Investigating Key Influencing Factors on Ethical Decision Making: A Study of Accounting Students in Indonesia

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Abstract

Worldwide accounting and business scandals have led people to ask about the ethicality of accountants and the role of accounting education in nurturing accounting students. These phenomena have encouraged accounting scholars to investigate factors that affect the ethical decision making (EDM) of accountants and accounting students as future accountants. Meanwhile, some accounting schools in Indonesia have responded to these phenomena by including more religious subjects in their curricula because they believe religion could influence EDM. However, the EDM research in the field of accounting is still underdeveloped.

This study extended Rest's (1986) EDM model by investigating the influence of religiosity, Locus of control (LOC), peer influence, and family influence on the EDM (ethical recognition, ethical judgement, and ethical intention) of accounting students in Indonesia. Furthermore, this study investigated the significant differences in the perception of each influencing factor according to gender and university affiliations. Lastly, this study investigated the extent to which the relationship between key influencing factors and EDM variables are mediated by other EDM variables.

Using Structural Equation Modelling (SEM), this study found that intrinsic religiosity and internal LOC variables have a significant positive effect on accounting students' ethical recognition and ethical intentions. Furthermore, this study found the ability of accounting students to recognise ethical problem positively affects their ethical judgement ability. It also found the ethical judgement of accounting students in Indonesia positively affects their ethical intention.

This study found that female accounting students had a significantly higher score on intrinsic religiosity compared to male accounting students. Meanwhile, male accounting students had a higher score on peer influence compared to female accounting students. Furthermore, this

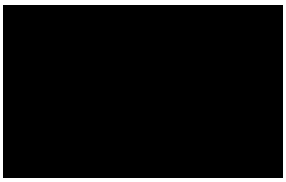
study found that Islamic accounting schools' students have a higher degree of extrinsic religiosity and family influence compared to accounting students from secular universities and Islamic universities. Meanwhile, accounting schools of Islamic universities had a higher degree of peer influence compared to students of secular universities and Islamic accounting schools.

This study found the effect of ethical recognition as a mediating variable on the relationship between intrinsic religiosity and ethical judgement. Furthermore, it found the effect of ethical judgement as a mediating variable on the relationship between intrinsic religiosity and ethical intention.

This study has suggested accounting schools to put more emphasis on developing intrinsic religiosity, internal LOC, and ethical judgement in training their students to nurture ethical accountants.

Student Declaration

I, Zaki Mubarak, declare that the DBA thesis entitled 'Investigating Key Influencing Factors on Ethical Decision Making: A Study of Accounting Students in Indonesia' is no more than 65,000 words in length including quotations and exclusive of tables, figures, appendices, bibliography, references and footnotes. This thesis contains no material that has been submitted previously, in whole or in part, for the award of any other academic degree or diploma. Except where otherwise indicated, this thesis is my own work.



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List of Abbreviations

AGFI	Adjusted Goodness-of-Fit Index
AMOS	Analysis of Moment Structures
ANOVA	Analysis of Variance
AVE	Average Variance Extracted
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CMD	Cognitive Moral Development
DF	Degree of Freedom
DIT	Defining Issue Test
EDM	Ethical Decision Making
EXRELIG	Extrinsic Religiosity
EXLOC	External Locus of Control
GFI	Goodness of Fit Index
INRELIG	Intrinsic Religiosity
INLOC	Internal Locus of Control
LOC	Locus of Control
MES	Multidimensional Ethical Scale
MOG	Manifestation of God Scale
ML	the Maximum Likely method
NC	Normed Chi-square
RMSEA	Root Mean Square Error of Approximation
ROS	Religious Orientation Scale
SD	Standard Deviation
SEM	Structural Equation Modelling
SRMR	Standardized Root Mean Square Residual
SPSS	Statistical Package for Social Sciences
TLI	Tucker-Lewis Index
TPB	Theory of Planned Behaviour

Chapter 1 Introduction

This thesis is a study on the influence of religiosity, Locus of control (LOC), peer influence and family on Indonesian accounting students' ethical decision making (EDM) (ethical recognition, ethical judgement, ethical intention). It also investigates the impact of gender and university affiliations on key influencing factors. Furthermore, it investigates whether the relationship between key influencing factors and an EDM variable is mediated by other EDM variables.

1.1 Background to the study

Ethics have become increasingly important in business conduct, particularly since a series of worldwide corporate collapses due to unethical conduct in accounting practices and reporting. These included the collapse of the Enron Corporation and Arthur Anderson in the United States (US), Parmalat in Italy, and OneTel and HIH insurance in Australia. Such scandals have raised questions about the role of accounting education in developing the ethical behaviours of accountants (Waddock 2005). Furthermore, accounting education has been criticised for not providing sufficient ethical training for students, focusing instead on teaching technical skills, laws, rules, and regulations (Sikka, Haslam, Kyriacou & Aggrizzi, 2007).

Ethical problems have not only occurred in developed economies but have also been apparent in emerging economies such as Indonesia, which is the focus of this study. Even though Indonesia has many religiously-based and conventional educational institutions that focus on ethical behaviour, unethical behaviour still persists, including corruption, bribery, and nepotism. For instance, Gayus Tambunan, an accounting school graduate who was a young Indonesian tax officer in charge of court proceedings, received bribes from several companies to pervert the course of justice and influence the outcomes of legal procedures in their favour (Kompas 2013). In another case at the corporate level, the largest Islamic bank in Indonesia, BSM, recently suffered losses of around US$5 million because three of its employees embezzled bank funds through the creation of

fictitious loans (Kompas 2014). Furthermore, Indonesia is still struggling to combat corruption. As recently as 2016, it was still considered a country with poor performance on the Corruption Perception Index (CPI), given a score of 37 and ranked 90th out of 176 countries. Denmark was ranked the highest, with a score of 90 and Somalia the lowest, with a score of 10 (Transparency International 2016).

Jackling, Cooper, Leung and Dellaportas (2007) consider accounting education to be one of the potential remedies for addressing failures in ethical behaviour in the accounting profession. Cohen, Pant and Sharp (1998) define EDM as decision making in the presence of ethical conflicts. Langenderfer and Rockness (1989) contend that universities have a responsibility to equip accounting students with the ability to evaluate ethical issues. These capabilities include the recognition of moral problems in their work, the ability to assess a moral dilemma consistent with the ethical principles and values, and the ability to classify choices for EDM and making the right ethical decision. Rest's (1986) model has been widely adopted to understand the EDM process but it has not been holistically applied to understand the impact of accounting education on the ethical behaviour of university students.

1.2 Research problem

In response to criticism of accountants' ethicality and the responsibility of accounting education to nurture ethical accountants, researchers in accounting education and ethics have explored factors that influence accountants' EDM. According to Uysal (2010), accounting ethics is an emergent research field, and there are only a few works on the subject (Bampton & Cowton 2013). There is still very limited understanding of the influence of religious orientation, personality orientation, influence from significant others and family members on the EDM of accountants. This study operationalises constructs of religiosity (for religious orientation), Locus of Control (LOC) (for personality orientation), peer influence (significant others) and family influence (family members) to address this knowledge gap in the study of Indonesian accounting students' ethical decision making (EDM).

1.2.1 Religiosity

Some scholars, including Hunt and Vitell (1986, 1993), Glover (1997), and Weaver and Agle (2002), have argued that religious beliefs and values have an influence on EDM. In some recent studies, religiosity has been considered a factor that influences EDM. However, findings from empirical studies on the relationship between religiosity and EDM have been inconclusive. Some studies found positive associations between religiosity and EDM (Arli & Tjiptono 2014; Ho 2009; Keller, Smith & Smith 2007; Sarwono & Armstrong 2001; Singhapakdi, Marta, Rallapalli & Rao 2000a; Singhapakdi, Vitell, Lee, Nisius & Grace 2013; Uyar, Kuzey, Güngörmüs & Alas 2015; Walker, Jones-Farmer, DeBode, Smither & Smith 2014; Walker, Smither & DeBode 2012; Wong 2008). On the other hand, other studies found an inconclusive relationship between religiosity and EDM (Conroy & Emerson 2004; Kurpis, Beqiri & Helgeson 2008; Saat, Porter & Woodbine 2009; Singhapakdi, Salyachivin, Virakul & Veerayangkur 2000b; Vitell & Paolillo 2003; Vitell, Sing & Paolillo 2005; Vitell, Sing & Paolillo 2007). Given these inconclusive findings on the relationship between religiosity and EDM, it is important to continue to explore this area. This is central to this thesis, which specifically explores this relationship in the under-examined Indonesian context. Moreover, this research also examines the effect of a mediating variable on the impact of religiosity on EDM, as this relationship has not been studied yet.

A religious-affiliated university usually adopts an identity associated with a religious group. Its mission statement tends to reflect this association in the context of offering a balance between academic, social and spiritual life within the university. Such universities usually require students to attend some religious classes from which students learn the doctrines, beliefs, and values of the affiliated religious group. However, research studies on the relationship between studying at a religious-affiliated educational institution and students' EDM have found mixed results. For example, Koeplin (1998) and Rawwas, Swaidan and Al-Khatib (2006) found no significant difference in ethicality between students at a religious-affiliated university and those at a secular university. Similarly, Hickman (2013) found no significant association between attendance at a religious-affiliated educational institution, religiosity, and ethical reasoning abilities.

However, Shaver (1987) and Fadzly (2010) found that students from religious-affiliated universities had higher levels of ethical reasoning skills than those from secular universities. Again, given these inconclusive findings, this study explores this relationship further. More specifically, while previous studies have only compared secular and religious-affiliated universities, this study investigates Indonesian accounting students' EDM in the context of three types of affiliations: accounting schools from secular universities, accounting schools from Islamic universities, and Islamic accounting schools from Islamic universities.

1.2.2 Personality orientation of locus of control

LOC refers to the extent to which people feel that they have control over the events that influence their lives. According to Rotter (1966), a person with an internal LOC believes that outcomes are a direct result of his or her efforts. On the other hand, a person with an external LOC believes that outcomes come from external forces out of his or her control. Previous studies show that the influence of LOC on EDM is inconclusive (Ford & Richardson 1994; Lehnert, Park & Singh 2015; Loe, Ferrell & Mansfield 2000). For example, Jones and Kavanagh's (1996) study of the influence of LOC on EDM on a group of MBA students at a university in the US resulted in inconclusive findings. They found that external LOC was positively related to unethical behaviour intentions in the first experiment in which they investigated this relationship. However, their second experiment, during which they replicated the first experiment using a different sample, did not indicate a significant relationship between LOC and behaviour intentions. Cherry and Fraedrich's (2000) study, which focused on sales managers, found that individuals with internal LOC show less intention to behave unethically than those with external LOC. However, Bass, Barnett and Brown's (1998) study on 602 marketing practitioners in the US found no significant relationship between LOC (internal and external) and ethical judgement and behavioural intentions. Again, given these inconclusive findings, this study further explores the influence of LOC on accounting students' EDM in the Indonesian context. Moreover, this research will also examine the effect of mediating variables on the impact of LOC on EDM, as this relationship has not been tested by previous studies.

1.2.3 Peer influence and family influence

In addition to religiosity and LOC, primary social relationships such as those with peers and family members, are potential key factors influencing an accountant's EDM. The relationship between peer influence and EDM has been supported by empirical studies such as those by Zey-Ferrell, Weaver and Ferrell (1979) and Zey-Ferrell and Ferrell (1982), who studied marketing managers and found that their perceptions of what their peers did were a better predictor of unethical behaviour than their own values and beliefs. Beams, Brown and Killough's (2003) study involving accounting students from a US university found that peer influence positively affected the intention to behave unethically. Westerman, Beekun, Stedham, and Yamamura (2007) found the influence of peers was significant in shaping employees' intentions to behave ethically. Zey-Ferrel et al. (1979) found that peers have a significant influence on employees' ethical behaviour. However, the Jones and Kavanagh (1992) study on MBA students, discussed in section 1.2.2, again showed inconclusive results. They found peer influence to have a significant positive effect on the behavioural intentions of those in the first experiment but not in the more generalisable sample of the second experiment. However, this second experiment did suggest a significant relationship between manager influence and behaviour intentions. Once again, given these inconclusive findings and the fact that most previous research has been conducted in developed countries, this study further explores the effect of peer influence on accounting students' EDM in the Indonesian context. Furthermore, few studies have focused on the effect of family influence on accountants' EDM. Consequently, this too was explored in this current study.

1.2.4 Gender

Gender has been considered as the most widely researched demographic variable in business ethics (Eweje & Brunton 2010; O'Fallon & Butterfield 2005). The influence of gender differences on EDM is supported by Gilligan's (1982) ethics of care theory which contends that women tend to have orientations of 'caring for others', 'understanding relationships' and 'responsibility to whole community' when resolving ethical problems, whereas men prefer to have an orientation towards 'rules, fairness, rights and justice'.

However, structural theory does not support the influence of gender on EDM. This theory argues that the influence of gender differences formed in early socialization and other women's roles (eg. wife, mother) will be eliminated by the rewards and costs associated with occupational roles. Furthermore, it predicts that women would become more like men when placed under similar occupational conditions (Betz, O'Connell & Shepard 1989).

Studies on the influence of gender on EDM have revealed mixed findings. After reviewing fourteen studies on the relationship between gender and EDM, Ford and Richardson (1994) found that half of them supported a positive relationship and half indicated non-significant results. Borkowski and Ugras (1998) used meta-analysis on 47 studies and found that 29 studies supported a positive correlation, 16 studies had non-significant results and two studies had mixed results. O'Fallon and Butterfield (2005) reviewed 49 studies and found that 16 studies supported a positive correlation, and 24 studies found no significant relationship. They concluded that "there are often no differences found between males and females, but when differences are found, females are more ethical than males (p.379).

Many later studies have found that women are more ethical than men (Eweje & Brunton 2010; Johl, Jackling & Wong 2012; Krambia-Kapardis & Zopiatis 2008; Pierce & Sweeney 2010). On the other hand, there are also studies that produced inconsistent findings. For example, Hopkins, Hopkins and Mitchell's (2008) study on the EDM of MBA students from a large public university in the US found that men were more consistent in their decision-making across ethical situations of bribery, social responsibility and discrimination. Marques and Azevedo-Pereira's (2009) study on Portuguese chartered accountants found that men were stricter when making ethical judgements. They concluded that "there are often no differences found between males and females, but when differences are found, females are more ethical than males" (p.379).

Given these inconclusive findings and the fact that most previous research has been conducted in developed countries, this study further explores the effect of gender on

accounting students' EDM in the Indonesian context. This study did not examine the direct effect of gender on EDM variables; however, it studied the effect of gender on the key influencing variables.

1.2.5 University Affiliation

Accounting education in Indonesia at university level can be divided into three types based on religious affiliations. First, accounting education is provided by non-religious-affiliated (secular) universities. These universities teach secular/conventional accounting subjects similar to those in western curricula. However, they may provide a very small number of religious subjects in their curricula since most universities in Indonesia do so. Second, accounting education is provided by religious-affiliated universities, such as Islamic universities and Catholic universities. These universities, particularly Islamic universities, teach conventional accounting subjects similar to those in western curricula but also include religious subjects. Third, specifically Islamic accounting education is provided by Islamic universities. Islamic accounting is centred on the belief that interest and speculative business are prohibited according to Islamic religion. A company can only trade goods and service that are allowed according to Islamic religious law. Islamic accounting education in Indonesia differs from conventional accounting education as Islamic studies comprise about 35-40% of their curriculum, compared with 2% of the total curriclum for conventional accounting in Islamic universities. Islamic studies include Islamic jurisprudence (fiqh), Islamic morals (Akhlaq), Qur'an interpretation (Tafsir), Sayings of the Prophet Muhammad (Hadist), Islamic economics, Islamic accounting theory, Islamic business ethics, and accounting for Islamic banks. There has been no prior study that investigates key influencing factors in EDM according to university affiliations.

1.3 Research questions

Having outlined the research problem, the following questions were developed to guide the study:

1. To what extent does the religiosity, LOC, peers and family of accounting students in Indonesia influence their EDM processes (ethical recognition, ethical judgement, and ethical intention)?
2. Are there significant differences in each influencing factor according to gender and university affiliations?
3. To what extent is the relationship between key influencing factors (religiosity, LOC, peers or family) and an EDM variable mediated by other EDM variables in this study?

1.4 Research methodology

In addressing the aims of this research, a cross-sectional analysis employing a quantitative research methodology was undertaken in this study. Quantitative methods view the world as observable and measurable and are associated with the positivist scientific paradigm (Creswell & Zhang 2009; Thomas 2003). This technique often includes hypothesis and theory testing as a core criterion relying on experimental and/or survey instruments, often using statistical data analysis (Creswell 2009).

Using a questionnaire, data was collected from 693 accounting students enrolled in 11 universities located in Yogyakarta, Surakarta, Semarang, and Bogor, Indonesia. The questionnaire employed three scenarios to measure EDM: a credit manager case; a local manager case; and a controller case. Based on these three cases, this research study employed the multidimensional ethics scale (MES) to measure ethical judgement, drawing on the work of Reidenbach and Robin (1988, 1990). Furthermore, to measure ethical intention, this study built on the work of Hunt and Vitell (1986), who proposed that individual behavioural intentions can be measured by asking a person to express the likelihood (in a probability sense) that he or she would actually perform the behaviours

described to them. To measure religiosity, this study employed three measures: intrinsic religiosity; extrinsic religiosity; and religiosity and study. The religious orientation scale (ROS), which was initially developed by Allport and Ross (1967), was adapted to measure intrinsic and extrinsic religiosity. The Manifestation of God scale (MOG), developed by Pargament and Mahoney (1999), was adapted to measure religiosity and study. To measure internal and external LOC, this study adapted Rotter's (1966) forced-choice measure of LOC using a 7-point Likert-type response format.

The data analyses in this study employed statistical techniques using descriptive statistics, factor analysis, structural equation modelling (SEM), the Mann Whitney U Test, and the one-way analysis of variance (ANOVA). Descriptive statistics were employed to identify the profile and characteristics of the sample population and to find out the shape of the distribution, as well as to examine missing values and univariate outliers. This study used SPSS version 24 to conduct the descriptive analysis.

SEM is a multivariate technique that combines factor analysis and multiple regression analysis. This allows a researcher to simultaneously examine a series of interrelated dependence relationships among measured variables and latent constructs (variates), and between several latent constructs (Hair, Black, Babin & Anderson 2014). SEM was employed to conduct the confirmatory factor analysis (CFA) to test how well the measured variables represented a smaller number of constructs (Hair et al. 2014). SEM allows the researcher to examine how sets of variables define relationships with, and influence each other in CFA by investigating these relationships through testing path coefficients for significance and goodness-of-fit (Schumacker & Lomax 2004). The first stage in CFA was assessing the one-factor congeneric measurement model for each construct. The aim was to confirm the validity of each measurement latent in the factors before integrating them into a full latent measurement model. The second stage was to perform the CFA on the full latent measurement model. The researcher integrated the final measurement model of each latent variable into the full structural model to test the influence of one latent variable on another in the modelling of causal direction. This procedure was intended to confirm that there was no significant cross-loading on other variables.

SEM was then used to quantitatively examine the influence of intrinsic religiosity, extrinsic religiosity, religiosity and study, internal LOC, external LOC, peer influence and family influence on accounting students' EDM (ethical recognition, judgement, and intention). Furthermore, SEM was also employed to examine the impact of mediating variables on the relationship between each significant variable and EDM variable.

This study employed the Mann-Whitney U Test to examine any significant differences in each influencing factor according to gender. The Mann-Whitney U Test is a non-parametric alternative to the t-test for independent samples and is employed to examine the differences between two independent groups (such as male and female) associated with a continuous variable by using medians for comparing groups (Coakes, Steed & Ong 2010). The researcher applied the statistical techniques of the Mann-Whitney U Test using SPSS version 24 to test for significant differences across respondents' gender profiles for each influencing factor. This study employed the one-way ANOVA to examine any significant differences in each influencing factor according to university affiliations. This method enables the researcher to compare the score on a continuous variable for more than just two groups.

1.5 Significance of the study

Indonesia has been chosen as the context of interest for this study because most prior studies on accounting students' EDM or related topics in this area were conducted in developed countries. Therefore, a study in a developing country such as Indonesia will address a knowledge gap. Furthermore, Indonesia has a unique institutional setting since it has three accounting school affiliations including accounting schools of secular universities, accounting schools of Islamic universities, and Islamic accounting schools of Islamic universities.

In contributing to the knowledge of ethical behaviour in the field of accounting, this research provides several new perspectives and directions, as follows:

1 This study extends Rest's (1986) EDM variables (ethical recognition, ethical judgement, and ethical intention) by examining the influence of religiosity, LOC, peer influence, and family influence on the EDM in the context of an emerging country and the accounting field. Most previous research has been conducted in developed countries and non-accounting fields.

2 This study adds to the existing body of research by examining the influence of religiosity on accounting students' EDM (ethical recognition, ethical judgement, and ethical intention) in Indonesia using three religiosity measurements (intrinsic religiosity, extrinsic religiosity, and religiosity and study). Most previous research has only used one single measure of religiosity. This may explain why results have been so mixed. Furthermore, this study has added a new indicator reflecting a pecuniary motive that has not been adopted by other studies to measure the extrinsic religiosity.

3 This study adds to the existing body of research by examining the influence of religiosity, LOC, peer influence, and family influence on Rest's (1986) EDM variables (ethical recognition, ethical judgement, and ethical intention) using a sample from three types of accounting schools in Indonesia (accounting schools of secular universities, accounting schools of Islamic universities, and Islamic accounting schools of Islamic universities). These schools use different curricula, particularly in the portion of religious studies included. Most previous studies have only focused on accounting students from two types of universities: religious-affiliated and secular universities.

4 This study extends Rest's (1986) EDM variables (ethical recognition, ethical judgement, and ethical intention) by examining the relationship between key influencing factors and EDM variables mediated by other EDM variables.

This study also provides an in-depth understanding of factors that influence accounting students' EDM in Indonesia, making the following practical contributions:

1. Accounting schools in Indonesia can utilise this research to understand factors that influence accounting students' EDM, and whether their curriculum effectively develops that EDM.

2. The Indonesian government and other policy-makers can utilise this research to support their policy-making processes aimed at encouraging accounting education to produce ethical accounting graduates.
3. Companies and accounting firms can benefit from this research by creating suitable training that helps their employees increase their EDM abilities.

1.6 Thesis structure

This thesis consists of seven chapters, as follows:

Chapter 1 has presented the background of the study, along with the research problems, research questions, and the theoretical and practical contributions of the study.

Chapter 2 reviews the literature focused on EDM theories and factors that influence EDM, including religiosity, LOC, peer influence, and family influence. Also, a brief discussion of Islamic and conventional accounting education in the Indonesian context is provided. It then presents the conceptual framework employed to examine the influence of religiosity, LOC, peer influence, and family influence on accounting students' EDM in Indonesia.

Chapter 3 provides the research methodology employed to validate the conceptual framework and examine the research hypotheses proposed in this study. Furthermore, this chapter presents the research design, data collection method, the sample selection criteria, the operationalisation of the research variables and survey instrument used in this study. This chapter also discusses data analysis tools, including descriptive statistics, the SEM, the Mann Whitney U Test, and the one-way ANOVA, as well as reliability and validity analysis.

Chapter 4 presents the survey results data in five major sections. Part one presented the findings of the CFA performed on the single-factor measurement models and the full model, including factor loadings, item reliability, construct reliability, Cronbach's alpha, and discriminant validity. Part two presents the results of the structural model analysis and the hypotheses testing. Part three presents the demographic profile of the respondents

and descriptive statistics. Part four shows the results of the analysis for differences between males and females across the influencing factors using a non-parametric statistic (the Mann Whitney U Test). Part four also presents the results of analysis for differences based on university affiliations using a parametric statistic (the one-way ANOVA). Part five shows the results of testing mediating effects in the structural model.

Chapter 5 presents a discussion of major findings derived from the analysis of the data. The chapter also highlights the research implications from theoretical and practical perspectives.

Chapter 6 presents a summary of the research and findings, along with the study's contributions, its limitations, and future study recommendations.

Chapter 2 Literature Review, Conceptual Framework and Hypothesis Development

2.1 Introduction

This chapter presents the literature review of EDM theories and empirical studies relating to the effect of religiosity, LOC, peer influence, and family influence on the EDM process (ethical recognition, ethical judgement, and ethical intention). A brief discussion of Islamic and conventional accounting education in the Indonesian context is also provided. Lastly, this chapter presents the conceptual framework employed to determine the relationship between the variables and the theoretical underpinnings of the concepts. Identification and development of an appropriate conceptual framework is very important for research, enabling the use of existing theories and models to benefit the research process, as well as draw conclusions from the study findings.

2.2 Definition of ethics and EDM theories

Previous studies on EDM have been criticised because they did not provide comprehensible definitions of the terms ethical and moral (Jones 1991; Tenbrunsel & Smith-Crowe 2008). According to Jones (1991), scholars such as Ferrell and Gresham (1985), Trevino (1986), and Hunt and Vitell (1986) did not provide substantive definitions of the terms ethical and unethical. Ferrell and Gresham (1985) explained that they did not provide such definitions because they focused on the context and variables that influenced decision-making behaviour, which would be defined by observers as ethical or unethical. Warren and Smith-Crow (2008) support this notion by contending that the focus of social scientists is to describe and predict what people think, perceive, and do, not to tell people what they should do. This is because behavioural ethics are descriptive not prescriptive.

A few scholars have tried to define ethics. For example, Taylor (1975, p. 1) defined ethics as "inquiry into the nature and grounds of morality where the term morality is taken to mean moral judgements, standards, and rules of conduct". This was followed by Rest (1986, p. 3) who defined the term 'morality' as a particular type of social value dealing with "how humans cooperate and coordinate their activities in the service of furthering human welfare, and how they adjudicate conflicts among individual interests". Another definition was offered by Jones (1991), who argues that an ethical decision is a decision that can be accepted by the larger community, a decision that is both legal and moral. Conversely, an unethical decision is a decision that cannot be accepted by the larger community as either legal or moral. However, one must not interpret Jones' (1991) definition to imply that ethics and the law are identical. This is because law sets minimum standards of behaviour whereas ethics sets maximum standards of behaviour (Sekhar 2002; Tsahuridu 2015). In other words, law usually represents an ethical minimum while ethics often represents a standard that surpasses the legal minimum (Bryne 2017). The corporate collapses of organisations such as Enron Corporation, Arthur Anderson, WorldCom, Barings Bank, Parmalat, OneTel and HIH demonstrate that ethics has become critically important in a business environment in which failure to adhere to proper standards can have a devastating effect on organisations, investors, suppliers, employees and customers (Cooper, Leung, Dellaportas, Jackling & Wong 2008). This suggests that it is not adequate to rely solely on the law as an instrument for measuring ethical behaviour. Education curriculum and professional certification have been recognised as some of the means to cultivate and encourage ethical behaviour (Cooper et al. 2008; Gray, Bebbington & McPhail 1994; Hafferty & Franks 1994; Lee, Birkey & Patten 2017).

Following on from these earlier attempts to define ethics, Carlson, Kacmar and Wadsworth (2002) defined EDM as a process by which individuals utilise their moral base to decide whether a particular issue is right or wrong. This was followed by Trevino, Weaver and Reynolds (2006, p. 952) who summarised behavioural ethics as referring to "individual behaviour that is subject to or judged according to generally accepted moral norms of behaviour". They explain that ethics mainly concentrates on individual behaviours happening in the context of larger social groups, with studies focusing on three areas: 1. unethical behaviours, such as lying, cheating and stealing; 2. ethical behaviours

or acts that reach the minimal moral standards, such as honesty and obeying the law; and 3. ethical behaviours or acts that exceed the minimal moral standards, such as charitable giving and whistle-blowing.

O'Fallon and Butterfield (2005) divide EDM theories in the area of business ethics into two categories: normative ethics and descriptive (empirical) ethics. The normative ethics, associated with the field of moral philosophy and theology, focuses on how individuals should behave: what is right and wrong and what should be done. The descriptive ethics, mainly associated with the areas of management and business, focuses on explaining and predicting individuals' actual behaviour. Murphy and Laczniak (1981) divide normative ethical theories in moral philosophy into two categories: deontological and teleological. According to Hunt and Vitell (1986), the main difference between these two theories is that the first focusses on the specific actions or behaviours of an individual, whereas the second focusses on the consequences of actions or behaviours. Furthermore, Hunt and Vitell contend that the main concern in deontological theories is the inherent righteousness of behaviour; in teleological theories, it is the amount of good or bad represented in the consequences of those behaviours.

Descriptive ethics theories in social psychology comprise Kohlberg's (1964) theory, and Rest's (1986) EDM model. In business studies, Trevino (1986) and Hunt and Vitell (1986, 1993) have proposed descriptive ethics theories. This research only focuses on descriptive aspects of EDM since they are a better fit with the focus of this research study and help address its research objectives.

2.2.1 Kohlberg's theory

In his model of cognitive moral development, Kohlberg contends that a person's level of cognitive moral development significantly affects them when encountering ethical dilemmas. According to Walker (1984, p. 679),

> Kohlberg's theory is a cognitive theory that deals with the adequacy of justifications for solutions to moral conflicts. It does not speak directly to the issues of moral emotions and behaviours, although Kohlberg (1978) has admitted the necessity and desirability of going beyond 'cognition'.

Kohlberg's theory is used to measure a person's maturity based on their responses to a series of hypothetical dilemmas. According to McPhail and Walters (2009), the majority of studies in the accounting literature use Rest's (1986) defining issue test (DIT) to gather data on personal predispositions. This is then analysed using Kohlberg's theory which consists of six stages as revealed in Table 2.1. Stage one relates to obeying the rules, which is mandatory since it is a means of avoiding punishment. In stage two, a person bases their ethical judgement on a type of cost-benefit analysis, mainly reflecting their personal interests. The first two stages of moral development are known as pre-conventional, with people (usually children) making moral decisions based on rewards and punishment, and not in response to the needs or concern of others. In stage three, a person behaves ethically to satisfy the interests of significant others. In stage four, consideration is given to maintaining law and order by following rules, doing one's duty, and respecting authority. The third and fourth stages of development are called conventional, during which societal rules and the needs of others become relevant to moral reasoning. In stage five a person starts to account for differences in the values, opinions, and beliefs of others. In stage six, ethical behaviour is based on maintaining universal principles of justice and ethics. In the fifth and sixth stages, or post-conventional, the good of society is included in moral reasoning. (Cohen, Pant & Sharp 1996; Carlson & Kacmar 1997; Kohlberg 1969).

Table 2.1 Kohlberg's theory

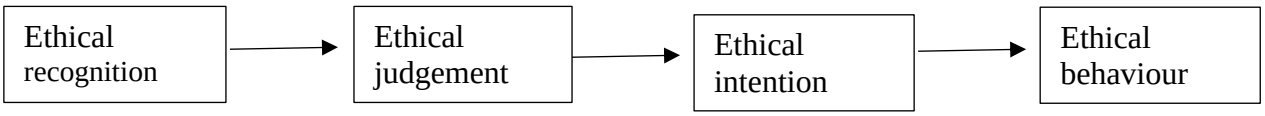
Levels	Stages	Disposition
3. Post-conventional	6	Based on universal moral principles
	5	Impartial with a concern for everyone's interests
2. Conventional	4	Informed by society's laws
	3	Conforming to group norms
1. Pre-conventional	2	Self-interest is the primary motivation
	1	Avoid punishment

Source: McPhail and Walters (2009 p. 24)

2.2.2 Rest's (1986) EDM model

Rest's (1986) model has been widely accepted as the most influential in EDM research (Jones 1991; Musbah, Cowton & Tyfa 2016; Robin, Reidenbach & Forrest 1996; Tormo-Carbó, Seguí-Mas & Oltra 2016) and probably the simplest (McMahon & Harvey 2006). This model describes people's cognitive stages when they encounter ethical problems. It proposes four sequential stages of individual EDM: (1) ethical recognition – the ability to recognise the circumstances as being ethical or unethical; (2) ethical judgement – the ability to decide on the approriate moral choice; (3) ethical intention - the ability to prioritise an ethical choice; and (4) ethical behaviour – the ability to implement an ethical choice. Rest explained that each stage is theoretically different and that success in one stage does not guarantee success in any other stage.

Figure 2.1 Rest's (1986) EDM model



Source: Jones (1991 p. 379)

2.2.2.1 Ethical recognition

The first step in Rest's (1986) EDM model requires the recognition of a situation containing an ethical issue or problem, which calls for further reflection and evaluation (Jones 1991). While studies in business ethics have adopted different terms, such as ethical recognition, ethical awareness and ethical orientation, to describe the first step of Rest's model, this research uses ethical recognition to describe this process. As an individual's free actions may be either detrimental or helpful to others (Velaquez & Rostenkowski, cited in Jones, 1991), ethical recognition involves two components: a person must recognise that his or her decision or action will have consequences for other people; and that he or she has a choice. If he or she fails to recognise the ethical problem, they will also fail to employ an EDM schemata and will make a decision according to other schemata, such as economic rationality (Jones 1991). Ethical recognition includes understanding the situation, role-taking about how various actions might influence the parties concerned, imagining the cause-effect chain of events, and being alert that there is a moral problem when one exists (Lin & Ho 2008).

2.2.2.2 Ethical judgement

The second step of Rest's EDM model involves making an ethical judgement based on a broad evaluation of the fairness/equity, justice, relativism, and social contacts rooted in the ethical circumstances (Hunt & Vitell 1986). According to Reidenbach and Robin (1990), ethical judgement is the degree to which the behaviour in question is regarded by a person as morally agreeable. Lin and Ho (2008) define ethical judgement as judging which action would be most reasonable in an ethical sense. Ethical judgement can also be defined as the perceived degree of ethicalness of a certain action for answering a moral problem (Singhapakdi et al. 2013). According to Hunt and Vitell (1986), ethical judgement is a consequence of moral reasoning. As conceptualised by them, people form their moral judgements by relying on a combination of deontological and teleological evaluations. The focus of the deontological evaluation is on the specific actions or

behaviours of an individual and the focus of one's teleological evaluation is on the consequences of actions or behaviours (Singhapakdi et al. 2013).

To measure levels of ethical judgement, the second stage of his model, Rest (1986) developed a DIT instrument based on Kohlberg's (1976) six stages of moral development which was discussed in section 2.2.1. The DIT is a self-administered questionnaire that elicits a respondent's level of moral development using a hypothetical social dilemma. Much empirical research into ethical reasoning in accounting has used this moral development construct developed by the DIT (Cohen et al. 1996).

In contrast to the DIT aggregation of moral reasoning into a single measure of moral development, the MES employs a multiple scale of EDM developed by Reidenbach and Robin (1988). This scale draws from moral philosophy literature to identify five normative ethical principles that can be brought to bear in any given dilemma. These principles are: theories of justice (based on the Aristotelian view that equals should be treated equally and the unequal unequally); deontology (one's duty to obey ethical rules); relativism (there are no universal rules); utilitarian (actions that deliver the greatest good for the greatest number); and *egoist* (encouraging an individual's long-term self-interests). Some researchers have found that the MES correlates with Rest's EDM framework (Cohen et al. 1996; Johl, Jackling & Wong 2012). MES as employed by Flory et al. (1992) and Cohen et al. (1993, 1996) incorporates problems that are considered relevant to the work and experience of the sample of interest in a given study. According to Williamson et al. (2011), MES has the advantage of having multiple subscales rather than simply using single item scales.

2.2.2.3 Ethical intention

The third step of Rest's EDM model involves establishing an intention to behave consistently with a previous judgement of ethicality (Rest 1986). Rest et al. (1999, p. 101) define ethical intention as a person's "degree of commitment to taking the moral course of action, valuing moral values over other values, and taking personal responsibility for

moral outcomes". According to Ajzen and Fishbein (1980), a behavioural intention is the subjective probability that an individual assigns to the likelihood that a given behavioural alternative will be chosen. According to the theory of planned behaviour (Ajzen 1991), behavioural attitudes and social mores influence behavioural intentions and future conduct. This theory also predicts a relationship between intention and action.

2.2.2.4 Ethical behaviour

The last stage of Rest's EDM model is ethical behaviour, which is an individual's engagement with a proper action as a result of his or her intentions. Rest (1986) explains that ethical behaviour is the outcome of multiple and complex processes. Jones (1991) defines it as behaviour that is accepted by the larger community both legally and morally. Some scholars, including Reis and Mitra (1998), O'Fallon and Butterfield (2005), and Trevino et al. (2006) reveal that not many empirical studies had been done related to ethical behaviour. Therefore, they recommend more research in this area.

It is argued that the shortage of ethical behaviour research is due to the sensitivity of the subject and the difficulties in measuring and observing it (Ampofo et al. 2004; Haines & Leonard 2007a; Trevino 1992). Conducting research on ethical behaviour requires significant amounts of time and resources and constitutes an area for future research. This study focuses on the first three stages of Rest's EDM model (ethical recognition, ethical judgement, and ethical intention) in its research objectives.

2.2.3 Trevino's (1986) EDM framework

Trevino (1986) developed an interactionist EDM framework based on the three steps of Rest's (1986) EDM model and influenced by Kohlberg's theory of cognitive moral development. Trevino contends that Kohlberg's theory can be used as the basis for knowing the way managers recognise ethical problems. Her EDM model comprises three stages: recognising the existence of an ethical dilemma; cognitive processing; and engaging in real action.

Trevino (1986) contends that previous EDM models only accentuated the individual role or situational variables in causing ethical/unethical conduct and did not engage in the connections among individual and situational variables. Therefore, she proposes an interactionist model acknowledging the function of both individual and situational variables. Trevino argues that the interaction of individual and situational components can elucidate the EDM process in an organisation. She explains that individuals will use cognition influenced by their cognitive moral development stage when responding to ethical dilemmas. Moreover, although this model acknowledges that the cognitive moral development stage influences the process of deciding between right and wrong, this is not enough to predict EDM behaviour; additional individual and situational variables are required. Trevino proposes three individual variables: ego strength; field dependence; and LOC. These interact with cognition to determine the individual process in deciding what is right or wrong. She also proposes a number of situational variables originating from the immediate job context and the broader organisational culture to moderate the cognition behaviour relationship. These are: the organisation's normative structure; referent others; obedience to authority; responsibility for consequences; reinforcement contingencies; and other pressures. Lastly, Trevino proposes that characteristics of the job itself and the moral content of the organisational culture can influence the moral development of the individual.

2.2.4 Hunt and Vitell's (1986) EDM model

Hunt and Vitell (1986) extend Rest's (1986) model for a positive theory of marketing ethics by integrating moral philosophy, such as teleology and deontology, with EDM theories. This extended model provides a detailed theoretical framework that identifies sources of variance for explaining an individual EDM process. According to Hunt and Vitell, EDM begins with an individual's perception of a moral problem arising in a certain situation. This triggers the whole process of EDM. If the individual does not perceive any moral problem in that situation, the individual will not advance to the next stage of the process.

The next stage involves using deontological and teleological evaluations to judge various courses of action to attain related ethical judgements. In the deontological evaluation, individuals assess the inherent rightness or wrongness of the behaviours by comparing the behaviour with a set of pre-determined deontological norms, representing personal values or rules of behaviour. These norms comprise general beliefs such as honesty and treating people fairly, and issue-specific beliefs such as deceptive advertising and product safety. According to Hunt and Vitell (1986), the teleological evaluation consists of four components: the perceived effect of each alternative for numerous stakeholder groups; the probability that each effect will happen to each stakeholder group; the advantage or disadvantage of each effect; and the significance of each stakeholder group.

The outcome of ethical judgement will be the intention to conduct an activity. In agreement with Fishbein and Ajzen's (1975) model, Hunt and Vitell (1986) propose that ethical judgement affects behaviour through the intervening variable of intention. Hunt and Vitell also contend that judgement sometimes does not significantly influence intention. This is because the teleological evaluation also independently influences intentions.

2.3 Previous studies on ethical constructs in the EDM of accountants and accounting students

Previous studies on EDM of accountants and accounting students do not holistically considered all the ethical constructs (ethical recognition, ethical judgement and ethical intention) and key influencing factors within an integrated framework. In regard to ethical constructs, these studies tend to focus on a single ethical construct in the absence of the other two ethical constructs in understanding the key influencing factors on the EDM behaviour of respondents.

Accounting studies that investigated the ethical recognition of accountants or accounting students include Shaub, Finn, and Munter (1993), Shawver (2006), and Lin and Ho (2008). Shaub et al.'s (1993) study found that ethics education has an important role in advancing the ethical recognition of auditors. Another study by Shawver (2006)

investigated the influence of a 12-week ethics course that was attended by accounting seniors. The study examined whether case studies can stimulate a change in a student's ethical recognition. The study found that case studies are beneficial, but are not sufficient to develop ethical recognition over a 12-week period. Lin and Ho (2008) studied cultural differences in the EDM of undergraduate accounting students in the US and Taiwan using the MES. Their study found significant cultural differences in the recognition of accounting ethics between accounting students from the US and Taiwan. The overall ethical recognition of the US accounting students was higher than that of Taiwanese students in three scenarios.

Accounting studies that investigated the ethical judgment of accountants or accounting students include Ponemon (1990a), St. Pierre, Nelson and Gabbin (1990), Ponemon and Glazer (1990), and Ponemon (1992b). Ponemon's (1990a) study found that accountants' moral reasoning capacity improves until they reach the stage of manager or partner, at which point it begins to decline. St. Pierre et al. (1990) found that students with accounting majors had a score significantly lower than students with psychology majors using DIT, but at about the same level as most business majors. Ponemon and Glazer (1990) found that accounting students also scored lower in this ethical construct as compared to liberal arts students on the DIT. Ponemon's (1992b) study on 88 auditors from a national public accounting firm in the USA found that underreporting on an audit task is systematically related to the auditor's level of moral reasoning. Cohen et al.'s (1998) research found that accounting students were more likely to judge actions as unethical compared to other disciplines students.

Pan and Sparks (2012) conducted a review and meta-analysis of the ethical judgements literature. Their meta-analysis helps quantitatively support the generally consistent relationships between ethical judgements and several other variables. These variables include gender, idealism, relativism, Machiavellianism, ethical recognition, deontological, teleological evaluations, moral intensity, and the outcome variable, behavioural intentions. Pan and Sparks (2012) recommended that future studies focus on variables with theoretically sound relationships to ethical judgement but for which no

empirical relationships have been established. Those variables include age, work experience, LOC, religiosity, and ethical environment.

Accounting studies that investigated the ethical intention of accountants or accounting students include Cohen, Pant and Sharp (1998), and Buchan (2005). Cohen et al.'s (1998) research found that accounting students were less likely to take similar action, than subjects in other disciplines. Buchan (2005) studied professionals from five accounting firms in the US and found a direct relationship between attitudes and ethical intentions. This study addresses a knowledge gap in the extant literature by incorporating all the ethical constructs in the conceptual framework for understanding EDM of accounting students at Indonesian universities.

2.4 Factors that affect EDM

As indicated earlier, this study only focuses on factors that affect the first three stages of Rest's EDM model (ethical recognition, ethical judgement, and ethical intention). Furthermore, since there are so many variables that relate to EDM, this research only focuses on the individual variables of religiosity, LOC, peer influence, and family influence. There are three reasons for selecting these variables. First, to address the inconsistent results of previous studies on the influence of these variables on EDM. Secondly, most previous studies have investigated the relationship of those variables to EDM in developed countries, but little research has been done in emerging countries such as Indonesia. Lastly, although there are studies that have investigated the relationship of these variables to EDM, little research has been done to investigate these variables in the context of the accounting field.

2.4.1 Religiosity and EDM

In their search for a better understanding of ethical judgements and behaviour, researchers are increasingly looking at the role of religion (Corner 2009; Kolodinsky, Giacalone & Jurkiewicz 2008). This avenue has much intuitive appeal, provided that ethics, in their

simplest sense, represent a choice between right and wrong, and world religions, through the values and principles they endorse, aim to offer their adherents principles, values, norms and beliefs for making these choices (Parboteeah, Hoegl & Cullen 2008).

Several researchers highlight the importance of religiosity as a key influencing factor in ethical decision making and behaviour. Culliton (1949) suggests that religion can foster ethical corporate behaviour. The theory of rationalisation identifies the influence of religion on people by contending that religion affects work choices, attitudes and moral behaviour (Weber, cited in Rawwas et al. 2006). In agreement with this theory, Lenski (cited in Rawwas et al. 2006) supports this theory by explaining that religion is a factor that impacts societies because every major religious group develops its own distinctive orientation toward all aspects of people's lives. These orientations greatly impact the daily actions of its adherents and later the institutional structure of society. According to Klein (1987), the theory of rationalisation reveals that major social institutions, including religion, shape people's behaviours.

According to Kohlberg (1981), the main function of religion is not to give moral prescription but to support moral judgement and action. This is related to the existential question, why live? Kohlberg (1981, p. 45) contends that the "union with God" experience found in religion may offer a suitable answer to these and other existential questions. Furthermore, this experience may provide a motivation to incorporate the universal ethical principles and, hence, assist in progression to stage 6 of his model.

In a similar vein, in their revised theory of marketing ethics, Hunt and Vitell (1993) advocate for the relationship between religion and EDM by including religion as one of the factors that influence ethical judgement. They maintain that strength of religious beliefs would affect decision-making processes in the face of an ethical problem. Furthermore, Rest et al. (1999) contend that religion can become a source of moral philosophy. Rest et al. said that "…morality deals with this world; religion defines how we in this world deal with transcendence; but when religion defines how we in this world are to relate to each other, then religion serves to define morality" (1999, p. 163). Glover

(1997) argues that one's moral reasoning depends, in part, upon the seriousness and character of one's religious commitment.

Pace (2014) contends that although there is a link between religiosity and religion, they are different constructs. This argument has been supported by Reuter (2012) in a survey which revealed that identifying with the traditions of a faith did not always equate to religiosity. Of the 51,927 people surveyed, 97 percent of Buddhists, 83 percent of Protestants, 80 percent of Hindus and 81 percent of Catholics described themselves as religious. The average decreased to 74 percent among Muslims and only 38 percent among Jews. Therefore, Pace (2014) argues that religiosity and religion can be separated, and being a religious person does not necessarily imply a religious affiliation.

Weaver and Agle (2002) note that religiosity has been known to have an influence on the attitude and behaviour of human beings. They use symbolic interactionism theory to explain the relationship between religiosity and ethical outcomes because it relates to identity. According to symbolic interactionism, individuals develop a sense of self-identity in large part due to the various roles they play. For example, a woman may identify herself as a parent, wife, a sister, and an accountant. Similarly, individuals may identify themselves in part by being a believer in one of any number of religions. Weaver and Agle (2002) contend that we should not assume religion to influence ethical behaviour for all religious individuals. However, the extent of the relationship between religiosity and ethical outcomes will depend on several specific religious attitudes. For example, people who have extrinsic religiosity tend to accept ethically questionable scenarios. However, people with intrinsic religiosity tend to disagree with those ethically questionable scenarios.

In contrast to what was discussed above in support of the effect of religion on peoples' behaviour, the theory of the sacred canopy highlights that major religions have lost their effect on many aspects of people's lives due to the increasing materialism of our modern societies (Berger 1969; Gorski 2000). According to Berger (1969), people shelve religion and omit it from the centre of their lives in modern, highly pragmatic and bureaucratised societies. However, people have not left religion altogether, but have downgraded its

effect to the personal and familial arena. As an example, a businessman or businesswoman or politician may devotedly obey the religiously legitimated norms of family life. However, at the same time he or she does not follow any religious values when conducting business activities in the public domain. In other words, a pecuniary motive may undermine the religiosity of an individual. Prior studies have not considered pecuniary motive in the religiosity construct in the EDM process. Hence, this study includes this motive in religiosity within the EDM framework.

Uyar et al. (2015) explain the reasons why religiosity influences ethical behaviour. First, the concept of belief in all religions emphasises avoidance of sin through immoral acts, as all religions affirm being truthful, right, just and without deceit. Second, these beliefs also ensure people comply with law both personally and professionally. Third, according to many religious teachings and commandments, a person who commits a sin will be punished in the hereafter, while those doing good deeds will be rewarded. This acts as a deterrent or a motivator in daily life.

While some previous studies only employed one measurement of religiosity, this study employed three measurements of religiosity: (1) intrinsic religiosity, and (2) extrinsic religiosity adapted from Allport and Ross' (1964) ROS, and (3) religiosity and study, adapted from Pargament and Mahoney's (1999) MOG. ROS represents the dominant influence on the measurement of religion (King & Crowther 2004). According to Meadow and Kahoe (1984), no other single construct has had a greater impact on the empirical study of religion.

2.4.1.1 Religiosity

Allport and Ross (1967) use the term religious orientation to describe religiosity, which they define as "the personal practice of religion" (p. 432). McDaniel and Burnett (1990) define religiosity as a trust in God accompanied by commitment to follow principles believed to be set by God. Schwartz and Huismans (1995) associate religiosity with the degree of commitment to religion. Singhapakdi et al. (2000a) and Conroy and Emerson (2004) use terms such as religiousness and religiosity to describe one's adherence to the

practice of religion. Reutter and Bigatti (2014) provide further details by defining religiosity as the extent to which a person abides by religious values, belief and practices.

Some previous studies found that religiosity had a significant positive effect on EDM (Conroy & Emerson 2004; Ho 2009; Keller et al. 2007; Sarwono & Armstrong 2001; Singhapakdi et al. 2000a; Wong 2008). Singhapakdi et al. (2000a) used a sample of AMA practitioners and found that religiosity was a significant determinant of marketing managers' perceptions of ethical problems. Sarwono and Armstrong (2001) study also found a positive relationship between religious value orientation and the perceived ethical problems among marketing managers in Indonesia. Furthermore, Conroy and Emerson's (2004) study of 850 American graduate and undergraduate students of various disciplines in two southern US universities (one public and one private) found that religiosity, as measured by frequency of church attendance, influenced ethical attitudes. They found that religiosity was a statistically significant predictor of responses in a number of ethical scenarios. In seven of the eight vignettes for which religiosity was significant, the effect was negative, implying that it reduced the 'acceptability' of ethically-charged scenarios. Keller et al. (2007) studied 171 undergraduate and postgraduate accounting students from a major US university and found that religiosity influenced EDM. Wong (2008) studied 300 Malaysian Christians from three large churches in Kuala Lumpur and found that there were some differences in the ethical attitudes of Malaysian Christians in business based on different levels of religiosity. Those longer in the faith were less accepting of unethical behaviour. Wong concluded that religiosity had a positive influence on the ethical attitudes of Malaysian Christians. Ho's (2009) study on 427 junior and senior accounting students from two universities in Taiwan found that accounting students with religious beliefs obtained higher scores on ethical reasoning abilities than those who did not hold religious beliefs.

However, some studies obtained mixed findings (Saat et al. 2009; Singhapakdi et al. 2000b; Vitell & Paolillo 2003). Singhapakdi et al.'s (2000b) research studied 798 managers enrolled in executive MBA programs from eight public and five private universities in Thailand to investigate the effect of religiosity on ethical intention. To measure religiosity, they modified Wilkes, Burnett and Howell's (1986) religiosity scale

comprising three dimensions: temple attendance, perceived importance of religious values, and confidence in religious values. Their study found mixed results, with religiosity a significant predictor of ethical intentions in only two of the four scenarios tested. Vitell and Paolillo (2003) studied 353 adult consumers in the US to investigate the effect of religiosity on consumers' ethical beliefs/attitudes. Their study found that religiosity did not have a direct influence on any dimensions of consumers' ethical beliefs. However, the post hoc analysis revealed that religiosity had a significant influence on idealism and relativism. Because idealism and relativism was found to determine consumer ethical beliefs, therefore, they concluded that religiosity had a significant indirect influence on consumer ethical beliefs. Furthermore, Saat et al.'s (2009) study on 378 Malaysian accounting students found that religious affiliation, religious education background, type of institution, and religiosity (faith maturity) influenced the ethical sensitivity, but the influence was situational. They also found that accounting students who attended religious schools had higher levels of ethical sensitivity in eight out of 16 scenarios and four were significantly different.

2.4.1.2 Intrinsic religiosity and extrinsic religiosity

Intrinsic religiosity refers to motivations grounded in the inherent purposes of religious tradition itself. Intrinsic religiosity indicates having a religious commitment to more inherent, spiritual purposes. It echoes the motivation for internal commitment to religion and its principles, as part of one's daily life, to assist the common good and to assist one's religion (Vitell et al. 2011). King and Crowther (2004) describe intrinsically-motivated religious people as those who view their practice of religion as a goal in itself, true believers in religious practice for its own sake, and as having a pure, direct motivation toward religion and practice.

Extrinsic religiosity refers to primarily utilitarian motivations for religious behaviours. It indicates religious participation for slightly selfish reasons, such as social approval for furthering one's business (Vitell et al. 2011). Vitell et al. (2005) contend that people who have a high degree of extrinsic religiosity might not be as committed to their religion or as ethically sensitive as they might appear to be or when compared to people with high

intrinsic religiosity. Weaver and Agle (2002) argue that an extrinsically-oriented person treats religion in terms of its usefulness or as a means of procuring other benefits.

Findings from empirical studies on the effect of intrinsic and extrinsic religiosity on EDM have remained inconclusive among researchers who support the effect of intrinsic and extrinsic religiosity on EDM area (Singhapakdi et al. 2013; Vitell et al. 2005; Walker et al. 2012; Walker et al. 2014; Uyar et al. 2015). Singhapakdi et al. (2013) studied 202 American marketing managers and found that managers who were higher in terms of their intrinsic religiosity tended to be more ethical in their intentions. This result indicates that intrinsic religiosity has a significant positive effect on ethical intention. They also found that managers who were higher in terms of their extrinsic religiosity tended to be less ethical in their intentions. This result indicated that extrinsic religiosity had a negative effect on ethical intention. Vitell et al. (2005) studied 114 undergraduate student consumers from a university in the US and claimed that intrinsic religiosity was a significant determinant of consumer ethical beliefs (three of the four dimensions). Walker et al. (2012) studied 220 individuals in the US who were at least 19 years old with at least one year of work experience and found that intrinsic religiosity had a significant negative relationship with endorsing ethically questionable action while extrinsic religiosity had a significant positive relationship with endorsing these ethically questionable actions. Furthermore, Walker et al. (2014) surveyed 330 people over 19 years of age with at least one year of work experience in the US to investigate the influence of religiosity on work related ethical judgements. Using latent profile regression, they found that religiosity was related to ethical outcomes. Intrinsic religiosity had a negative correlation with the endorsement of ethically questionable actions. Extrinsic religiosity had a positive correlation with the endorsement of ethically questionable actions. Recently, Uyar et al. (2015) surveyed 219 accountants from the largest cities in Turkey to investigate the influence of religiosity on their ethical awareness. They used a partial least square SEM for data analysis and found that intrinsic religiosity had a positive effect on ethical awareness.

However, some studies found inconclusive findings (Kurpis et al. 2008; Vitell et al. 2005; Vitell et al. 2007). Vitell et al.'s (2005) study on 114 undergraduate student consumers

from a university in the US found that extrinsic religiosity was not related to consumer ethical beliefs. Furthermore, Vitell et al. (2007) examined the effect of intrinsic and extrinsic religiosity on the ethical beliefs of consumers in a non-student population. The results of the study revealed mixed findings in which the intrinsic religiosity only affected the ethical consumer beliefs for three of the five dimensions (except the dimensions of no harm/no foul and doing good/recycling). The study also found that extrinsic religiosity significantly affected ethical consumer confidence only in one ethical dimension (doing good/recycling). Similarly, Kurpis et al.'s (2008) study on 242 American business students found mixed results, with intrinsic religiosity a significant predictor of ethical intentions in only two of eight scenarios. Furthermore, their results revealed that intrinsic religiosity was not a significant predictor of ethical recognition.

Table 2.2 shows a summary of findings from studies on the relationship between religiosity (including demarcating between intrinsic religiosity and extrinsic religiosity) and EDM.

Table 2.2 Summary of studies on the relationship between religiosity and EDM

Author	Sample/Data	Research methods	Findings
Uyar et al. (2015)	219 accountants in Turkey	Quantitative Survey	Intrinsic religiosity had a positive influence on accountants' ethical awareness in Turkey.
Walker et al. (2014)	300 individuals in the US	Quantitative Survey	Intrinsic religiosity had a negative relationship with the endorsement of ethically questionable actions. Extrinsic religiosity had a positive relationship with the endorsement of ethically questionable actions.
Arli and Tjiptono (2014)	356 students from three large universities in Yogyakarta Indonesia	Quantitative	Intrinsic religiosity positively affected individual attitudes to ethically questionable consumer practices in Indonesia. However, results showed mixed findings on the influence of extrinsic religiosity on consumer ethics.

Singhapakdi et al. (2013)	202 American marketing managers	Quantitative Survey	Managers with higher intrinsic religiosity tended to be more ethical in their intentions. This indicated that intrinsic religiosity had a positive influence on ethical intention. Managers with higher extrinsic religiosity tended to be less ethical in their intentions. This indicated that extrinsic religiosity had a negative influence on ethical intention.
Walker et al. (2012)	220 individuals who were at least 19 years old and had at least one year of work experience in the US	Quantitative	Intrinsic religiosity had a negative relationship with the endorsement of ethically questionable actions. Extrinsic religiosity was found to have a positive relationship with the endorsement of these ethically questionable actions.
Saat et al. (2009)	378 Malaysian accounting students	Quantitative	Religious affiliation, religious education background, type of institution and religiosity (faith maturity) influenced accounting students' ethical sensitivity, but the influence was situational. Accounting students who attended religious schools were found to have higher levels of ethical sensitivity in eight out of 16 scenarios and four were significantly different.
Ho (2009)	427 junior and senior accounting students from two universities in Taiwan	Quantitative Accounting specific DIT (ADIT) t test with independent samples	Accounting students with religious beliefs obtained higher scores on ethical reasoning abilities than those who did not hold religious beliefs. No significant differences in mean ethical reasoning abilities scores among three groups of students with different religious beliefs.
Kurpis et al. (2008)	242 undergraduate business students from a small private, religiously-	Quantitative	The results showed that the relationship between intrinsic religiosity and ethical recognition was inconclusive (intrinsic religiosity was positively related to ethical recognition, but not in all scenarios).

	affiliated university in the Pacific northwest of the US		The results also showed mixed findings on the relationship between intrinsic religiosity with ethical intention (in two of the eight combinations of scenarios and dependent variables).
Wong (2008)	300 Malaysian Christians from three large churches in Kuala Lumpur	Quantitative	Religiosity had a positive influence on ethical attitudes of Malaysian Christians in business. There were some differences in the ethical attitudes of Malaysian Christians in business with different levels of religiosity. Those longer in the faith were less accepting of unethical behaviour.
Keller et al. (2007)	171 undergraduate and postgraduate accounting students from a major US university	Quantitative Survey Logistic regression t-test	The results showed that the religiosity of US accounting students significantly influenced their EDM.
Vitell et al. (2007)	110 undergraduate business students in the US	Quantitative	The results showed that the relationship between intrinsic and extrinsic religiosity and consumer ethical beliefs was inconclusive. The intrinsic religiosity significantly affected the ethical consumer beliefs for three of the five dimensions (except dimension no harm/no foul, and doing good/recycling). Extrinsic religiosity significantly affected ethical consumer confidence only in the ethical dimension of the consumer (doing good/recycling).
Vitell et al. (2005)	114 undergraduate student consumers from a university in the US	Quantitative	The authors claim that intrinsic religiosity was a significant determinant of consumer ethical beliefs (three of the four dimensions). However, they found that extrinsic religiosity was not related to consumer ethical beliefs.

Conroy and Emerson (2004)	Students at two southern US universities (one public and one private)	Quantitative	The authors claimed that religiosity was a statistically significant predictor of responses in a number of ethical scenarios. In seven of the eight vignettes for which religiosity was significant, the effect was negative, implying that it reduces the 'acceptability' of ethically-charged scenarios. Completion of ethics or religion classes, however, was a significant predictor of ethical attitudes in only two of the 25 vignettes (and in the expected direction).
Vitell and Paolillo (2003)	353 adult consumers in the US	Quantitative	Their study found that religiosity did not have a direct influence on any dimensions of consumers' ethical beliefs. However, the post hoc analysis revealed that religiosity had a significant influence on idealism and relativism. Because idealism and relativism was found to determine consumer ethical beliefs, therefore, they concluded that religiosity had a significant indirect influence on consumer ethical beliefs.
Sarwono and Armstrong (2001)	173 Javanese, 128 Batak, and 170 Indonesian-Chinese marketing managers in Indonesia	Quantitative	Religious value orientation had a positive relationship with the perceived ethical problems score.
Singhapakdi et al. (2000a)	American Marketing Association practitioners	Quantitative	Religiosity was a significant determinant of perceptions of an ethical problem.
Singhapakdi et al. (2000b)	798 managers enrolled in executive MBA programs from eight public and five private	Quantitative Scenarios	The results showed that the relationship between religiosity and ethical intention was inconclusive. Religiosity positively influenced ethical intention only for two of four scenarios.

	universities in Thailand		
Kennedy and Lawton (1998)	Students from universities in the US	Quantitative	They found a significant negative relationship between intrinsic religiosity and intention to behave unethically.

2.4.1.3 Religiosity and study

Religiosity can be defined as the faith that a person has in God and the extent to which they are pursuing a path considered set by God (McDaniel & Burnett 1990). Weaver and Agle (2002) identify the experience or perception of work as sacred or spiritual (also referred as sanctifying one's work) as a key religious attitude. Sanctification includes perceiving objects or event theistically by viewing them as having religious significance. According to Walker et al. (2012), any object or event can be sanctified, including one's job. Walker et al. (2008) found that individuals who sanctified their jobs were more satisfied, more committed, and had less intent to leave. Weaver and Agle (2002) contend that roles related to work and their related expectations can come to be sanctified for some individuals.

Since there were no prior studies that employed construct religiosity and study, this study developed this construct to measure religiosity based on Walker et al.'s (2012) job sanctification construct which originally came from Pargament and Mahoney's (1999) 12 item MOG. In this study, religiosity and study is related to the perception of studying at university as sacred or spiritual. This construct assesses the extent to which accounting students believe God to be present in their study at university.

2.4.2 LOC and EDM

Rotter (1966) define LOC as the degree to which people believe that outcomes are dependent upon their personal characteristics and behaviour. Furthermore, Spector (2008), and Hellriegel, Slocum and Woodman (2010) define LOC as the extent to which

individuals believe they are able to control events that influence them. According to Rotter (1966), people can be characterised into two groups: 'internals' who believe they have control of their own destiny, and 'externals' who believe they do not have control over life events since these are the result of fate, luck or destiny. Trevino (1986) argues that people with an external LOC are not likely to take personal responsibility for the consequences of ethical/unethical behaviour because they rely on external forces. On the other hand, people with an internal LOC are more likely to take responsibility for consequences since they depend on their inner strength of mind to guide behaviours related to right and wrong.

As previously discussed, there are only a few empirical studies on the relationship between LOC and EDM and their results are inconclusive. Some studies found a significant relationship between LOC and EDM (Cherry & Fraedrich 2000; Ho 2010; McCuddy & Peery 1996; Reis & Mitra 1998; Street & Street 2006; Suryaningrum, Hastuti & Suhartini 2013). McCuddy and Peery (1996) studied 171 undergraduate students from two universities in the US using 15 scenarios and found that LOC has a relationship with ethical beliefs. Reis and Mitra (1998) studied 198 college students from a university in the US and found that students with an external LOC tended to accept uncertain ethical behaviours more than those with an internal LOC. Cherry and Fraedrich (2000) studied sales managers to examine the ability of LOC to predict a manager's moral reasoning and its effect on EDM. They found sales managers with internal LOC exhibited stricter judgement of unethical behaviour such as bribery when compared to sales managers with external LOC. Furthermore, sales managers with internal LOC indicated less intention to behave unethically, such as paying bribes. Street and Street (2006) studied 155 undergraduate business students from a university in the US and found that students with an external LOC were significantly inclined to select unethical choices compared with those with an internal LOC. Ho (2010) found that LOC significantly affected the ethical perception of managers. Suryaningrum et al. (2013) investigated 436 accounting students and 112 accounting lecturers in Indonesia and found that individuals with an internal LOC are more reluctant to do unfair and unethical actions than individuals with an external LOC.

In contrast, Jones and Kavanagh (1996) found mixed result when investigating the influence of LOC (internal versus external) on individual behavioural intention to engage in unethical behaviour in the work setting. Their respondents were 138 upper-level undergraduate students enrolled in a management course at a large northeastern university in the USA. Their study used a 2x2x2 experimental design and hierarchical regression to analyse data. Jones and Kavanagh found that people with an external LOC were more likely to engage in unethical behaviour in one of two experiments when compared to people with an internal LOC. Meanwhile, Forte (2005) studied 400 managers of companies in the US and found no significant relationship between LOC and the moral reasoning ability of managers.

Because a gap exists in the ethics literature in regard to the influence of LOC on EDM, this study sought to determine whether LOC (internal and external) influenced accounting students' EDM in Indonesia. Table 2.3 below provides a summary of findings from studies on the relationship between LOC and EDM.

Table 2.3 Summary of studies on the relationship between LOC and EDM

Author	Sample/Data	Research methods	Findings
Suryaningrum et al. (2013)	436 accounting students and 112 accounting lecturers from a university in Indonesia	Quantitative	Individuals with an internal LOC are more reluctant to do unfair and unethical actions than individuals with an external LOC.
Street and Street (2006)	155 undergraduate students from a university in the US	Quantitative Experimental design	The study found a statistically significant relationship between LOC and students' EDM.
Forte (2005)	400 managers of companies in the US	Quantitative	The study found no statistically significant relationship between LOC and the moral reasoning ability of managers.
Cherry and Fraedrich (2000)	430 sales managers in the US	Quantitative	Sales managers with internal LOC showed stricter ethical judgements of unethical behaviour than do sales managers with external LOC. Sales managers with internal LOC indicate less intention to behave

			unethically than Sales managers with external LOC.
Reis and Mitra (1998)	198 college students from a university in the US	Quantitative	People with an external LOC were inclined to regard uncertain ethical behaviours as more acceptable than did those with an internal LOC.
Jones and Kavanagh (1996)	138 upper-level undergraduate students enrolled in a management course at a university in the US	Quantitative Experimental design	The study's findings were inconclusive. People with an external LOC were more likely to engage in unethical behaviour in 1 of 2 experiments than people with an internal LOC.
McCuddy and Peery (1996)	171 undergraduate students from two universities in the US	Quantitative	LOC has a relationship with ethical beliefs. This means that differences in LOC are related to differences in ethical attitudes.

2.4.3 Peer influence and EDM

It has been argued that an employee's peers can influence their behaviour. These influencing peers may be colleagues within the same organisation, or counterparts in the same field but employed by other agencies. According to Jones and Kavanagh (1996), peers may affect unethical behaviour in two ways: through norms or through differential associations. Schein (1984) explains that peers may set the normative structure and become the reference for an employee's decision-making – particularly in a situation where there is a weak organisational culture. Using the differential association theory of criminal behaviour, Sutherland (1983) contends that a person learns unethical behaviour through partnership with a peer group. The learning can include the techniques of unethical conduct in action, as well as the reasons and justifications for that unethical behaviour (Jones & Kavanagh 1996). The influence of peers on decision-making has also been supported by Bandura's (1977) social learning theory, in which individuals learn from their peers' behaviour.

The few empirical studies on the effect of peer influence on EDM that exist have presented inconclusive findings. Some studies found that an individual's organisational

peers did influence unethical behaviours. Zey-Ferrell and Ferrell (1982) investigated marketing managers in the US and found that their perceptions of what their peers did was a better predictor of unethical behaviour than their own values and beliefs. Ponemon (1992b) studied 88 auditors from a national public accounting firm in the US and discovered that peer pressure had the most significant influence on underreporting on audit tasks.

However, Jones and Kavanagh (1996) provided different results. Using an experimental design, they investigated the influence of situational variables, including peer influence (unethical versus ethical) and managerial influence (unethical versus ethical), on individual behavioural intention to engage in unethical behaviour in a work setting. The respondents were 138 upper-level undergraduate students enrolled in a management course at university in the US. To analyse the data, the study used hierarchical regression analysis. The results indicated that peer influence had a significant correlation with behavioural intentions in the first experiment, but only managerial influence had a significant correlation with behavioural intention in the second experiment.

Because a gap exists in the ethics literature in regard to the influence of peer influence on EDM, this study sought to determine whether peer influence affects accounting students' EDM in Indonesia. Table 2.4 below provides a summary of findings from studies on the relationship between peer influence and EDM.

Table 2.4 Summary of studies on the relationship between peer influence and EDM

Author	Sample/Data	Research methods	Findings
Jones and Kavanagh (1996)	138 undergraduate students from a university in the US	Quantitative Experimental design	Peer influence had a significant correlation with behavioural intentions only in experiment 1. Only managerial influence had a significant correlation with behavioural intention in experiment 2.

Ponemon (1992b)	88 auditors from a national public accounting firm in the US	Quantitative	Peer pressure had the most significant influence on underreporting on audit tasks.
Zey-Ferrell and Ferrell (1982)	225 marketing managers in the US	Quantitative	Marketing managers' perceptions of what their peers did was a better predictor of unethical behaviour than their own values and beliefs.

2.4.4 Family influence and EDM

Family has been considered as a very important agent in the socialisation of children, including their development of skills and knowledge necessary to act as successful consumers in a complex marketplace (Heckle, Childers & Arunachalam 1989). Mochis (1985) terms the influence of family in the socialisation of children to new people and environment as intergenerational influence. Furthermore, Mochis contends that family communication has an impact on parental influences, which in turn have an effect on adolescent behaviours. Children that have frequent communication with their family tend to follow their family in their ethical decisions.

Empirical studies have found that family influence affects children's decision-making. For example, Basow and Howe (1980) found that both fathers and mothers had a more significant influence on young adult career and education objectives than other groups, including peers, teachers, and other adult role models. Furthermore, Mascarenhas and Higby (1993) investigated the influence of peers, parents, and the media on teen apparel shopping and found that teens received significantly more parental influences when they buy special apparel than when they buy ordinary apparel. Furthermore, the influence of parents on teen's shopping decisions is greater than the influence of peers and media. Based on the above argument and two empirical studies that support the influence of family on children's decision-making, and because a gap exists in the ethics literature in regard to this influence on EDM, this study sought to investigate whether family influence affects accounting students' EDM in Indonesia.

2.4.5 Ethical recognition and ethical judgement

The influence of ethical recognition on ethical judgement has been described by Rest (1986) in his EDM model. Furthermore, Hunt and Vitell (1986, 1993) in their EDM model showed that an individual's recognition of an ethical problem situation is the catalyst of the EDM process. To measure the construct of ethical recognition, Singhapakdi and Vitell (1990) suggest asking the respondent whether the situation described in each scenario contains ethical problems. Specifically, Singhapakdi et al. (1996 p.248) asked respondents to state their agreement on statements such as "the situation above involves an ethical problem".

A study by Singhapakdi, Vitell and Kraft (1996) found that individuals who have ethical recognition ability or can perceive that a situation has an ethical problem will form a more ethical judgement. However, Valentine and Fleischman (2003) found that the ability to recognise an ethical problem did not have a relationship with ethical judgement.

2.4.6 Ethical judgement and ethical intention

The theory of reasoned action (Ajzen & Fishbein 1980) proposes that people's attitudes or judgement impact their behavioural intentions. In their marketing ethics model, Hunt and Vitell (1986) explain ethical judgement as an underlying factor of an individual's intention to implement a particular alternative for solving an ethical dilemma. To measure ethical intentions, Singhapakdi et al. (1996) suggest asking respondents to state if they would act in the same, ethically questionable ways as the person described in the scenarios. Particularly, Singhapakdi et al. (1996, p. 248) used the statement "the situation above involves an ethical problem". Previous studies such as Vitell and Hunt (1990), Mayo and Marks (1990) and Singhapakdi et al. (2013) empirically found that ethical judgement has a positive influence on ethical intention.

2.5 Gender

According to O'Fallon & Butterfield (2005), gender has been considered as the most widely studied demographic variable in business ethics. The effect of gender differences on EDM is supported by Gilligan's (1982) ethics of care theory which proposes that women are inclined to have orientations of 'caring for others', 'understanding relationships' and 'responsibility to whole community' when determining ethical problems, while men are inclined to have an orientation towards 'rules, fairness, right and justice'. However, structural theory does not support the effect of gender on EDM. This theory contends that the effect of gender differences is formed in early socialisation and other women's roles (for example, wife, mother) will be disregarded when rewards and costs are associated with work-related roles. Furthermore, it expects that women would become more like men when positioned under similar occupational conditions (Betz, O'Connell & Shepard 1989).

Many previous studies have examined the relationship between gender and EDM and they found that the relationship was inconclusive (Borkowski & Ugras 1998; Ford & Richardson 1994; O'Fallon & Butterfield 2005). Richardson (1994) reviewed 14 studies on the relationship between gender and EDM and found that half of the studies reviewed showed a positive relationship and half the others showed non-significant results. Borkowski and Ugras (1998) employed meta-analysis on 47 studies and found that 29 studies indicated a positive relationship, 16 studies indicated a non-significant relationship, and 2 studies indicated mixed results. After reviewing 49 studies, O'Fallon and Butterfield (2005) found 16 studies showed a positive relationship and 24 studies showed a non-significant relationship.

This study did not examine the direct influence of gender on EDM variables; however, it examined the influence of gender on the key influencing variables. In other words, this study examined the indirect influence of gender on EDM.

2.6 Accounting education in Indonesia

Accounting education in Indonesia at university level can be divided into three types based on religious affiliations. First, accounting education is provided by non-religious-affiliated (secular) universities. These universities teach secular/conventional accounting subjects similar to those in western curricula. However, they may provide a very small number of religious subjects in their curricula since most universities in Indonesia do so. Second, accounting education is provided by religious-affiliated universities, such as Islamic universities and Catholic universities. These universities, particularly Islamic universities, teach conventional accounting subjects similar to those in western curricula but also include religious subjects. Third, specifically Islamic accounting education is provided by Islamic universities. Islamic accounting is centred on the belief that interest and speculative business are prohibited according to Islamic religion. A company can only trade goods and service that are allowed according to Islamic religious law. Islamic accounting education in Indonesia differs from conventional accounting education as Islamic studies comprise about 35-40% of their curriculum, compared with 2% of the total curriclum for conventional accounting in Islamic universities. Islamic studies include Islamic jurisprudence (fiqh), Islamic morals (Akhlaq), Qur'an interpretation (Tafsir), Sayings of the Prophet Muhammad (Hadist), Islamic economics, Islamic accounting theory, Islamic business ethics, and accounting for Islamic banks. There has been no prior study that investigates key influencing factors in EDM according to university affiliations.

2.7 Scenarios

According to Alexander and Becker (1978, p. 94), scenarios or vignettes are "short descriptions of a person or a social situation which contain precise references to what are thought to be the most important factors in the decision-making or judgement-making processes of respondents". Furthermore, they explain the employment of vignettes assists to standardise the social stimulus across respondents and at the same time makes the decision-making situation more real. Robin et al. (1996) contend that using scenarios

enables researchers to provide participants with real problems that require a minimal amount of effort for a response. Musbah et al. (2016) contend that scenarios are the most usual instrument employed by researchers to obtain personal perspectives related to ethical issues within the business ethics field.

In selecting the scenarios, this study followed suggestions by Weber (1992) including: first, ensuring that they are familiar to, and salient and attractive to, participants; secondly, scenarios should include realistic problems related to the investigated area; the study should use a reasonable number of scenarios; and lastly, it is recommended that the study use previously tested scenarios which allow the researchers to make comparisons for their results and aid cross-validation of the results.

This study used three scenarios that have been previously used to measure EDM (case studies of a credit manager, local manager, and controller) adapted from Cohen et al. (1996). Each scenario presents an ethical dilemma that an individual business or professional person might encounter and an action taken in response to that situation. The scenarios are based on general business situations that students, even if they had not taken an ethics course, could understand and relate to when responding to each case. To measure levels of ethical recognition and ethical judgement, this study adopted the MES, drawing on the work of Reidenbach and Robin (1988, 1990). To measure ethical intention, this study followed Hunt and Vitell (1986), who propose that individual behavioural intentions could be measured by asking a person to express the likelihood (in a probability sense) that he or she would actually perform the behaviours described to them.

2.8 The conceptual framework and hypotheses development

2.8.1 Conceptual framework

A conceptual framework illustrates the researcher's opinion on how particular phenomena (or variables or concepts) are linked to each other (creating a model) and the reason why the researcher believes that these variables are related (theory) (Sekaran &

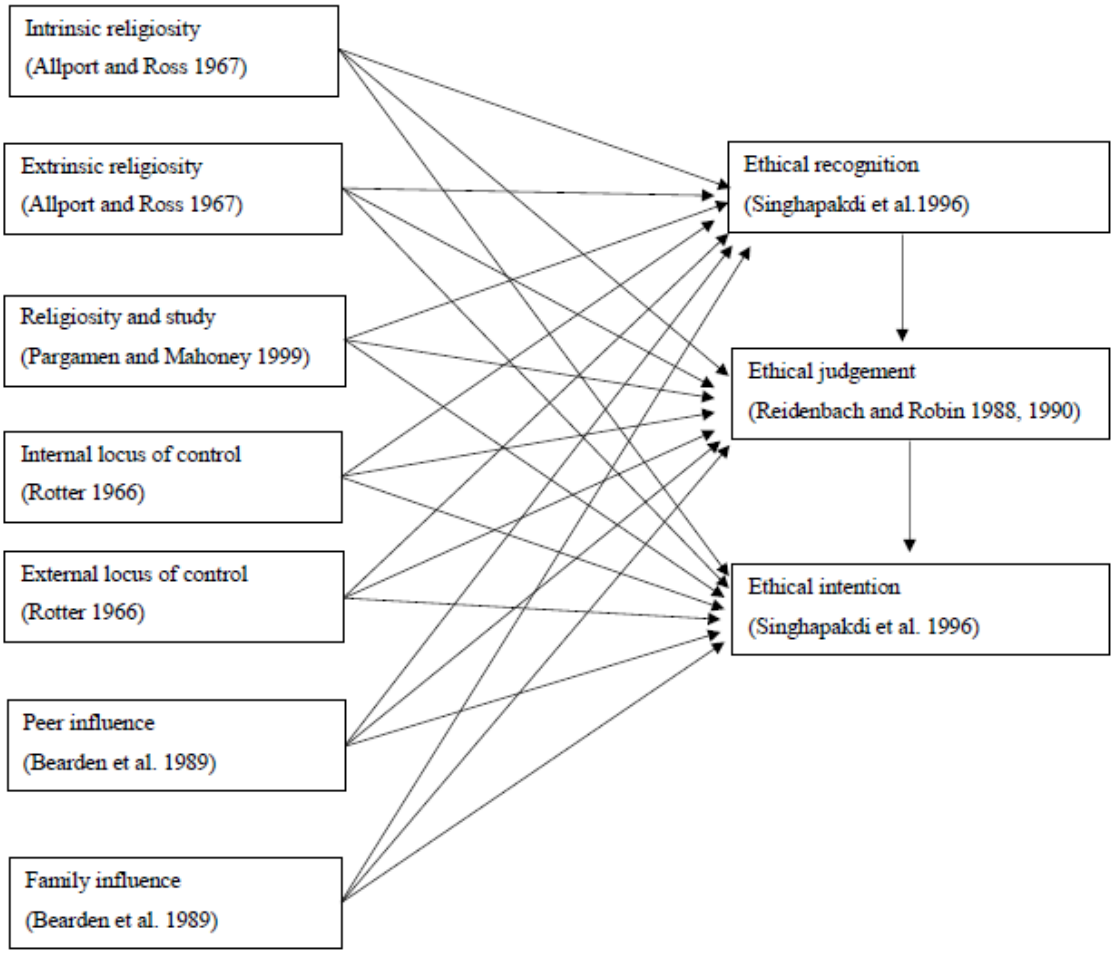
Bougie 2016). Sekaran and Bougie explained that a good theoretical framework identifies and defines the essential variables in situations that are relevant to the problem. It then describes and explains the interconnections among these variables.

Veal (2005) states that we need to carry out four important activities in developing a conceptual framework: identify concepts, define their characteristics, explore the relationship between those concepts, and operationalise the concepts. First, all concepts related to the study objectives and questions must be identified. Second, the identified concepts must be defined to clarify the meaning of each concept in the context of study. Third, the correlation among concepts, or cause and effect, must be identified in response to the research questions. Lastly, the operationalisation of concepts refers to the decision-making in terms of the way those concepts will be measured, if the research is quantitative in nature.

The comprehensive review presented in Chapter 2 focused on 10 concepts (i.e., intrinsic religiosity; extrinsic religiosity; religiosity and study; internal LOC; external LOC; peer influence; family influence; ethical recognition; ethical judgement; ethical intention), which are substantial in developing the conceptual framework of this study. These concepts have been previously employed by many scholars in the accounting ethics and business ethics fields.

The conceptual framework in this study includes four main relationships: the effect of religiosity on EDM; the effect of LOC on EDM; the effect of peer influence on EDM; and the effect of family influence on EDM.

Figure 2.2 Conceptual framework



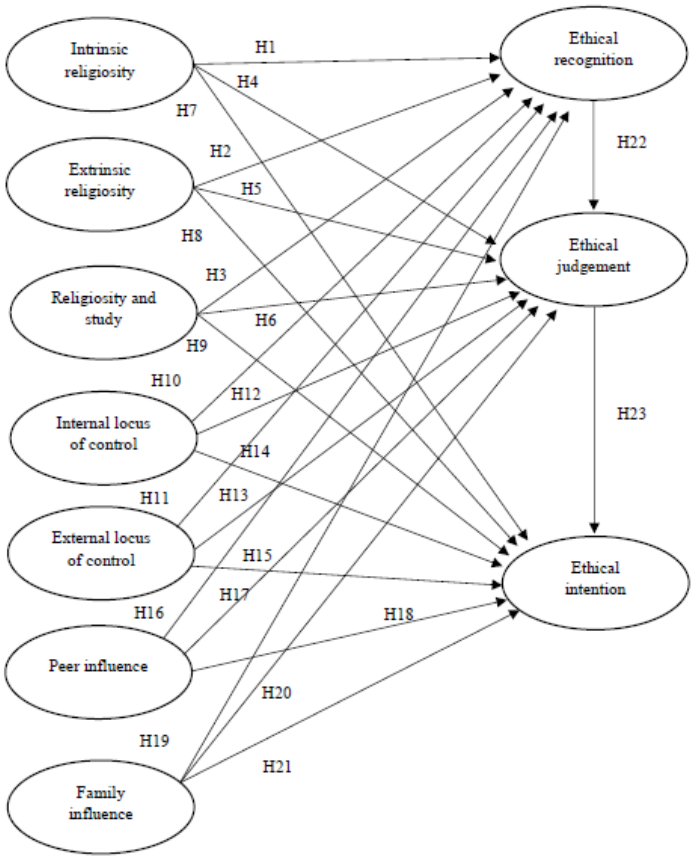
The conceptual framework is shown in Figure 2.2. This study extends Rest's (1986) EDM model by examining the effect of seven independent variables on the three dependent variables (ethical recognition, ethical judgement and ethical intentions).

2.8.2 Research model and hypotheses development

Using the conceptual framework, this study developed a research model and hypotheses under each of these three scenarios (credit manager, local manager, controller) to examine the theory and constructs. Figure 2.3 shows the research model, comprising independent variables (intrinsic religiosity, extrinsic religiosity, religiosity and study, internal LOC,

external LOC, peer influence, and family influence) and dependent variables (ethical recognition, ethical judgement, and ethical intention).

Figure 2.3 Research model and hypotheses



2.8.2.1 The effect of religiosity on EDM

Based on the theories (Hunt & Vitell 1993; Weaver & Agle 2002) and empirical studies (Beam et al. 2003; Jones & Kavanagh 1996; Ponemon 1992; Zey-Ferrell & Ferrell 1982), including those with a focus on intrinsic and extrinsic religiosity (Arli & Tjiptono 2014; Singhapakdi et al. 2013; Uyar 2015; Walker, AG, Smither and DeBode (2012), discussed in Chapter 2, this research predicted that intrinsic religiosity would have a positive effect on ethical recognition, ethical judgement, and ethical intention. Furthermore, this research predicted that extrinsic religiosity would have a negative effect on ethical recognition, ethical judgement, and ethical intention. This research also predicted that religiosity and

study would have a positive effect on ethical recognition, ethical judgement, and ethical intention. Therefore, this research study hypothesised that:

H1: Intrinsic religiosity has a positive effect on ethical recognition.
H2: Extrinsic religiosity has a negative effect on ethical recognition.
H3: Religiosity and study has a positive effect on ethical recognition.

H4: Intrinsic religiosity has a positive effect on ethical judgement.
H5: Extrinsic religiosity has a negative effect on ethical judgement.
H6: Religiosity and study has a positive effect on ethical judgement.

H7: Intrinsic religiosity has a positive effect on ethical intention.
H8: Extrinsic religiosity has a negative effect on ethical intention.
H9: Religiosity and study has a positive effect on ethical intention.

2.8.2.2 The effect of LOC on EDM

Based on the theories (Rotter 1966; Trevino 1986) and empirical studies (Cherry & Fraedrich 2000; McCuddy and Peery (1996); Reis & Mitra 1998) discussed in Chapter 2, this research predicted that internal LOC would have a positive effect on the ethical recognition, ethical judgement, and ethical intention of accounting students in Indonesia. This study also predicted that external LOC would have a negative effect on the ethical recognition, ethical judgement, and ethical intention of accounting students in Indonesia. Therefore, this research study hypothesised that:

H10: Internal LOC has a positive effect on ethical recognition.
H11: External LOC has a negative effect on ethical recognition.
H12: Internal LOC has a positive effect on ethical judgement.
H13: External LOC has a negative effect on ethical judgement.
H14: Internal LOC has a positive effect on ethical intention.
H15: External LOC has a negative effect on ethical intention.

2.8.2.3 The effect of peer influence on EDM

Based on the theories (Bandura 1977; Jones & Kavanagh 1996; Sutherland 1983) and empirical studies (Beam et al. 2003; Jones & Kavanagh 1996; Ponemon 1992; Zey-Ferrell & Ferrell 1982) discussed in Chapter 2, this research predicted that peer influence would affect the ethical recognition, ethical judgement, and ethical intention of accounting students in Indonesia. Therefore, this research study hypothesised that:

H16: Peer influence affects ethical recognition.
H17: Peer influence affects ethical judgement.
H18: Peer influence affects ethical intention.

2.8.2.4 The effect of family influence on EDM

Based on the theories and empirical studies (Basow & Howe 1980; Mascarenhas & Higby 1993) discussed in Chapter 2, this research predicted that family influence would affect the ethical recognition, ethical judgement, and ethical intention of accounting students in Indonesia. Therefore, this research study hypothesised that:

H19: Family influence will influence ethical recognition.
H20: Family influence will influence ethical judgement.
H21: Family influence will influence ethical intention.

2.8.2.5 The effect of ethical recognition on ethical judgement

Based on the theories (Rest 1986) and empirical studies (Singhapakdi et al. 1996) discussed in Chapter 2, this research predicted that ethical judgement would have a positive effect on the ethical intention of accounting students in Indonesia. Therefore, this research study hypothesised that:

H22: Ethical recognition has a positive effect on ethical judgement.

2.8.2.6 The effect of ethical judgement on ethical intention

Based on the theories (Hunt & Vitell 1986; Rest 1986) and empirical studies (O'Fallon& Butterfield 2005; Singhapakdi et al. 2013; Vitell & Hunt 1990) discussed in Chapter 2, this research predicted that ethical judgement would have a positive effect on the ethical intention of accounting students in Indonesia. Therefore, this research study hypothesised that:

H23: Ethical judgement has a positive effect on ethical intention.

2.8.3 Mediating variables

O'Fallon and Butterfield (2005), and Lehner, Park and Singh (2015) have argued that very few studies have investigated moderating and mediating effects in EDM research. In this study on accounting students in Indonesia, the researcher investigated the extent to which the relationship between key influencing factors (religiosity, LOC, peer influence, or family influence) and EDM variables was mediated by other EDM variables. This research study proposed that the relationship between the independent factors with dependent variables would be mediated by another EDM variable. This is because all independent variables were predicted to influence the EDM variable (ethical recognition, ethical judgement, and ethical intention). For example, the research model predicted that intrinsic religiosity would have a relationship with both ethical recognition and ethical judgement. If the relationship is significant, we could predict that the relationship between intrinsic religiosity and ethical judgement would be mediated by ethical recognition. This means that the relationship between intrinsic religiosity and ethical judgement with indirect but through ethical recognition. Furthermore, the relationship between intrinsic religiosity and ethical intention was also predicted to be mediated by ethical judgement. This means that the influence of intrinsic religiosity on ethical intention would be indirect but through ethical judgement. Based on the above, this research study hypothesised that:

H24: The relationship between key influencing factors (intrinsic religiosity, extrinsic religiosity, religiosity and study, internal LOC, external LOC, peer influence, or family influence) and ethical judgement is mediated by ethical recognition.

H25: The relationship between key influencing factors (intrinsic religiosity, extrinsic religiosity, religiosity and study, internal LOC, external LOC, peer influence, or family influence) and ethical intention is mediated by ethical judgement.

2.9 Summary

This chapter has discussed EDM theories and examined the empirical studies focused on the influencing factors of religiosity, LOC, peer influence and family influence on the EDM process (ethical recognition, ethical judgement, and ethical intention). The literature review in this Chapter justifies the relevance and significance of the research objectives in this study. A brief overview of Islamic and conventional accounting education in the Indonesian context has also been provided.

Lastly, this chapter has discussed the conceptual framework employed to determine the influence of seven independent variables (intrinsic religiosity, extrinsic religiosity, religiosity and study, internal LOC, external LOC, peer influence, and family influence) on ethical recognition, ethical judgement, and ethical intention. It also discussed the research model and the 25 hypotheses developed for this research. The next chapter will reveal the research process and identify the methodology used in this study.

Chapter 3 Research Methodology

3.1 Introduction

In the preceding chapter, the conceptual framework for this study and the relevant research hypotheses were developed and presented. This chapter outlines the research process and identifies the methodology adopted in this study to address the research objectives. It is a logical progression from the literature review and the conceptual framework (presented in Chapter 2). These research steps helped determine the appropriate research design for data collection and the methodology employed to best address or investigate the research problem through the proposed framework.

A survey research design and quantitative methods of analysis for cross-sectional data were employed to examine the impacts of religiosity, LOC, peer influence and family influence on the EDM (recognition, judgement, and intention) of accounting students in Indonesia. Statistical techniques used for analysing data collected from the survey are also presented.

3.2 Research process

The research process of this study consisted of six steps: a literature review, the research design, research procedures, data collection, data preparation and analytic tools, and data analysis and results. These steps are listed in more detail in Table 3.1.

Table 3.1 The research process

Research process	Activities undertaken
Literature review	• Conducted a literature review to identify relevant issues and knowledge gaps for investigation in this study • Developed research questions • Developed a theoretical framework • Developed a research model and hypotheses
Research design	• Identified and selected an appropriated quantitative research design
Research procedures	• Sampling • Designed a suitable questionnaire for collecting data • Translated and back-translated a questionnaire to test consistency of meaning in both English and Indonesian languages • Pre-testing questionnaire • Applied for human research ethics approval
Data collection	• Research assistants distributed questionnaire to participants and completed data collection
Data preparation and analytic tools	• Coded questionnaire results • Screened data to eliminate missing values, incomplete information and outliers • Prepared data analysis instruments
Data analysis and results	• Conducted the preliminary descriptive analysis for demographic profiles • Conducted CFA, and reliability and validity tests • Used SEM • Tested for mediating effects in the structural equation model • Determined differences among groups • Reported results

The six steps of the research process identified in Table 3.1 constitute a systematic and step-by-step approach to the research activities considered necessary to address the objectives in this study. The following sections provide more detail on each step of the research process.

3.3 Literature review

The first step in the research process is a comprehensive review of the literature. Veal (2005) defines a literature review as the process of thoroughly examining theories and previous studies relevant to a particular issue and area of research. An extensive review of the relevant materials that embody scholarly and academic research findings, he argued, can offer ideas on topics for research, inform researchers of existing research findings and theories, as well as provide insights for methodological approaches or theoretical ideas. Simultaneously, this also helps to identify the significance of one's research within the existing body of research, and can be a vital source of support for one's study. In terms of activities in this literature review process, Kumar (2005) identifies four major tasks that need to be undertaken: (1) searching for existing literature in the area of study; (2) reviewing the literature selected; (3) developing a theoretical framework; and (4) formulation of a research model.

This study observed the guidelines recommended by Veal (2005) and Kumar (2005), conducting a literature review of articles relevant to EDM from books, journal articles, conference proceedings, conference papers, newspaper articles, reports and online materials. To keep abreast of the latest published research in EDM, the researcher accessed journal articles from electronic databases, such as (1) Emerald full text; (2) EBSCOhost for Academic Search Elite; (3) Business Source Complete; (4) EBSCOhost Online Citations; (5) Newspaper Sources; (6) Wiley InterScience; (7) IEEE Explore; (8) ACM Digital Library; (9) Pro Quest Direct; (10) ScienceDirect; and (11) Australian Digital.

The researcher conducted a thorough review of literature on EDM and its influencing factors (religiosity, LOC, peer influence and family influence) from the aforementioned sources. Materials from these different sources were critically reviewed, with research findings and perspectives compared and contrasted to identify inconclusive results, unresolved problems and existing knowledge gaps (Kumar 2005). The literature search of these materials enabled the researcher to understand current issues in EDM in accounting and ascertained the appositeness of this research study within the existing

body of literature. Most importantly, the researcher was able to develop a theoretical framework and research model for investigating factors influencing EDM among accounting students in Indonesian universities from the review and synthesis of the literature.

3.4 Research design

Social science research involves the study of people or collections of people such as groups, firms, societies, individual, or of collective human behaviours (Bhattacherjee 2012). This study fits within the social science research arena because it seeks to understand the EDM behaviour of accounting students at Indonesian universities.

According to Creswell (2009), epistemological and methodological issues must be taken into consideration in the development of a research study. Epistemology is the study of the nature of knowledge and ways of enquiring and disseminating knowledge in particular areas of inquiry (Easterby, Thorpe & Lowe 2015). It entails how knowledge is viewed and how we can see ourselves in relation to this knowledge, and the methodological strategies we use to uncover or discover that knowledge. According to Guba and Lincoln (1985), epistemological orientations guide researchers in their choice of methodological approaches, influence the types of questions and study design developed, and the research strategies adopted. In this study, the researcher developed knowledge of epistemology with reference to the social science research literature in EDM. This knowledge of epistemology in turn underpins the entire research process, including governing the research paradigm and choice of research methods employed.

Collis and Hussey (2009) define a research paradigm as a philosophical framework that shows how scientific research should be carried out. In social science research design, positivistic paradigms and phenomenological paradigms are the most common approaches adopted by researchers (Collis & Hussey 2009). Easterby et al. (2015, p. 51) contend that a positivistic paradigm has a central thesis that "the social world exists externally, and that its properties should be measured through objective methods, rather than being inferred subjectively through sensations, reflections or intuition". This

paradigm adheres to the view that any phenomenon can be explained by causes (Creswell 2009). Positivism studies involve the collection and interpretation of data through an objective approach to identifying and assessing the causes that lead to certain outcomes. This paradigm often uses existing theory to develop hypotheses to be tested during the research process (Bryman & Bell 2011). The research findings in these studies are usually observable and quantifiable, and underpinned by statistical analysis. The positivist approach is also referred to as a quantitative research approach (Bryman & Bell 2011).

In contrast, a phenomenological paradigm is used to understand human behaviour from an individual participant's own frame of reference to gain more in-depth information (Collin & Hussey 2009; Creswell 2009). The phenomenological approach is referred to as a qualitative research approach (Bryman & Bell 2011). Key features of these two approaches have been summarised by Collis and Hussey (2009), as shown in Table 3.2.

Table 3.2 Key features of the positivistic and phenomenological paradigms

Positivist paradigm	**Phenomenological paradigm**
Inclines to produce quantitative data	Inclines to produce qualitative data
Employs large samples	Employs small samples
Emphasis on hypothesis testing	Emphasis on generating theories
Data is very specific and precise	Data is rich and subjective
The location is artificial	The location is natural
Reliability is high	Reliability is low
Validity is low	Validity is high
Generalises from sample to population	Generalises from one setting to another

Source: Collis and Hussey (2009 p. 62)

As this study is within the discipline of business research, concerned with producing substantive quantifiable data derived from analysing large samples rather than small ones, the quantitative approach used is well-matched to the positivistic paradigm. Furthermore, much of the research related to EDM in accounting pursues the positivistic paradigm by using pre-selected theoretical frameworks from the literature and testing relevant hypotheses.

3.4.1 Quantitative research

The quantitative research approach in a positivist paradigm can systematise the knowledge generation process by enhancing precision in the identification and description of the relevant parameters and the discernment of the relationships among them (Creswell 2009). This approach enabled the researcher to gain a better understanding of the EDM behaviour of accounting students at Indonesian universities with *determinism*, *empiricism*, *parsimony* and *generality*, which are essential elements in a positivist paradigm for social science research (Cohen, Manion & Morrison 2007). *Determinism* means that events are caused by explainable circumstances and understanding the casual links is important for prediction and control (Dash 2005). By understanding the key influencing factors in the EDM of accounting students at Indonesian universities, education providers, policy-makers and government could use this information to develop or improve Indonesian universities' accounting curriculum to produce more ethical accounting graduates. In regard to *empiricism*, this study collected verifiable empirical evidence via a survey to test theories and hypotheses. *Parsimony* refers to the explanation of the phenomena in the most simple and economical way (Aarts 2007; Popper 1959). The testing of theories and hypotheses in this study is based on the use of the most parsimonious quantitative model. The use of a SEM technique in this study, for identifying and describing the relevant parameters and discerning the relationships among them, penalises attempts at over-fitting a model at which data is inconsistent with theory. This technique not only allows theory to be revised or modified as new evidence is found from the study, but also leads to achieving a parsimonious model that could be generalised (in terms of achieving *generality*) to other evaluation contexts (Cohen et al. 2007; Popper 1959). According to Sekaran and Bougie (2016), the higher the probability that the results can be generalised, the more beneficial the research is to users. In addition, the quantitative research approach was adopted because further analysis could be drawn from a SEM technique to determine significant differences in perceptions among groups using a Mann-Whitney U test and one-way ANOVA test.

In summary, the quantitative research approach was adopted in this study for the following reasons, related to both the research objectives and implications for future research:

(1) it was appropriate for studying human behaviour in the EDM of accounting students at Indonesian universities;
(2) new perspectives on phenomena can be gained through refinement of measurement scales or inclusion of variables not captured in prior research;
(3) theory can be revised and updated through the modelling process;
(4) the precision of parsimony in the research methods helped make the study of a large number of respondents useful and saved time; and
(5) the generalisability of the research findings can be used for future quantitative predictions.

3.4.2 Survey method

The survey method was selected as the most suitable research technique for this study for the following reasons. First, this method is a widely employed strategy developed within the positivist approach to science (Nueman 2003) and it is the most common data collection method employed for quantitative hypothesis testing research (Babbie 2000; Creswell 2009). Second, the survey method is a powerful and effective way of collecting information on beliefs, attitudes, and motives (Burns 2000). Third, the survey method can provide a quick, low-cost, efficient, and precise way of obtaining information from a population, including a large sample (Malhotra 2008; McClelland 1994; Zikmund et al. 2010). Fourth, the survey method employing a questionnaire to gather data offers a quantitative description of a portion of a population. This allows the researcher to make inferences about generalising the findings from a sample of responses to a population (Creswell 2009).

In this study, a survey questionnaire was employed to collect data from undergraduate students enrolled in 11 accounting schools located in Yogyakarta, Surakarta, Semarang, and Bogor, Indonesia. The researcher asked the students to voluntarily complete a

questionnaire. Research assistants (Indonesian accounting scholars) distributed and collected the questionnaires from those students.

3.5 Research procedures

This section discusses the process involved in constructing the research instruments and executing the necessary procedures before the field survey. The research procedures comprised sample selection, questionnaire development, questionnaire translation, the ethics application, questionnaire testing, and a pilot survey.

3.5.1 Sampling

The target population for this study was all accounting students in Indonesia. In 2016 it was estimated that there were 265,000 accounting students in Indonesia (www.iaiglobal.or.id), with the highest proportion in the provinces in Java. The researcher recruited undergraduate students as respondents from accounting schools located in Yogyakarta, Surakarta, Semarang, and Bogor through random sampling, with every member of the population having the opportunity to be selected (Collis & Hossey 2009). Those four cities have been selected because they have many accounting schools. Furthermore, there are three different affiliations of accounting schools found in those cities including accounting schools of secular universities, accounting schools of Islamic universities and Islamic accounting schools of Islamic universities. A simple random sampling has the advantage of having the least bias and offering a high generalisability of findings (Sekaran & Bougie 2016).

Using Yamane's (1964) formula to calculate the sample size with a 95 per cent confidence level and taking the number of 265,000 accounting students in Indonesia into consideration, a total of 400 accounting students was considered a sufficient sample size for this study. Furthermore, as the minimum sample to run a SEM analysis is 200 cases, the sample size in this research, which was 693, was sufficient (Gravetter & Forzano 2011; Kline 2005).

3.5.2 Developing the survey questionnaire

A questionnaire is a list of carefully structured questions, selected after substantial testing aimed at eliciting reliable responses from a particular group of people. The purpose of a questionnaire is to find out what respondents think, do or feel, as this will help address the research question (Collis & Hossey 2009). The construction of a survey questionnaire primarily includes the process of organising established sets of scale measurements into an instrument for gathering raw data from respondents (Hair, Bush & Ortinau 2006). According to Sekaran and Bougie (2016), questionnaires can be categorised as administered personally, distributed electronically, or mailed to the respondent. They are cheaper and less time-consuming compared to interviews and observation, but they also present a much larger possibility of non-response and error. This study employed a personally administered questionnaire. The advantage of this was that the researcher and the research assistants could gather all the completed responses within a short period of time. Furthermore, if the respondents had any doubts on any question, they were able to clarify issues on the spot.

3.5.2.1 Questionnaire design and presentation

The survey questionnaire for this study comprised three sections. The first was intended to screen the potential respondents before giving them the questionnaire. This consisted of two screening questions to decide if a respondent qualified as a member of the defined study population (Churchill, Brown & Suter 2008). The screening questions ensured that the selected respondents: (a) had not joined this survey beforehand; and (b) were accounting students. The second section represented the ten constructs developed in the research model and comprised: intrinsic religiosity (8 questions), extrinsic religiosity (7 questions), religiosity and study (12 questions), internal LOC (13 questions), external LOC (13 questions), peer influence (10 questions), family influence (10 questions), ethical recognition (5 questions), ethical judgement (8 questions), and ethical intention (5 questions). The last section of the questionnaire consisted of a set of questions associated with the demographic profile of the respondents, such as gender, age, work experience, and university affiliations. The respondents were also provided with a cover sheet

explaining the research objectives, respondent and questionnaire requirements, benefits of participation in this study, as well as the contact details of the researcher. The questionnaire can be found in *Appendix A1 and Appendix A2*.

3.5.2.2 Measures

The assessment of constructs in this study was built on multi-item scales to find out the effect of the independent variables (intrinsic religiosity, extrinsic religiosity, religiosity and study, internal LOC, external LOC, peer influence, and family influence) on the dependent variables (ethical recognition, ethical judgement, and ethical intention). According to Bryman and Bell (2011), utilising multi-item scales in a survey is regarded as essential for constructing an accurate technique. This helps the researcher obtain sound data for assessing complex constructs and collecting adequate measurements to elucidate results.

Table 3.3 shows that this study's questionnaire employed all the items from valid and reliable measures derived from the existing literature including Allport and Ross (1967), Pargament and Mahoney (1999), Rotter (1967), and Bearden, Netemeyer and Teel (1989). The researcher formulated the questions for these measurement items on a seven-point Likert scale. The questions asked respondents to indicate their agreement with the statements, with a value of 1 referring to “strongly disagree”, 2 “disagree”, 3 “somewhat disagree”, 4 “neither agree or disagree”, 5 “somewhat agree”, 6 “agree”, and 7 “strongly agree”. The Likert scale is a standard method employed for producing valuable and meaningful results in business research (Sekaran & Bougie 2016). The employment of a seven-point scale, instead of five-point or six-point, has been supported by Zikmund et al. (2010), who contend that the Likert scale sensitivity could be enhanced by permitting a larger range of probable scores. Furthermore, Finstad (2010) found that a five-point Likert scale was insufficient to absorb the data and was not sensitive enough to record true robustness in respondents’ evaluation systems. Furthermore, he contends that using a seven-point Likert scale could better reveal a respondent’s true subjective assessment in a robust questionnaire.

Table 3.3 List of independent variable measurement items by construct and associated literature

Constructs	Items	Source
Intrinsic religiosity	InRelig1: I enjoyed reading about my religion. InRelig2: It does not matter much what I believe in so long as I am good. InRelig3: It is important to me to spend time in private thought and prayer. InRelig4: I have often had a strong sense of God's presence. InRelig5: I try hard to live all my life according to my religious belief. InRelig6: Although I am religious, I do not let it affect my daily life. InRelig7: My whole approach to life is based on my religion. In Relig8: Although I believe in my religion, many other things are more important in life.	Allport and Ross (1967) Arli and Tjiptono (2014) Walker et al. (2014)
Extrinsic religiosity	ExRelig1: I go to religious services because it helps me to make friends. ExRelig2: I pray mainly to gain relief and protection.	Allport and Ross (1967) Arli and Tjiptono (2014) Walker et al. (2014)

	ExRelig3: What religion offers me most is comfort in times of trouble and sorrow. ExRelig4: Prayer is for peace and happiness. ExRelig5: I go to religious services mostly to spend time with my friends. ExRelig6: I go to religious services because I enjoy seeing people I know there. ExRelig7: I go to religious services to broaden my business networks.	
Religiosity and study	RelignStdy1: God played a role in the development of my university study. RelignStdy2: God is present in my university study. RelignStdy3: My university study is a reflection of God's will. RelignStdy4: My university study is an expression of my religiousness. RelignStdy5: My university study is consistent with my religious identity. RelignStdy6: I experience God through my university study.	Pargament and Mahoney (1999) Walker et al. (2012)

	RelignStdy7: My university study reflects my image of what God wants for me. RelignStdy8: My university study is influenced by God's action in my life. RelignStdy9: My university study represents the holy work of God. RelignStdy10: My university study represents God's presence in my life. RelignStdy11: My actions surrounding my university study follow the holy scriptures of my religion and what it teaches. RelignStdy12: My actions surrounding my university study follow the teachings of my religion.	
Internal LOC	InLOC1: People's misfortunes result from the mistakes they make. InLOC2: One of the major reasons why we have wars is because people don't take enough interest in politics. InLOC3: In the long run, people get the respect they deserve in this world. InLOC4: The idea that teachers are unfair to students is nonsense.	Rotter (1966) Jones and Kavanagh (1996) Cherry and Fraedrich (2000)

	InLOC5: Without the right breaks, one cannot be an effective leader. InLOC6: People who can't get others to like them don't understand how to get along with others. InLOC7: Trusting to fate has never turned out as well for me as making a decision to take a definite course of action. InLOC8: In the case of the well-prepared student, there is rarely, if ever, such a thing as an unfair test. InLOC9: Becoming a success is a matter of hard work; luck has little or nothing to do with it. InLOC10: The average citizen can have an influence on government decisions. InLOC11: When I make plans, I am almost certain that I can make them work. InLOC12: In my case, getting what I want has little or nothing to do with luck. InLOC13: What happens to me is my own doing.	
External LOC	ExLOC1: Many of the unhappy things in people's lives are partly due to bad luck.	Rotter (1966) Jones and Kavanagh (1996)

	ExLOC2: There will always be wars, no matter how hard people try to prevent them. ExLOC3: Unfortunately, an individual's worth often passes unrecognised no matter how hard he tries. ExLOC4: Most students don't realise the extent to which their grades are influenced by accidental happenings. ExLOC5: Capable people who fail to become leaders have not taken advantage of their opportunities. ExLOC6: No matter how hard you try, some people just don't like you. ExLOC7: I have often found that what is going to happen will happen. ExLOC8: Many times, exam questions tend to be so unrelated to course work that studying is really useless. ExLOC9: Getting a good job depends mainly on being in the right place at the right time. ExLOC10: This world is run by the few people in power, and there is not much the little guy can do about it.	

	ExLOC11: It is not always wise to plan too far ahead because many things turn out to be a matter of luck anyway. ExLOC12: Many times, we might just as well decide what to do by flipping a coin. ExLOC13: Sometimes I feel that I don't have enough control over the direction my life is taking.	
Peer influence	Peerinf1: I often consult my friends for help to choose the best available alternatives from my decision. Peerinf2: To make sure I make the right decision, I often observe what my friends are deciding. Peerinf3: If I have little experience with an ethical problem, I often ask my friends about the problem. Peerinf4: I frequently gather information from my friends about choices before I make a decision. Peerinf5: If I want to make a decision like my friends, I often try to make the same decision that they make. Peerinf6: It is important that my friends like the decision I make.	Bearden et al. (1989)

	Peerinf7: I rarely make a decision until I am sure my friends approve it. Peerinf8: I often identify with my friends by making the same decision as they make. Peerinf9: When making a decision, I make one that I think my friends will approve of Peerinf10: I like to know what/which decisions make good impressions on my friends.	
Family influence	Familyinf1: I often consult my family members for help to choose the best available alternatives from my decision. Familyinf2: To make sure I make the right decision, I often observe what my family members are deciding. Familyinf3: If I have little experience with an ethical problem, I often ask my family members about the problem. Familyinf4: I frequently gather information from my family members about choices before I make a decision. Familyinf5: If I want to make a decision like my family members, I often try to make the same decision as they make.	Bearden et al. (1989)

	Familyinf6: It is important that my family members like the decision I make. Familyinf7: I rarely make a decision until I am sure my family members approve it. Familyinf8: I often identify with my family members by making the same decision as they make. Familyinf9: When making a decision, I make one that I think my family members will approve of. Familyinf10: I like to know what/which decisions make good impressions on my family members.	

As evidenced in Table 3.3, in this study, the researcher employed three scenarios (case studies of a credit manager, local manager, and controller) adapted from Cohen et al. (1996) to measure EDM. Each scenario presents an ethical dilemma that an individual business or professional person might encounter and an action taken in response to that situation. The scenarios were based on general business situations that students, even if they had not taken an ethics course, could understand and relate to when responding to each case. In terms of ethical judgement, respondents were ask to record their judgement of the ethicality of the scenario using the seven-point Likert scale. Furthermore, for ethical recognition and ethical intention, the respondents were asked to indicate their agreement with the statements using the seven-point Likert scale.

Table 3.4 List of EDM measurement items by construct and associated literature

Case scenario 1: Credit manager		
A promising startup company applies for a loan at a bank. The credit manager of the bank is a friend and frequently goes golfing with the company's owner. This new company's short credit history does not meet the bank's normal lending criteria. Action: The credit manager recommends approving the loan		
Constructs	**Items**	**Source**
Ethical judgement	Record your judgement of the ethicality of this scenario using the scale below: JudgeCrMan1: Fair ◄——►[1] Unfair JudgeCrMan2: Just ◄——► Unjust JudgeCrMan3: Morally right ◄——► Not morally right JudgeCrMan4: Acceptable to my family ◄——► Unacceptable to my family JudgeCrMan5: Culturally acceptable ◄——► Culturally unacceptable JudgeCrMan6: Traditionally acceptable ◄——► Traditionally unacceptable JudgeCrMan7: Does not violate ◄——► an unspoken promise Violates an unspoken promise	Cohen et al. (1993) Cohen et al. (1996) Flory et al. (1992) Reidenbach and Robin (1988, 1990, 1991) Lin and Ho (2008) Nguyen and Biderman (2008)

[1] '◄——►' represent 7-point Likert measurement scale for the construct. This scale is presented in the questionnaire in Appendix A.

	JudgeCrMan8: Does not violate ⟷ an unwritten contract Violates an unwritten contract.	
Ethical recognition	RecogCrMan1: The situation above involves an ethical problem. RecogCrMan2: The situation above contains an ethical issue. RecogCrMan3: This story contains ethical implications. RecogCrMan4: This story has ethical content. RecogCrMan5: I consider the action in this story as an unethical behaviour.	Singhapakdi et al. (1996)
Ethical intention	Intent CrMan1: If I had the opportunity, I would perform the behaviour of the credit manager described in the story in Case 1 above. Intent CrMan2: If I were actually in this situation, I would most likely undertake the same action as the credit manager. Intent CrMan3: I would be likely to take the same action as the credit manager in this situation. IntentCrMan4: I would act in the same manner as the credit manager in the story in Case 1 above. IntentCrMan5: The probability that I would undertake the same action as the credit manager in the story in Case 1 above is:	Hunt and Vitell (1986) Jones and Kavanagh (1996) Singhapakdi et al. (1996)

Case scenario 2: Local manager		
A local manager of a company eager to do more business abroad has been requested to make an undisclosed cash payment to a local distributor in a foreign country. The payment is requested as a "goodwill gesture" that will allow the local company to introduce its products in that foreign country. This practice is considered a normal business procedure in that country, and no laws prohibit such a payment there. Action: The local manager verbally authorises the payment		
Constructs	**Items**	**Source**
Ethical judgement	Record your judgement of the ethicality of this scenario using the scale below: JudgeLocMan1: Fair ◄——► Unfair JudgeLocMan2: Just ◄——► Unjust JudgeLocMan3: Morally right ◄——► Not morally right JudgeLocMan4: Acceptable to my family ◄——► Unacceptable to my family JudgeLocMan5: Culturally acceptable ◄——► Culturally unacceptable JudgeLocMan6: Traditionally acceptable ◄——► Traditionally unacceptable JudgeLocMan7: Does not violate ◄——► an unspoken promise Violates an unspoken promise JudgeLocMan8: Does not violate ◄——► an unwritten contract Violates an unwritten contract	Cohen et al. (1993) Cohen, Pant and Sharp (1996) Flory et al. (1992) Reidenbach and Robin (1988, 1990, 1991) Lin and Ho (2008) Nguyen and Biderman (2008)

Ethical recognition	RecogLocMan1: The situation above involves an ethical problem. RecogLocMan2: The situation above contains an ethical issue. RecogLocMan3: This story contains ethical implications. RecogLocMan4: This story has ethical content. RecogLocMan5: I consider the action in this story as an unethical behaviour.	Singhapakdi et al. (1996)
Ethical intention	IntentLocMan1 If I had the opportunity, I would perform the behaviour of the local manager described in the story in Case 2 above. IntentLocMan2 If I were actually in this situation, I would most likely undertake the same action as the local manager. IntentLocMan3 I would be likely to take the same action as the credit manager in this situation. IntentLocMan4 I would act in the same manner as the local manager in the story in Case 2 above. IntentLocMan5 The probability that I would undertake the same action as the local manager in the story in Case 2 above is:	Hunt and Vitell (1986) Jones and Kavanagh (1996) Singhapakdi et al. (1996)

Case scenario 3: Controller		
The CEO of a company requests that the controller reduces the estimate for bad debts in order to increase reported income, arguing that this is a common practice in the industry when times are hard. Historically, the company made very conservative allowances for doubtful accounts, even in bad years. The CEO's request would make it one of the least conservative in the industry. Action: The controller makes the adjustment		
Constructs	**Items**	**Source**
Ethical judgement	Record your judgement of the ethicality of this scenario using the scale below: JudgeControl1: Fair ◄——► Unfair JudgeControl2: Just ◄——► Unjust JudgeControl3: Morally right ◄——► Not morally right JudgeControl4: Acceptable to my family ◄——► Unacceptable to my family JudgeControl5: Culturally acceptable ◄——► Culturally unacceptable JudgeControl6: Traditionally acceptable ◄——► Traditionally unacceptable JudgeControl7: Does not violate ◄——► an unspoken promise Violates an unspoken promise JudgeControl8: Does not violate ◄——► an unwritten contract Violates an unwritten contract	Cohen et al. (1993) Cohen, Pant and Sharp (1996) Flory et al. (1992) Reidenbach and Robin (1988, 1990, 1991) Lin and Ho (2008) Nguyen and Biderman (2008)

Ethical recognition	RecogControl1: The situation above involves an ethical problem. RecogControl2: The situation above contains an ethical issue. RecogControl3: This story contains ethical implications. RecogControl4: This story has ethical content. RecogControl5: I consider the action in this story as an unethical behaviour.	Singhapakdi et al. (1996)
Ethical intention	IntentControl1 If I had the opportunity, I would perform the behaviour of the controller described in the story in Case 3 above. IntentControl2 If I were actually in this situation, I would most likely undertake the same action as the controller. IntentControl3 I would be likely to take the same action as the controller in this situation. IntentControl4 I would act in the same manner as the controller in the story in Case 3 above. IntentControl5 The probability that I would undertake the same action as the controller in the story in Case 3 above is:	Hunt and Vitell (1986) Jones and Kavanagh (1996) Singhapakdi et al. (1996)

3.5.3 Back-translation of the survey questionnaire

As survey language used in this study was Indonesian, a back-translation was needed to guarantee the most accurate translation of the questionnaire (Zikmund et al. 2010). Back-translation takes a previously translated questionnaire and translates it back into the original language using a second, independent translator (Zikmund et al. 2010). This method is commonly used to verify the accuracy of original documents in cross-cultural surveys (Douglas & Craig 2007).

The researcher employed two professional translators from the English department of a university in Indonesia in the translation process. The first translator was required to translate the original version of the questionnaire into Indonesian. The researcher (an Indonesian national) subsequently validated the meaning of each question and adjusted the translation into a version that could easily be understood by Indonesian accounting students without losing the original sense. The second translator was asked to translate the Indonesian version of the questionnaire back into English. The researcher then compared the back-translation by the second translator with the original one to ensure that both versions matched in terms of content and meaning.

3.5.4 Pre-testing questionnaire

Following an extensive review of the relevant literature, the questionnaire employed in this study was developed to measure all variables of interest. Following this, two pre-tests were conducted to check the usefulness of the questionnaire prior to undertaking the primary study. Reynolds and Diamantopoulus (1998) maintain that pre-testing is integral in the questionnaire development process. According to Veal (2005), pre-testing the questionnaire is intended for uncovering any limitations and ensuring that the respondents do not encounter any difficulties in understanding the questions or instructions. Although the questionnaire applied in this study had been examined and empirically validated several times in previous studies, it was pre-tested twice before the primary survey was performed. The first pre-test was carried out in June 2016 after the researcher had

developed the original (English version) with five doctoral students and one academic staff member in the Graduate School of Victoria University. These respondents were asked to provide helpful comments. These comments were used to adjust the initial questionnaire in English. After translating it into Indonesian, the researcher then conducted the second pre-test to assess the comprehensibility of the questions and instructions (Veal 2005) with five Indonesian native speakers from a university in Indonesia. As there were no significant comments about the content, only a few minor adjustments were made. The final versions of the questionnaire, in both English and Indonesian, are attached in *Appendix A1 and Appendix A2*.

3.5.5 Ethical considerations

Ethics in business research refers to a code of conduct based on the expected societal norm of behaviour while undertaking research (Sekaran & Bougie 2016). According to Veal (2005), both the researcher and supervisor must show ethical behaviour when they undertake research that examines human activities and requires human participation.

An ethics application, including the research method, survey procedure, consent forms, information sheets to participants, and survey questionnaire, was submitted and approved by the Human Research Ethics Committee of Victoria University prior to conducting the survey. The Ethics Committee approved this study on the condition that the researcher guaranteed participant privacy and confidentiality, confirmed that there were no risks related to the project, explained the process for safeguarding the data, and emphasised the voluntary nature of participation in the project. These conditions were fulfilled throughout the study.

3.5.6 Pilot survey

The researcher conducted a pilot survey on 4 August 2016 after obtaining approval from the Ethics Committee at Victoria University. This survey was carried out among 30 randomly selected respondents from a university accounting school in Central Java prior

to the final questionnaire being distributed. The reasons for conducting this pilot survey were: to examine question content, wording, sequences, forms and layouts, question difficulties and instructions; to examine fieldwork arrangements; to approximate response rates; to approximate the questionnaire completion time; and to obtain familiarity with respondents (Veal 2005). The questionnaire completion time per respondent was around 15 to 20 minutes. Since there were no comments proposed by these respondents related to difficulties in understanding the instructions and answering the questions, the researcher was able to include them in the main survey.

3.6 Data collection

The main survey of this study was administered over a period of eight weeks from 10 August to 10 October 2016. The researcher and research assistants distributed 1,200 questionnaires in 11 accounting schools (three accounting schools of secular universities, four accounting schools of Islamic universities, and four Islamic accounting schools of Islamic universities) in four cities in Java including Yogyakarta, Surakarta, Semarang, and Bogor. At the end of the survey, a total of 930 questionnaires were received.

3.7 Data preparation

After collecting the data, an important step was to prepare the data for analysis. Before conducting CFA and SEM analyses, it was very important to confirm the completeness and accuracy of the input data (Byrne 2009; Hair et al. 2010b; Tabachnick & Fidell 2006). Therefore, the researcher performed several data coding and screening inspections to confirm that no error was made in the data preparation process before running the subsequent analyses.

3.7.1 Data coding

Coding the questionnaire answers was the first step taken in making the data ready for the analysis. According to Malhotra et al. 2002, the coding process comprises giving a code, usually a number, to each possible answer to each question. Before coding, the

researcher gave each item in the questionnaire a special variable name that could identify information such as age, gender, work experience, and so forth. The coding sheet, which incorporates all the coding instructions and important information about the variables in this survey data set, is presented in *Appendix B.* At the end of this stage, the researcher coded 930 completed questionnaires into an MS Excel spreadsheet.

3.7.2 Data screening

The second stage in preparing the data for analysis involved screening the input data. According to Hair et al. (2010b), the process of screening data comprises: (a) assessing missing data; (b) assessing multivariate normality; (c) identifying outliers; and (d) assessing multicollinearity. Malhotra (2008) emphasises the importance of confirming the accuracy of the data before conducting any data analyses. This is because errors such as missing values or unusual varieties in values can bring about an inaccurate understanding of the data and produce distorted study outcomes.

3.7.2.1 Evaluation of missing data

Missing data can come about because of the actions of the researcher or respondents. For example, respondent answers may not be accurately documented by the researcher or the respondents may have declined to respond to some questions in the questionnaire. According to Hair et al. (2010a), the purpose of missing data evaluation is to estimate the value of variables that are unavailable for analysis. After screening, 70 cases were considered missing values therefore eliminated because they would distort the study outcomes.

3.7.2.2 Assessment of normality

The researcher started to inspect for data distribution after evaluating and removing the missing values in the data. Most multivariate statistical analyses, particularly CFA and SEM, need an assumption about the distributional characteristics of the data. Normality

is one of the most basic assumptions in multivariate analysis (Byrne 2009). Multivariate normality presumes that each variable, as well as all linear combinations of the variables, are normally distributed (Tabachnick & Fidell 2006). Most of the estimation methods used in SEM, such as maximum likelihood (ML), presume that the sample data has a normal distribution. According to Hair et al. (2010b), the results could be interrupted if non-normal data distribution exists when conducting multivariate analysis. Therefore, Kline (2005) contended that validating normality is one of the most essential phases in multivariate analysis, and if the researcher neglects this process of assuring the normality of the data, they may derive false interpretations and incorrectly believe that the model is at fault.

Besides confirming that the values of the responses are equally distributed across different variables in the data, the researcher must also ensure the univariate normality of each variable, as well as the multivariate normality of all variables. Moreover, Byrne (2009) points out that even if the distribution of variables could be univariate normal, the multivariate distribution could still be multivariate abnormal. Thus, Tabachnick and Fidell (2006) advise that the researcher should carry out a univariate normality examination prior to a multivariate normality examination.

The skewness and kurtosis of individual variables can be used to examine univariate normality. According to Tabachnick and Fidell (2006), zero score of skewness and kurtosis scores demonstrate that the data distribution is normal. Kline (2005, p. 50) describes the rule of thumb for data abnormality, stating that variables that have absolute scores for the skewness index larger than 3.0 can be considered as extremely skewed and variables that have absolute scores for the kurtosis index larger than 10.0 may suggest a problem.

We usually assess multivariate normality by the score of multivariate kurtosis and its critical ratio. The scores of kurtosis are essential in multivariate analysis, particularly in SEM, since this can severely influence the test of variances and covariances (DeCarlo 1997). Bentler (2004) recommends that the researcher use Mardia's normalised estimate of multivariate kurtosis score (or multivariate kurtosis critical ratio) as an evaluation

criterion in examining whether or not sample data shows multivariate normal distribution. Furthermore, Bentler notes that for all practical purposes, the rule of thumb score of Mardia's normalised estimate should be below 5.00 to show normal distribution of data.

This study employed a SEM technique using the AMOS version 24 program to evaluate the data normality. The results showed that absolute values for the skewness and kurtosis indices met the criteria for univariate normality revealed earlier. However, this study was not able to accomplish the requirement of multivariate normality because the value of Mardia's normalised estimate index was larger than 5.00. The assessment of the normality table can be found in *Appendix C*.

3.7.2.3 Identification of outliers

Outliers mean scores that are significantly lower or higher than other scores in the data set (Pallant 2011). They can be recognised in cases where scores are very different from the rest of the data set (Kline 2005). Byrne (2009) contends that outliers can cause the non-normality of data. Outliers can arise due to observation errors, data entry errors, instrument errors based on layout or instruction, or actual extreme values from self-report data (Schumacker & Lomax 2004). Hair et al. (2014) explain that we cannot categorically characterise outliers as either beneficial or problematic before viewing them within the context of the analysis and evaluating them by the types of information they reflect. Although outliers are different from most of the sample, they can be beneficial because they may be indicative of characteristics of the population that will not be found in the normal course of analysis. Outliers can be problematic if they are not representative of the population, counter the objective of the analysis, or seriously disturb the statistical tests. According to Kline (2005) and Hair et al. (2014), the removal of such outliers may increase the multivariate normality but may limit generalisability.

Univariate and multivariate detections are the most common methods used to detect outliers. A univariate outlier refers to a case where there is an extreme score on a single variable, whereas a multivariate outlier refers to a case where there is an extreme score

on two or more variables (Kline 2005). A univariate outlier can be detected by observing the distribution of Z scores for each variable in the analysis. The cases falling at the outer ranges (upper or lower end) of the distribution are considered as outliers (Hair et al. 2010b). The rule of thumb for detecting an outlier is by using Z scores greater than ± 3 (Kline 2005). A multivariate outlier can be detected by observing the Mahalanobis distance (D^2) statistic, which echoes the distance in standard deviation units between a set of scores for an individual case and the sample means for all variables (Kline 2005). D^2 is evaluated as Pearson chi-square (χ^2) statistics with the degree of freedom equal to the number of variables. For example, a case that has a value of D^2 with a relatively low *p*-value ($p<.001$ for the χ^2 value) may be considered a multivariate outliner (Kline 2005; Tabachnick & Fidell 2006).

In this study, the researcher performed both univariate and multivariate outlier analysis to detect outliers in the data. The univariate outliers were detected by observing the frequency distribution of Z scores, while multivariate outliers were detected by observing the Mahalanobis distance (D^2) statistic. In this study, 76 cases were identified as univariate outliers and 91 cases as multivariate outliers.

There are two possible treatments for outliers: retaining or removing. According to Hair et al. (2014), outliers should be retained unless they prove to be abnormal and not representing any segment of the sample population. The outliers identified in this study were examined and then removed because they were considered abnormal and not representative of the general data set, resulting in data non-normality (Kline 2005) and seriously influencing the statistical tests (Hair et al. 2014; Tabachnick & Fidell 2006). The removal of the outliers generated the final sample data of this study, with 693 responses for analysis.

3.7.2.4 Assessment of multicollinearity

Multicollinearity arises when any single independent variable is highly correlated with a set of other independent variables (Hair et al. 2014). The most straightforward approach to detect multicollinearity is through an examination of the correlation matrix for the

independent variables. Hair et al. (2010a) explain that the presence of correlation estimates at 0.90 and above is a sign of substantial multicollinearity. According to Tabachnick and Fidell (2006), when variables are multicollinear, they indicate redundant information of variables in the same analysis. Therefore, the unnecessary variables should be eliminated from the analysis (Byrne 2009; Kline 2010; Tabachnick & Findell 2006) since they can reduce the predictive power of an independent variable (Hair et al. 2014).

In this study, the assessment of multicollinearity was conducted through the process of CFA, using a one-factor congeneric measurement model, as well as the construct validity of the full measurement model (discussed in more detail in Chapter 4). Each one-factor congeneric measurement model in this study was assessed for multicollinearity, certifying that no redundant indicators (or observed variables) were sitting in the same model. Similarly, multicollinearity was assessed for the construct validity of the full measurement model to ensure that seven constructs in the measurement model were unique and empirically distinguishable.

3.8 Analytic techniques

After coding and screening the data, the next stage was to prepare the analytic tools to understand the data and test the hypotheses of the study. This study used statistical techniques for data analysis, comprising descriptive analysis, factor analysis, SEM, and reliability and validity tests. The researcher performed the statistical techniques with the software packages SPSS version 24 (Statistical Package for the Social Sciences) and AMOS (Analysis of Moment Structures) version 24. SPSS was employed to conduct necessary statistical data analyses, such as descriptive analysis and a reliability test, whereas AMOS was employed to perform the factor analysis and structural model analysis.

3.8.1 Descriptive analysis

Pallant (2011) explains that a descriptive analysis comprises the understanding of data using basic statistical techniques such as frequencies, means, standard deviations, maximum/minimum and data distribution. In this study, the descriptive analysis was

performed to identify the demographic profiles of the respondents, find out the shape of data distribution, and to examine missing values and univariate outliers.

3.8.2 Factor analysis

Factor analysis is an interdependence technique used to define the underlying structure among variables in an analysis (Hair et al. 2014). Coakes et al. (2010) define factor analysis as a method of data reduction that can be employed to decrease a large number of variables to a smaller set of underlying factors that describe the necessary information included in the variables. Schumacker and Lomax (2004) contend that factor analysis tries to resolve which different sets of observed variables share common variance-covariance characteristics that define the theoretical constructs (latent variables).

Factor analysis can be divided into two primary methods: exploratory factor analysis (EFA) and CFA (Pallant 2011). EFA is used to construct a theoretical model and explore how the measures are grouped into specific constructs (Tabachnick & Fidell 2006). CFA is "a way of testing how well measured variables represent a smaller number of constructs" (Hair et al. 2014, p. 602). The measures in the research model constructed for this study were based on the existing theoretical literature on EDM, as well as empirical studies on the influence of religiosity, LOC, peer and family influence on EDM. Thus, the researcher considered CFA to be a suitable method for testing the proposed hypotheses and the research model using survey data gathered from Indonesian accounting students. The aim of performing the CFA was to examine how the observed variables were correlated with their underlying latent variables (independent or dependent variables) and to determine the strengths of the regression paths (factor loadings) generated from the latent variables and their respective observed variables. In this study, the researcher performed the CFA using SEM techniques (see sub-section 3.8.3). The first stage in CFA was to assess the one-factor congeneric measurement model for each construct: intrinsic religiosity, extrinsic religiosity, religiosity and study, internal LOC, external LOC, peer influence, family influence, ethical recognition, ethical judgement,

and ethical intention. The aim was to confirm the validity of each measurement latent in the factors prior to joining them into a full latent measurement model.

After assessing the one-factor congeneric measurement model, the next stage was to perform the CFA on the full latent measurement model. The researcher integrated the final measurement model of each latent variable into the full model to test the influence of one latent variable on another in the modelling of causal direction. Furthermore, this procedure sought to confirm that there was no significant cross-loading on other variables. Byrne (2009) emphasises the importance of analysing the full latent measurement model before assessing the structural model. This procedure helps to determine whether the measurement model is operating adequately and provides greater confidence in findings associated with the evaluation of the hypothesised structural model. A description of results is provided in detail in Chapter 4.

3.8.3 SEM

SEM is a method of evaluating measurement quality at the same time as theory fit (Anderson & Gerbing 1988; Bagozzi & Yi 1988; Fornell & Larcker 1981). It is a multivariate data analysis technique that uses a combination of statistical methods, such as factor analysis, multiple regression analysis, and path analysis, to investigate and explain the relationship between multiple constructs (Hair et al. 2014; Tabachnick & Fidell 2006). SEM also allows researchers to examine how sets of variables define relationships and influence each other, using CFA to investigate these relationships through testing path coefficients for significance and goodness-of-fit (Schumacker & Lomax 2004).

According to Schumacker and Lomax (2004), SEM analysis is intended to uncover the extent to which the sample data supports a particular theoretical model. They explained that if the theoretical model delivers a reasonable fit to the sample data, we can hypothesise more complicated aspects of the theoretical model. However, if the

theoretical model does not deliver a good fit to the sample data, we need either to modify and test the original model or consider and test other theoretical models.

There are several justifications for using SEM in this study. First, SEM enables the researcher to discover more than one relationship within the model on one occasion (Hair et al. 1998). Second, the CFA enables an assessment of whether a model developed from the literature is a good fit to the observed data or not (Hair et al. 1998). Third, SEM enables the researcher to form or reflect on multiple latent variables through a set of reliably observed variables in factor analysis. The researcher can then conduct causal relationship modelling using these latent variables rather than single observed variables as in conventional multivariate analysis procedures (Byrne 2009). Fourth, since SEM makes allowance for measurement error in the observed data, statistical estimation is improved (Bentler 2004; Hair et al. 1998). Fifth, SEM enables the researcher to run alternative methods for modelling multivariate relations or estimating point and interval indirect effects that are not found in traditional multivariate methods (Byrne 2009). Lastly, SEM enables the researcher to model the structural relations pictorially by employing diagrams and directional arrows, to allow a vibrant conceptualisation of the theories being investigated (Byrne 2009).

Byrne (2009) emphasised the importance of confirming the adequacy of the measurement model prior to performing a structural model analysis. The data analysis with the SEM method employed in this study comprised two steps of modelling: (a) assessment of measurement models (one-factor congeneric measurement and full latent measurement model); and (b) assessment of the structural model. The assessment model was used to confirm that the observed variables had a significant loading on the factors they belonged to and there was no significant cross-loading on other factors, or transference of mostly correlated residuals to an item of another factor. In contrast, the assessment of the structural model was used to analyse the relationship between the independent and dependent variables.

3.8.3.1 SEM procedures

This study performed the SEM analysis in accordance with a five-stage approach, as suggested by Schumacker and Lomax (2004). These five stages were as follows:

(a) Model specification comprises the utilisation of all the available relevant theory, research, and information to construct a theoretical model and find out every relationship (Hair et al. 2014). It also includes the description of the parameters to be estimated in the analysis, such as coefficients, sample variance, residual variance, independent variables, and error variance related to the observed variables.

(b) Model identification is used to find out whether the parameters to be estimated can really be estimated. Unknown model parameters are equated with known variances and covariances in the measured variables. Thus, if the sum of the estimated parameters in a model surpasses the number of variances and covariances in the measurement, the model is categorised as unidentified (Coote 2012).

(c) Model estimation is used to examine different methods for estimating the parameters in a model. In parameter estimation, the ML method is one of the most employed methods in SEM (Hair et al. 2014). The ML offers the estimate of an approximate score for each parameter that may have more than one possible solution. Schermelleh-Engel, Moosbrugger, and Muller (2003) contend that the ML offers parameter estimates and standard errors that are asymptotically unbiased, consistent, and efficient. However, the ML requires the observed data to have a multivariate normality to produce a correct standard for the parameter estimate and deliver an overall fit of statistical scores that asymptotically follow a chi-square distribution (Jöreskog 1967; Schermelleh-Engel et al. 2003).

(d) Model testing aims to find out whether the specified model fits the data. According to Schumacker and Lomax (2004), model fit is the degree to which the sample variance-covariance data fits the structural model. Several statistical measures such as chi-square, goodness-of-fit index (GFI), and the standardised root mean square residual index (SRMR) can be employed to find out whether a proposed model fits the sample data. Section 3.8.3.2 discusses the model fit criteria employed in this study.

(e) Model re-specification is the process of making essential modifications to the model to enhance its fit to the data when the model is found to be a poor fit. The procedures for modifying a model comprise an assessment of the critical ratios (t-values), the standardised residuals, and modification indices (Schumacker & Lomax 2004). This study employed AMOS version 24 to generate these indices to find out how the model could be enhanced.

3.8.3.2 Model fit criteria

The criteria for assessing model fit show how well a specified model duplicates the covariance matrix among observed variables (Hair et al. 2010b). There is no single statistical measure that best describes the predictive capabilities of a model in SEM (Hair et al. 1992; Kline 2005). Thus, this study utilised different types of goodness-of-fit statistics to evaluate the model fit. This study utilised three perspectives suggested by Hair et al. (1992) and Schumacker and Lomax (2004): (a) absolute fit; (b) incremental fit or comparative fit to a base model; and (c) model parsimony. These are described in detail in the subsequent sections.

(a) Measures of absolute fit

Chi-square (χ^2)

Chi-square (χ^2) is the most basic absolute fit index and the only statistically based SEM fit measure (Hair et al. 2014). The χ^2 statistical measure embodies the difference between the matrix of *implied* variance-covariance and the matrix of empirical sample variance-covariance (Coote 2012). Typically, researchers seek to gain a non-significant χ^2 score relative to the degree of freedom ($p>0.05$) because it shows a good fit (Schumacker & Lomax 2004). The χ^2 score is less meaningful as the sample size becomes large or the number of observed variables becomes large (Hair et al. 2014). When the sample size is larger than 200 respondents, the χ^2 statistic tends to have a significant probability level (Schumacker & Lomax 2004). According to Cheng (2001), non-significant χ^2 statistics are one of the most difficult GFI to achieve because the χ^2 statistic accounts typically for all possible relationships between constructs and indicators in a model. The χ^2 statistic

tends to produce a low *p*-value (indicating a poor model fit) when a model is correlated with plenty of constructs and indicators. Therefore, the non-significant χ^2 statistic is the least used GFI.

In the same way, Byrne (2009) contends that findings of well-fitting hypothesised models, where the χ^2 score approximates the degree of freedom, have proven to be impracticable in most SEM empirical research. As a result, researchers are encouraged to accompany this measure with other fit indices to assess the goodness-of-fit (Hair et al. 2014, Schumacker & Lomax 2004).

According to the final sample size of this study (693), the χ^2 scores relative to the degree of freedom may show a significant probability level (or *p*-value less than 0.05) and accordingly, result in poor model fit. Therefore, this study also considered other measures of model fit, such as the GFI and the Tucker-Lewis index (TLI), for examining the goodness of fit.

GFI

The GFI is one measure of absolute fit category that represents the overall degree of fitness, which is less sensitive to sample size (Hair et al. 1992; Hair et al. 2014). GFI is constructed on the ratio of the total squared differences between the observed and reproduced matrices to the observed variances (Schumacker & Lomax 2004). GFI scores range from 0 to 1.0. The rule of thumb is that GFI with higher scores indicate better fit (Hair et al. 2014). For example, scores of GFI equal to 1.0 show perfect model fit and scores above 0.9 indicate good fit, while scores closer to zero indicate very poor fit (Kline 2005).

SRMR

The SRMR is one of the measures of absolute fit based on residuals. SRMR means the average differences between the sample variances and covariances and the estimated population variances and covariances (Tabachnick & Fidell 2006). Scores of SRMR range from 0 to 1.0. The rule of thumb is that a SRMR with lower scores show a good-fitting model and scores over 0.10 show a problem with fit (Hair et al. 2014; Kline 2005).

Root mean square error of approximation (RMSEA)

The RMSEA is one of the most widely employed measures used to correct for the tendency of the χ^2 goodness of fit test statistic to reject models with a large sample or a large number of observations. It better embodies how well a model fits a population by including model complexity and sample size for estimation (Hair et al. 2014). RMSEA approximates the amount of error of approximation per model degree of freedom and takes sample size into account (Kline 2005). This measure seeks to rectify the tendency of the chi-square test statistic to reject any model that has large samples or a large number of observed variables. A lower score of RMSEA indicates good fit, whereas a higher score may show a poor fit. The rule of thumb is that a RMSEA with a score less than or equal to 0.05 is considered acceptable (Schumacker & Lomax 2004).

(b) Measures of incremental fit

Comparative fit index (CFI)

The CFI is an incremental fit index and a better version of the normed fit index (Hair et al. 2014). It contains model complexity as a measure for a relative comparison of the proposed model compared to the null model. The CFI index is a ratio of the difference in the χ^2 score for the planned model and a null model divided by the χ^2 score for the null model (Hair et al. 2010b). The scores associated with the CFI range between 0 and 1.0. The rule of thumb is CFI with higher scores indicate better fit. CFI scores above 0.90 show a reasonable fit of the model (Hair et al. 2014; Hu & Bentler 1999).

TLI

The TLI is theoretically akin to CFI in so far as it is built on the mathematical comparison of a proposed model and a baseline null model. However, TLI is not normed, and its values can fall below 0 or above 1. A rule of thumb score for TLI is 0.90 or larger. According to Hair et al. (2010b), TLI and CFI normally offer very similar scores in practice.

(c) Measures of parsimonious fit

Adjusted goodness-of-fit index (AGFI)

The AGFI reflects an adjusted value of GFI due to a model's complexity. AGFI is adjusted by the ratio of degrees of freedom for a proposed model to the degree of freedom for the null model (Kline 2005; Schumacker & Lomax 2004). As AGFI is an extension of GFI, the possible range of AGFI is similar to that of GFI, where scores larger than 0.90 may indicate a good fit (Kline 2005). However, AGFI scores are usually lower than GFI scores in proportion to model complexity (Hair et al. 2014)

Normed chi-square (NC)

The NC measure refers to a simple ratio of the chi-square divided by the degrees of freedom (i.e., NC ratio = χ^2 / degrees of freedom) (Hair et al. 1992). This measure is usually employed to assess the appropriateness of a model. According to Hair et al. (2010b), a threshold of 3:1 or less in NC ratios yields better-fitting models. In other words, a value of NC larger than the upper limit of 3:1 may indicate that the proposed model is not truly representative of the observed data and therefore needs improvement. Also, it is essential to note that an NC ratio can be affected by a large sample size (above 500) and a high degree of model complexity, given that the chi-square value is the main component in this measure (Byrne 2009). Therefore, some scholars, such as Bollen (1989), proposed that the NC ratio can go beyond 3:1 but should be less than 5:1 to indicate a reasonable fit.

In brief, to assess the goodness-of-fit of the proposed model, this study employed measures and guidelines suggested by a variety of scholars (Bollen 1989; Browne & Cudeck 1992; Byrne 2009; Hair et al. 1992; Hair et al. 2010b; Hair et al. 2014; Hu & Bentler 1999; Kline 2005). Table 3.5 presents a summary of these measures, including the level of acceptable fit employed in this study for the numerous statistical measures.

Table 3.5 A summary of measures and model fit criteria used in this study

Measures	Level of acceptable fit
Measures of absolute fit	
• Chi-square (χ^2) (with associated degrees of freedom and probability of significant difference)	*p*-value>0.05 (at the $\alpha = 0.05$ level)
• Goodness of fit index (GFI)	Suggested to be higher than 0.90
• Standardised root-mean-square residual (SRMR)	The smaller, the better, value less than 0.10 presents a good model fit
• Root-mean-square error of approximation (RMSEA)	Suggested to be less than 0.05
Incremental fit measures	
• Comparative fit index (CFI)	Suggested to be higher than 0.90
• Tucker-Lewis index (TLI)	Suggested to be higher than 0.90
Parsimonious fit measures	
• Adjusted goodness-of-fit (AGFI)	Suggested to be higher than 0.90
• Normed chi-square (χ^2/df)	Lower limit 1.0, upper limit 3.0 or as high as 5.0.

3.8.4 Reliability and validity

Reliability is a test of how consistently a measuring instrument measures a concept, whereas validity is a test of how well an instrument that is constructed measures a concept. Reliability is focused on stability and consistency, and validity is focused on whether we measure the right concept (Sekaran & Bougie 2016). Testing the reliability and validity of each scale and measure is very important because it indicates the quality of data and credibility of the research findings (Pallant 2011).

3.8.4.1 Assessment of reliability

Reliability means the extent to which a measurement of a phenomenon delivers stable and consistent results if repeated measurement is generated on the variable of concern (Carmin & Zeller 1979; Malhotra 2008). It shows that the numerical results do not change due to characteristics of the measurement process or measurement instrument (Neuman 2003). The reliability of a measure is an indication of the stability and consistency with

which the instrument measures the concept and assists in assessing the goodness of a scale (Sekaran & Bougie 2016). According to Kline (2005), Cronbach's coefficient alpha (α) is the most frequently reported estimate of reliability. This statistical tool measures the internal consistency of the data to decide the degree to which the items that make up the scale are all measuring the same underlying attribute. Cronbach's coefficient alpha also indicates the average correlation among all the items that make up the scale. A rule of thumb for Cronbach's coefficient alpha is a score in excess of 0.7 (Kline 2005; Nunnaly 1978). According to Kline (2005), a coefficient alpha score lower than 0.70 shows that the sample of items does not capture the construct.

3.8.4.2 Assessment of validity

According to Punch (1998), validity relates to the relationship between a construct and its indicators. Measurement validity is the extent to which an instrument measures what it is stated to measure, and an indicator is valid to the extent that it empirically characterises the theoretical concept it is designed to measure. Neuman (2003) explains that a better fit between the conceptual and operational definitions will lead to greater measurement validity. Kline (2005) contends that construct validity is the most commonly employed validity test.

According to Pallant (2011), construct validity comprises testing a scale not against a single criterion but in terms of theoretically derived hypothesis regarding the nature of the underlying variable or construct. We normally examine construct validity through a concurrent and overlapping test of convergent and discriminant validity. A set of variables is assumed to measure the same construct, therefore indicating convergent validity if their intercorrelations are at least moderate in magnitude. Conversely, a set of variables is assumed to measure different constructs, therefore indicating discriminant validity if their intercorrelations are not too high (Kline 2005). The researcher performed the assessment of convergent and discriminant validity for this study through CFA with SEM.

Data analysis was undertaken to determine whether there were statistically significant differences in intrinsic religiosity and internal LOC due to respondents' gender and university affiliations. For this purpose, the statistical non-parametric techniques of the Mann-Whitney U test and the ANOVA were employed. The Mann-Whitney U test was employed to find out if there were significant differences between male and female respondents according to the influencing factors. The ANOVA test was employed to test for significant differences according to university affiliations (secular university, Islamic university, and Islamic accounting).

3.8.5 Non-parametric test (Mann-Whitney U test)

The researcher employed the statistical techniques of the Mann-Whitney U test using the SPSS version 24 to test for statistically significant differences in the perception of each influencing factor toward EDM between male and female respondents. The Mann-Whitney U test is a non-parametric alternative to the t-test for independent samples. It is used to test the differences between two independent groups (such as male and female) associated with a continuous variable by using medians for comparing groups (Coakes et al. 2010). The score on the continuous variables is converted into a rank value and then compared to see whether the ranks of the two groups differ significantly. If the *p*-value is less than 0.05, it indicates that there is a significant difference between the two groups (Pallant 2011).

3.8.6 Parametric test (one-way ANOVA)

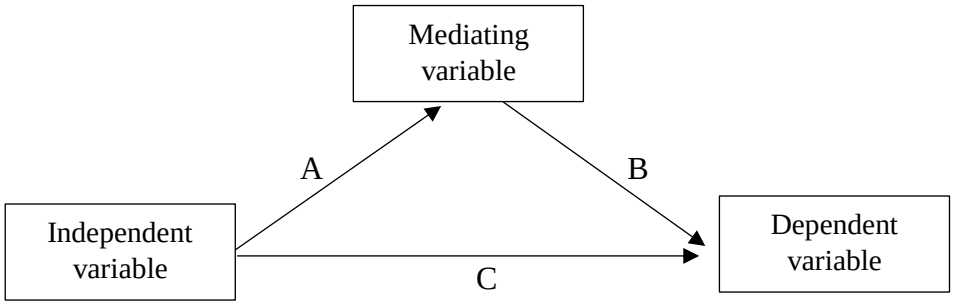
As already indicated, this research employed the statistical techniques of the one-way ANOVA, using SPSS version 24, to test for statistically significant differences in the perception of each influencing factor toward EDM between groups across respondents' university affiliations (secular university, Islamic accounting, and Islamic university). This method enabled the researcher to compare the score on a continuous variable for more than just two groups. According to Blanca et al. (2017), the one-way ANOVA is a robust test against the normality assumption and may be used for analysis at a significance

level (or alpha level) of 0.05 even if there is a lack of normality in data distribution, unequal sample sizes and differing shapes in the groups. In ANOVA, the homogeneity of variance is an assumption of the independent samples t-test (Black et al. 2013). When this assumption of homogeneity of variances is not met, especially with unequal sample sizes, Welch's test is used for performing an ANOVA analysis (Gastwirth, Gel & Miao 2009). In addition, a post-hoc test was undertaken to determine which specific group differed from the other on a pairwise comparison basis.

3.8.7 Testing mediating variables

Mediation suggests a causal hypothesis whereby an independent variable causes a mediator which in turn causes a dependent variable, as depicted in Figure 3.1. This study examined the effect of a mediating variable on the relationship between an independent variable and a dependent variable. Figure 3.1 illustrates the following mediating relationships: a direct effect of an independent variable on a mediator variable (path A); a direct effect of a mediator variable on a dependent variable (path B); a direct effect of an independent variable on a dependent variable (path C).

Figure 3.1 Mediation



These types of mediation effects comprise partial mediation and complete mediation. Partial mediation happens when the path from an independent variable to a dependent variable is reduced in absolute size but is still statistically significant when the mediator is introduced. In contrast, complete mediation happens when this path is reduced in absolute size and is no longer statistically significant. The mediation effect was only

examined in this study when the direct effect of an independent variable on a dependent variable was statistically significant (Hair et al. 1998). If the direct effect of an independent variable on a dependent variable was not statistically significant, the results from the mediational analysis have little value. Hair et al. (1998) suggest the following stages in testing for mediation effects:

1. Establish the individual relationships among variables that have a significant relationship:
   - The direct effect of an independent variable on a dependent variable.
   - The direct effect of an independent variable on a mediating variable.
   - The direct effect of a mediating variable on a dependent variable.
2. Examine the initial model with the direct effect of path C. Then examine the model when a mediating variable is introduced. In this step, the researcher needs to confirm that:
   a. When the mediating variable is introduced into the model, the effect should be reduced. If it is reduced but still significant, then the partial mediation has occurred.
   b. If the effect is reduced up to the level where it is no longer significant, then the full mediation has occurred.

3.9 Summary

This chapter has described the quantitative survey method employed in this study to gather data on the factors that affect accounting students' EDM. A sample size of 693 respondents was considered acceptable for the study. The survey questionnaire was constructed based on previous studies related to religiosity, LOC, peer influence, family influence, and EDM. The questionnaire was translated into Indonesian and then pre-tested for legibility and comprehensibility. A pilot test was also conducted in a city in Java before performing the main survey. The main survey was performed at 11 accounting schools in four cities in Indonesia. At the end of the survey fieldwork, a total of 930 completed questionnaires were received. The survey data were coded into SPSS and

screened for missing values, data distribution, and outliers. After screening, 70 cases were considered missing values, and 167 cases were found to be outliers. Thus, those 237 cases were eliminated. This enhanced the normality of the data set and generated 693 cases for data analysis. This analysis comprised descriptive analysis, CFA, reliability and validity analysis, SEM, and a non-parametric testing for differences between groups. The results of the data analysis are presented in the next chapter.

Chapter 4 Data Analysis and Results

4.1 Introduction

The research methodology employed to collect and analyse data for this research study has been discussed in detail in Chapter 3. This chapter presents the results of confirmatory factor analysis, structural equation modelling, descriptive statistics, as well as parametric and non-parametric tests. The chapter reflects the sequential activities performed as part of the data analysis process (illustrated in Table 4.1).

Table 4.1 Data analysis activities

Data analysis process	Purposes	Statistical techniques
DATA ANALYSIS PART ONE CFA of measurement model	• CFA of one-factor measurement model • CFA of full measurement model • Evaluation of construct validity and multicollinearity	• Structural equation modelling • AVE, CR, and squared correlation estimates
DATA ANALYSIS PART TWO Structural model analysis	• Structural model evaluation • Hypothesis testing	• Structural equation modelling • Critical rations (t value)
DATA ANALYSIS PART THREE Descriptive analysis and assessment of construct reliability	• Demographic profile • Descriptive statistics • Construct reliability	• Frequency distribution • Measures of central tendency and variability in responses • Cronbach's alpha of reliability
DATA ANALYSIS PART FOUR Testing for the difference in influencing factors across demographic profile	• To test for differences in the influence of gender and university affiliation	• Non-parametric test using Mann-Whitney U Test and • Parametric test using ANOVA
DATA ANALYSIS PART FIVE Testing mediating effects in the structural model	• To test mediating effect	• Structural equation modelling
Note: AVE = Average variance extracted, CR = Construct reliability		

Section 4.2 of this Chapter 4 presents the confirmatory factor analysis performed on the single factor measurement models and the full measurement model, including the construct validity using confirmatory factor analysis. Section 4.3 presents the structural analysis and hypothesis testing using structural equation modelling. Section 4.4 presents the demographic profile of the respondents and descriptive statistics (means and standard deviations). Section 4.5 presents the influence of demographic factors of gender and university affiliations using a non-parametric (Mann-Whitney U Test) and a parametric test (ANOVA). Section 4.6 presents the mediating effects in the structural model using structural equation modelling.

4.2 Data Analysis Part One: Confirmatory Factor Analysis (CFA) of the measurement model

Specifying a viable measurement model, before causal analysis is undertaken on the structural model, has been regarded as an important prerequisite condition in SEM (Anderson & Gerbing 1982; Bagozzi 1981; Jarvis, Mackenzie & Podsakoff 2003). The assessment of one-factor congeneric model is undertaken for each construct in section 4.2 to verify the existence of a relationship between observed variables and the respective underlying constructs. The CFA's one-factor congeneric model performed in this study aims to evaluate the relationships between the single latent variable and its observed variables to find out whether the observed variables are explained by the single latent variable and are considered valid. Two stages have been applied to evaluate the measurement model: first, a one-factor congeneric model analysis, and second, a full measurement model analysis. The processes of analysis, as well as the results from both stages, are also discussed in this section.

4.2.1 One-factor congeneric model analysis

Holmes-Smith, Cunningham, and Coot (2006) identify the one-factor congeneric model as the simplest form of measurement model that comprises the regression weights of a set of observed indicators on a single latent variable. Hair et al. (2010a) explain that a set of indicators should only represent one latent variable. The CFA on the one-factor congeneric model performed in this study aimed to evaluate the relationship between the single latent variable and its observed variables to find out whether the observed variables are explained by the single latent variable.

The research model of this study consisted of ten latent variables related to ethical decision making of accounting students in Indonesia (seven independent variables and three dependent variables). The independent variables include intrinsic religiosity (Inrelig), extrinsic religiosity (Exrelig), religiosity and study (RelignStdy), peer influence (Peerinf), family influence (Familyinf), internal LOC (InLOC), and external LOC (ExLOC). Meanwhile, the independent variables include ethical recognition (Recog), ethical judgement (Judge), and ethical intention (Intent).

A set of observed variables were loaded on their respective underlying single latent variable in confirmatory factor analysis using the one-factor congeneric measurement model in SEM to confirm no covariance between or within construct error variances and model identification. Any indicator that was not related to its purported latent dimension, suggesting it was not important to the model, was eliminated from the congeneric measurement model. Multicollinearity among items was also checked out in the related congeneric model to ensure there were no cross loadings. As previously discussed in Chapter 3, when the variables are highly correlated, it is a sign of multicollinearity, indicating that a variable can be explained by the other variables in the analysis (Hair et al. 2010b). Several scholars such as Byrne (2009), Tabachnick and Fidell (2006), and Kline (2010) emphasise that multicollinearity indicates redundant information or extensive overlap in the item content of variables related to the same analysis and recommend that such variables can be eliminated. In other words, multicollinearity could lead to increased variability in parameter estimates and underestimation of standard

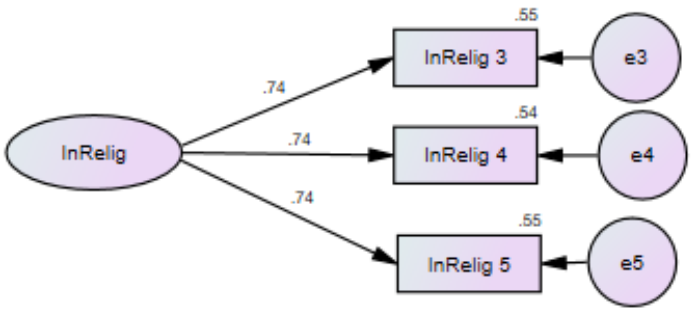
errors, which could produce misleading results (Kelava, Mossbrugger, Dimitruk & Schermelleh-Engel 2008). Therefore, redundant items found in this analysis were dropped and only anchor items are retained for the final model. The results of each one-factor congeneric model are presented from Section 4.2.1.1 to 4.2.1.16.

4.2.1.1 One-factor congeneric model of intrinsic religiosity

The evaluation of the one-factor congeneric model for the construct of intrinsic religiosity (Inrelig) revealed that the initial model was a poor fit. Further evaluation of the modification indices and the standardised residual covariance revealed that Inrelig1, Inrelig2, Inrelig6 and Inrelig7 were responsible for model misspecification. These items seemed to be highly correlated with other items in the model. For example, Inrelig2 and Inrelig6 were found to cause model misspecification since their measurement errors were highly correlated with each other (the measurement errors covariance between InRelig2 and InRelig6 was 57.775 with the expected parameter change estimates of 0.577). Redundant and highly correlated items found in this analysis were dropped, and only three items were retained in the final one-factor coefficient model of intrinsic religiosity.

However, with a three-item indicator model, imposition of constraints on particular parameters is mandatory (Byrne 2009). To decide the parameters to be constrained in this study, a critical ratio difference (CRDIFF) method was employed to create a list of ratios for pair-wise parameter estimates. Here, the residual CRDIFF created for this model (see *Appendix D1*) showed that Inrelig3 correlated with Inrelig4. The estimated values for these two variables were similar in magnitude at -0.039, with both being non-significant with values less than 1.96 (Byrne 2009). As a result, the regression weight parameters between Inrelig3 and Inrelig4 were constrained to be equal to one another. The model was then re-analysed and resulting in a good fit to the data: Mardia's normalised estimate = 4.251, χ^2 (1, n = 693) = 0.001, p = 0.969, χ^2/df = 0.001, SRMR=0.0029, GFI= 1.000, AGFI= 1.000, TLI=1.000, CFI=1.000, RMSEA=0.000.

Figure 4.1 One-factor congeneric model analysis results of intrinsic religiosity



InRelig3:
It is important to me to spend time in private thought and prayer.

InRelig4:
I have often had a strong sense of God's presence.

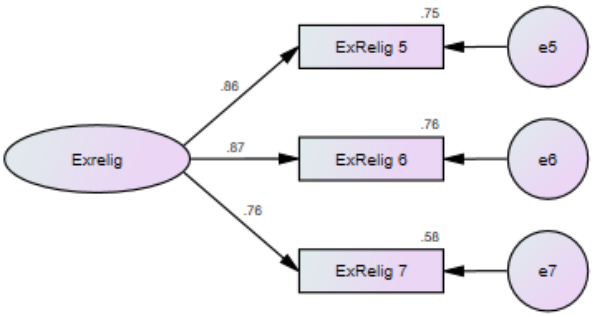
InRelig5:
I try hard to live all my life according to my religious belief.

4.2.1.2 One-factor congeneric model of extrinsic religiosity

The evaluation of a one-factor congeneric model for the construct of extrinsic religiosity (Exrelig) indicated that the initial model was a poor fit. The modification indices and standardised residual covariance indicated that ExRelig1, ExRelig2, ExRelig3, ExRelig4, and Exrelig8 were responsible for model misspecification. In this case, Exrelig3 and ExRelig4 were found to cause model misspecification since their measurement errors were largely related to each other (measurement error covariance between ExRelig3 and ExRelig4 was 295.519 with the expected parameter change estimates of 0.490). Furthermore, the measurement errors of ExRelig2 and ExRelig3 were also largely related to each other (measurement error covariance between ExRelig3 and ExRelig4 was 224.022 with the expected parameter change estimates of 0.458). Those five items were also found to produce lower regression weight estimates than the other items within the model. Therefore, the problematic items found in this analysis were removed, which generated the final model for this construct containing ExRelig5, ExRelig6, and ExRelig7. The critical ratio difference (CRDIFF) method was then applied to select the parameters that were required to be constrained to ascertain model fit. The CRDIFF test (see *Appendix D2*) recommended that the first (ExRelig5) and second (ExRelig6) path needed to be constrained as their estimated values were less than 1.96 (Byrne 2009).

After constraining the parameters, the respecified model revealed a good fit to the data: Mardia's normalised estimate = 1.600, χ^2 (1, n = 693) = 0.000, p = 0.990, χ^2/df = 0.000, SRMR=0.0001, GFI= 1.000, AGFI= 1.000, TLI=1.003, CFI=1.000, RMSEA=0.000.

Figure 4.2 One-factor congeneric model analysis results of extrinsic religiosity

	ExRelig5: I go to religious services mostly to spend time with my friends. ExRelig6: I go to religious services because I enjoy seeing people I know there. ExRelig7: I go to religious services to broaden my business networks.

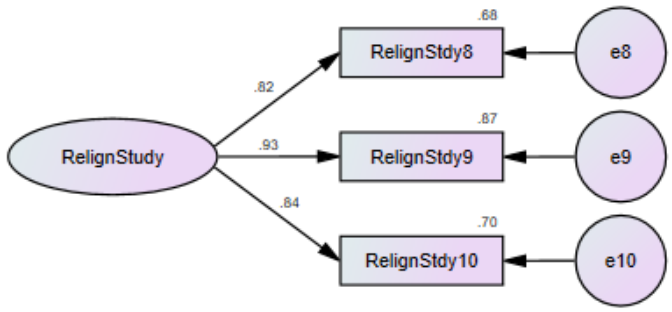
4.2.1.3 One-factor congeneric model of religiosity and study

The evaluation of a one-factor congeneric model for the construct of religiosity and study (RelignStdy) indicated that the initial model was a poor fit. The modification indices and standardised residual covariance indicated that RelignStdy1, RelignStdy2, RelignStdy3, RelignStdy4, RelignStdy5, RelignStdy6, RelignStdy7, RelignStdy11, and RelignStdy12 were responsible for model misspecification. For example, RelignStdy11 and RelignStdy12 were found to cause model misspecification since their measurement errors were largely related to each other (measurement error covariance between RelignStdy11 and RelignStdy12 was 379.992 with the expected parameter change estimates of 0.491). Furthermore, the measurement errors of RelignStdy1 and RelignStdy2 were also largely related to each other (measurement error covariance between RelignStdy1 and RelignStdy2 was 258.027 with the expected parameter change estimates of 0.354). Those nine items were also found to produce lower regression weight estimates than the other items within the model. Therefore, the problematic items found in this analysis were removed, which generated the final model for this construct containing RelignStdy8,

RelignStdy9, and RelignStdy10. The critical ratio difference (CRDIFF) method was then applied to select the parameters that were required to be constrained to ascertain model fit. The CRDIFF test (see *Appendix D3*) recommended that the first (RelignStdy1) and third (RelignStdy3) path needed to be constrained as their estimated values were less than 1.96 (Byrne 2009).

After constraining the parameters, the respecified model revealed a good fit to the data: Mardia's normalised estimate = 2.051, χ^2 (1, n = 693) = 1.034, p = 0.309, χ^2/df = 1.034, SRMR=0.082, GFI= 0.999, AGFI= 0.994, TLI=1.000, CFI=1.000, RMSEA=0.007.

Figure 4.3 One-factor congeneric model analysis results of religiosity and study



RelignStdy8:
My university study is influenced by God's action in my life.

RelignStdy9:
My university study represents the holy work of God.

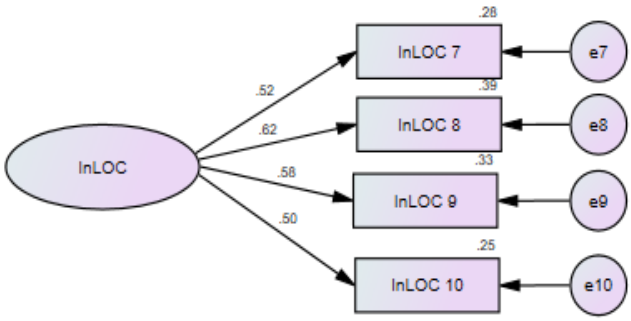
RelignStdy10:
My university study represents God's presence in my life.

4.2.1.4 One-factor congeneric model of internal LOC

The evaluation of a one-factor congeneric model for the construct of internal LOC (InLOC) showed that the data did not fit the hypothesised model. The modification indices and standardised residual covariance revealed that InLOC1, InLOC2, InLOC3, InLOC4, InLOC5, InLOC6, InLOC11, InLOC12, and InLOC13 were responsible for model misspecification. For example, InLOC1 and InLOC2 were found to cause model misspecification since their measurement errors were largely related to each other (measurement error covariance between InLOC1 and InLOC2 was 39.462 with the expected parameter change estimates of 0.299). Those eight items were also found to

produce lower regression weight estimates than the other items within the model. Therefore, the problematic items found in this analysis were removed, which generated the final model for this construct containing InLOC6, InLOC7, InLOC8, InLOC9 and InLOC10. The model revealed a good fit to the data: Mardia's normalised estimate = 2.633, χ^2 (1, n = 693) = 3.400, p = 0.183, χ^2/df = 1.700, SRMR=0.0152, GFI= 0.998, AGFI= 0.988, TLI=0.987, CFI=0.996, RMSEA= 0.032.

Figure 4.4 One-factor congeneric model analysis results of internal LOC



InLOC7:
Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

InLOC8:
In the case of the well-prepared student, there is rarely, if ever, such a thing as an unfair test.

InLOC9:
Becoming a success is a matter of hard work; luck has little or nothing to do with it.

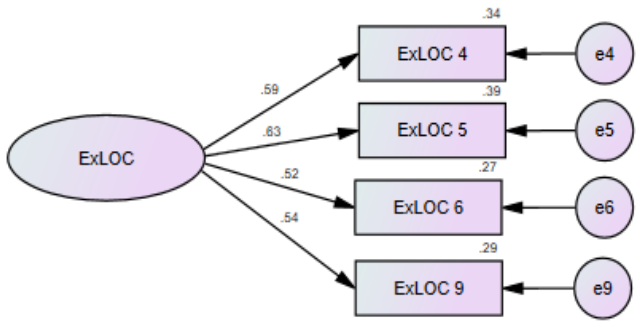
InLOC10:
The average citizen can have an influence on government decisions.

4.2.1.5 One-factor congeneric model of external LOC

The evaluation of a one-factor congeneric model for the construct of external LOC (ExLOC) showed that the initial model was a poor fit. The modification indices and standardised residual covariance revealed that ExLOC1, ExLOC2, ExLOC3, ExLOC7, ExLOC8, ExLOC10, ExLOC11, ExLOC12, and ExLOC13 were responsible for model misspecification. For example, ExLOC12 and ExLOC13 were found to cause model misspecification since their measurement errors were largely related to each other

(measurement error covariance between ExLOC12 and ExLOC13 was 57.195 with the expected parameter change estimates of 0.380). Furthermore, ExLOC3 and ExLOC12 were also found to cause model misspecification since their measurement errors were largely related to each other (measurement error covariance between ExLOC3 and ExLOC12 was 34.475 with the expected parameter change estimates of -0.295). Those eight items were also found to produce lower regression weight estimates than the other items within the model. Therefore, the problematic items found in this analysis were removed, which generated the final model for this construct containing ExLOC4, ExLOC5, ExLOC6, and ExLOC9. The model revealed a good fit to the data: Mardia's normalised estimate = 1.755, χ^2 (1, n = 693) = 0.898, p = 0.638, χ^2/df = 0.449, SRMR=0.0077, GFI= 0.999, AGFI= 0.997, TLI=1.010, CFI=1.000, RMSEA= 0.000.

Figure 4.5 One-factor congeneric model analysis results of external LOC



ExLOC4:
Most students don't realise the extent to which their grades are influenced by accidental happenings

ExLOC5:
Capable people who fail to become leaders have not taken advantage of their opportunities.

ExLOC6:
No matter how hard you try, some people just don't like you.

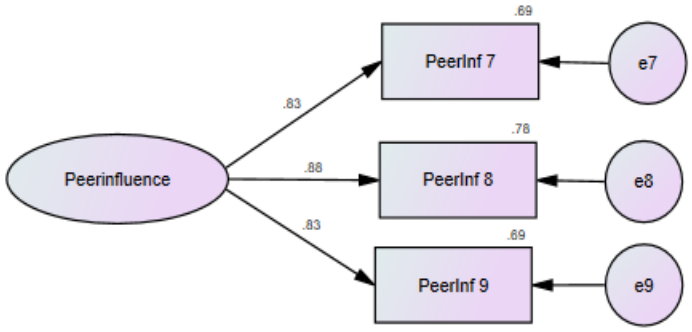
ExLOC9:
Getting a good job depends mainly on being in the right place at the right time.

4.2.1.6 One-factor congeneric model of peer influence

The evaluation of a one-factor congeneric model for the construct of peer influence (Peerinf) indicated that the initial model was a poor fit. The modification indices and standardised residual covariance indicated that Peerinf1, Peerinf2, Peerinf3, Peerinf4 and Peerinf5, Peerinf6, and Peerinf10 were responsible for model misspecification. In this case, Peerinf1 and Peerinf2 were found to cause model misspecification since their measurement errors were largely related to each other (measurement error covariance between Peerinf1 and Peerinf2 was 145.570 with the expected parameter change estimates of 0.391). Furthermore, the measurement errors of Peerinf3 and Peerinf4 were also largely related to each other (measurement errors covariance between Peerinf3 and Peerinf4 was 244.122 with the expected parameter change estimates of 0.465). Those seven items were also found to produce lower regression weight estimates than the other items within the model. Therefore, the problematic items found in this analysis were removed, which generated the final model for this construct containing Peerinf7, Peerinf8, and Peerinf9. The critical ratio difference (CRDIFF) method was then applied to select the parameters that were required to be constrained to ascertain model fit. The CRDIFF test (see *Appendix D4*) recommended that the first (Peerinf7) and third (Peerinf9) path needed to be constrained as their estimated values were less than 1.96 (Byrne 2009).

After constraining the parameters, the respecified model revealed a good fit to the data: Mardia's normalised estimate = 2.509, χ^2 (1, n = 693) = 0.997, p = 0.318, χ^2/df = 0.997, SRMR=0.0040, GFI= 1.000, AGFI= 0.994, TLI=1.000, CFI=1.000, RMSEA=0.000.

Figure 4.6 One-factor congeneric model analysis results of peer influence



Peerinf7:
I rarely make a decision until I am sure my friends approve it.

Peerinf8:
I often identify with my friends by making the same decision as they make.

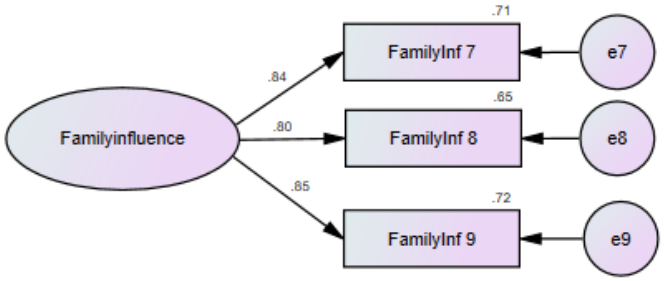
Peerinf9:
When making a decision, I make one that I think my friends will approve of.

4.2.1.7 One-factor congeneric model of family influence

The evaluation of a one-factor congeneric model for the construct of family influence (Familyinf) indicated that the data did not fit the hypothesised model. The modification indices and standardised residual covariance indicated that Familyinf1, Familyinf2, Familyinf3, Familyinf4, Familyinf5, Familyinf6, and Familyinf10 were responsible for model misspecification. In this case, Familyinf1 and Familyinf2 were found to cause model misspecification since their measurement errors were largely related to each other (measurement error covariance between Familyinf1 and Familyinf2 was 197.039 with the expected parameter change estimates of 0.281). Furthermore, the measurement errors of Familyinf3 and Familyinf4 were also largely related to each other (measurement errors covariance between Familyinf3 and Familyinf4 was 193.951 with the expected parameter change estimates of 0.291). Those seven items were also found to produce lower regression weight estimates than the other items within the model. Therefore, the problematic items found in this analysis were removed, which generated the final model for this construct containing Familyinf7, Familyinf8, and Familyinf9. The critical ratio difference (CRDIFF) method was then applied to select the parameters that were required to be constrained to ascertain model fit. The CRDIFF test (see *Appendix D5*) recommended that the first (Familyinf7) and third (Familyinf9) path needed to be constrained as their estimated values were less than 1.96 (Byrne 2009).

After constraining the parameters, the respecified model revealed a good fit to the data: Mardia's normalised estimate = 2.416, χ^2 (1, n = 693) = 0.001, p = 0.976, χ^2/df = 0.001, SRMR=0.0001, GFI= 1.000, AGFI= 1.000, TLI=1.003, CFI=1.000, RMSEA=0.000.

Figure 4.7 One-factor congeneric model analysis results of family influence

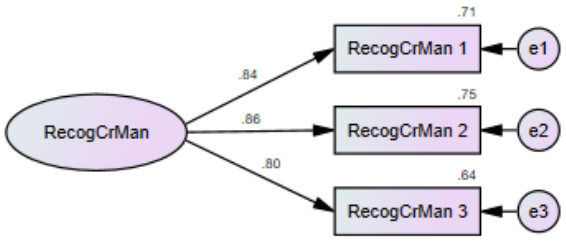
	Familyinf7: I rarely make a decision until I am sure my family members approve it. Familyinf8: I often identify with my family members by making the same decision as they make. Familyinf9: When making a decision, I make one that I think my family members will approve of.

4.2.1.8 One-factor congeneric model of ethical recognition in the case of a credit manager

The evaluation of a one-factor congeneric model for the construct of ethical recognition in the case of a credit manager (RecogCrMan) indicated that the initial model was a poor fit. The modification indices and standardised residual covariance indicated that RecogCrMan4, and RecogCrMan5 were responsible for model misspecification. Therefore, the problematic items found in this analysis were removed, which generated the final model for this construct containing RecogCrMan1, RecogCrMan2, and RecogCrMan3. The critical ratio difference (CRDIFF) method was then applied to select the expected parameters that were required to be constrained to ascertain model fit. The CRDIFF test (see *Appendix D6*) recommended that the first (RecogCrMan1) and second (RecogCrMan2) path needed to be constrained as their estimated values were less than 1.96 (Byrne 2009).

After constraining the parameters, the respecified model revealed a good fit to the data: Mardia's normalised estimate = 4.867, χ^2 (1, = 693) = 0.664, p = 0.415, χ^2/df = 0.664, SRMR=0.0035, GFI= 0.999, AGFI= 0.996, TLI=1.001, CFI=1.000, RMSEA=0.000.

Figure 4.8 One-factor congeneric model analysis results of ethical recognition in the case of credit manager

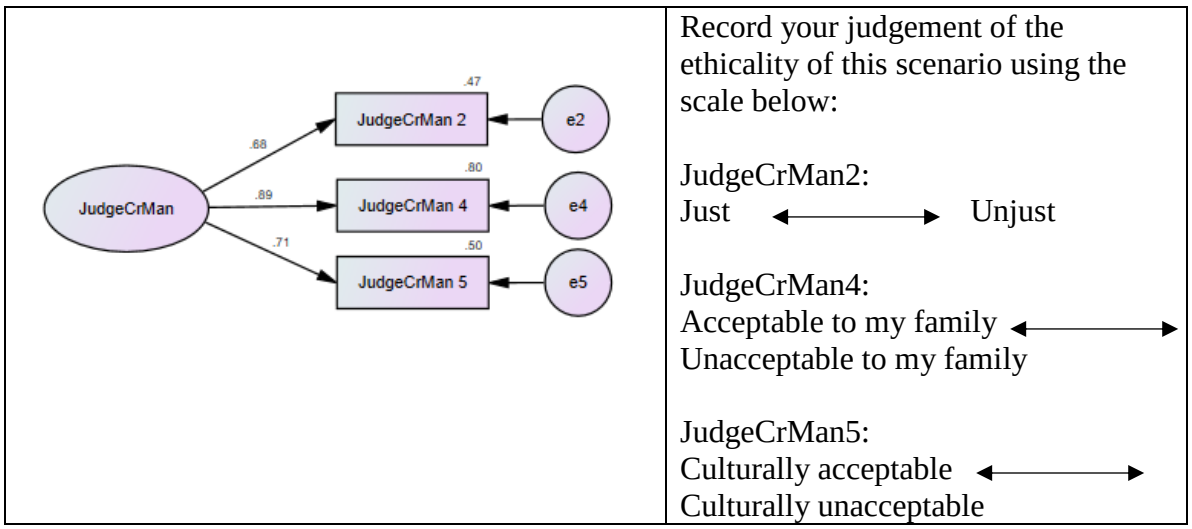
	RecogCrMan1: The situation above involves an ethical problem. RecogCrMan2: The situation above contains an ethical issue. RecogCrMan3: This story contains ethical implications.

4.2.1.9 One-factor congeneric model of ethical judgement in the case of a credit manager

The evaluation of a one-factor congeneric model for the construct of ethical judgement in the case of a credit manager (JudgeCrMan) indicated that the initial model was a poor fit. The modification indices and standardised residual covariance indicated that JudgeCrMan1, JudgeCrMan3, JudgeCrMan6, JudgeCrMan7, and JudgeCrMan8 were responsible for model misspecification. Therefore, the problematic items found in this analysis were removed, which generated the final model for this construct containing JudgeCrMan2, JudgeCrMan4, and JudgeCrMan5. The critical ratio difference (CRDIFF) method was then applied to select the parameters that were required to be constrained to ascertain model fit. The CRDIFF test (see *Appendix D7*) recommended that the first (JudgeCrMan2) and third (JudgeCrMan5) path needed to be constrained as their estimated values were less than 1.96 (Byrne 2009).

After constraining the parameters, the respecified model revealed a good fit to the data: Mardia's normalised estimate = 1.038, χ^2 (1, n = 693) = 0.848, p = 0.357, χ^2/df = 0.848, SRMR=0.064, GFI= 0.999, AGFI= 0.995, TLI=1.001, CFI=1.000, RMSEA=0.000.

Figure 4.9 One-factor congeneric model analysis results of ethical judgement in the case of credit manager

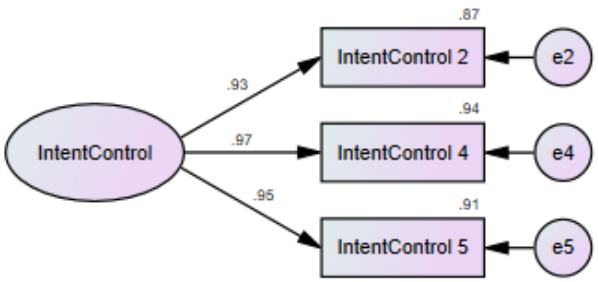


4.2.1.10 One-factor congeneric model of ethical intention in the case of a credit manager

The evaluation of a one-factor congeneric model for the construct of ethical intention in the case of a credit manager (IntentCrMan) indicated that the initial model was a poor fit. The modification indices and standardised residual covariance indicated that IntentCrMan1 and IntentCrMan3 were responsible for model misspecification. Therefore, the problematic items found in this analysis were removed, which generated the final model for this construct containing IntentCrMan2, IntentCrMan4, and IntentCrMan5. The critical ratio difference (CRDIFF) method was then applied to select the parameters that were required to be constrained to ascertain model fit. The CRDIFF test (see *Appendix D8*) recommended that the first (IntentCrMan2) and second (IntentCrMan4) path needed to be constrained as their estimated values were less than 1.96 (Byrne 2009).

After constraining the parameters, the model respecified model revealed a good fit to the data: Mardia's normalised estimate = 3.256, χ^2 (1, n = 693) = 0.060, p = 0.415, χ^2/df = 0.664, SRMR=0.0035, GFI= 0.999, AGFI= 0.996, TLI=1.001, CFI=1.000, RMSEA=0.000.

Figure 4.10 One-factor congeneric model analysis results of ethical intention in the case of a credit manager

	Intent CrMan2: If I were actually in this situation, I would most likely undertake the same action as the credit manager IntentCrMan4: I would act in the same manner as the credit manager in the story in case 1 above. IntentCrMan5: The probability that I would undertake the same action as the credit manager in the story in case 1 above is:

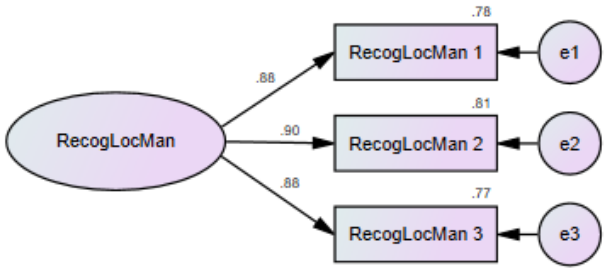
4.2.1.11 One-factor congeneric model of ethical recognition in the case of a local manager

The evaluation of a one-factor congeneric model for the construct of ethical recognition in the case of a local manager (RecogLocMan) indicated that the initial model was a poor fit. The modification indices and standardised residual covariance indicated that RecogLocMan4 and RecogLocMan5 were responsible for model misspecification. Therefore, the problematic items found in this analysis were removed, which generated the final model for this construct containing RecogLocMan1, RecogLocMan2, and RecogLocMan3. The critical ratio difference (CRDIFF) method was then applied to select the expected parameters that were required to be constrained to ascertain model fit. The CRDIFF test (see *Appendix D9*) recommended that the first (RecogLocMan1) and second

(RecogLocMan2) path needed to be constrained as their estimated values were less than 1.96 (Byrne 2009).

After constraining the parameters, the respecified model revealed a good fit to the data: Mardia's normalised estimate = 3.771, χ^2 (1, n = 693) = 0.202, p = 0.653, χ^2/df = 0.202, SRMR=0.0012, GFI= 1.000, AGFI= 0.999, TLI=1.002, CFI=1.000, RMSEA=0.000.

Figure 4.11 One-factor congeneric model analysis results of ethical recognition in the case of a local manager



RecogLocMan1:
The situation above involves an ethical problem.

RecogLocMan2:
The situation above contains an ethical issue.

RecogLocMan3:
This story contains ethical implications.

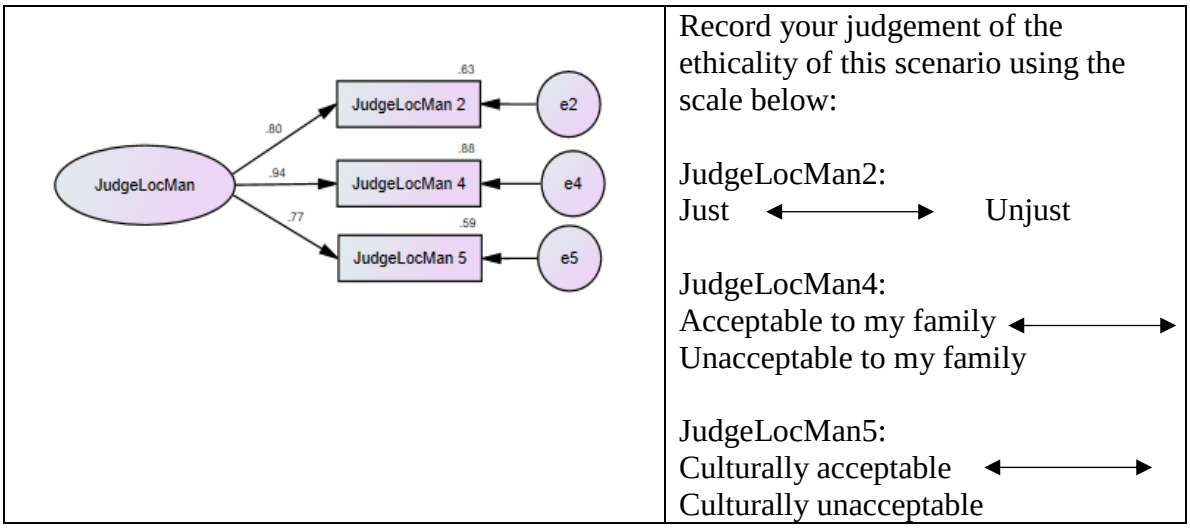
4.2.1.12 One-factor congeneric model of ethical judgement in the case of a local manager

The evaluation of a one-factor congeneric model for the construct of ethical judgement in the case of a local manager (JudgeLocMan) indicated that the initial model was a poor fit. The modification indices and standardised residual covariance indicated that JudgeLocMan1, JudgeLocMan3, JudgeLocMan6, JudgeLocMan7, and JudgeLocMan8 were responsible for model misspecification. Therefore, the problematic items found in this analysis were removed, which generated the final model for this construct containing JudgeLocMan2, JudgeLocMan4, and JudgeLocMan5. The critical ratio difference (CRDIFF) method was then applied to select the parameters that were required to be constrained to ascertain model fit. The CRDIFF test (see *Appendix D10*) recommended

that the first (JudgeLocMan2) and third (JudgeLocMan5) path needed to be constrained as their estimated values were less than 1.96 (Byrne 2009).

After constraining the parameters, the respecified model revealed a good fit to the data: Mardia's normalised estimate = 0.709, χ^2 (1, n = 693) = 0.899, p = 0.343, χ^2/df = 0.899, SRMR=0.0043, GFI= 0.999, AGFI= 0.995, TLI=1.000, CFI=1.000, RMSEA=0.000.

Figure 4.12 One-factor congeneric model analysis results of ethical judgement in the case of a local manager



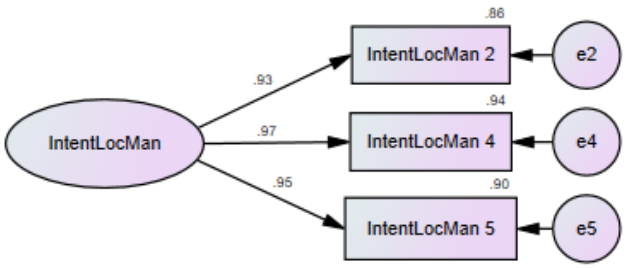
4.2.1.13 One-factor congeneric model of ethical intention in the case of a local manager

The evaluation of a one-factor congeneric model for the construct of ethical intention in the case of a local manager (IntentLocMan) indicated that the initial model was a poor fit. The modification indices and standardised residual covariance indicated that IntentLocMan1 and IntentLocMan3 were responsible for model misspecification. Therefore, the problematic items found in this analysis were removed, which generated the final model for this construct containing IntentLocMan2, IntentLocMan4, and IntentLocMan5. The critical ratio difference (CRDIFF) method was then applied to select the parameters that were required to be constrained to ascertain model fit. The CRDIFF

test (see *Appendix D11*) recommended that the first (IntentLocMan2) and third (IntentLocMan5) path needed to be constrained as their estimated values were less than 1.96 (Byrne 2009).

After constraining the parameters, the respecified model revealed a good fit to the data: Mardia's normalised estimate = 4.365, χ^2 (1, n = 693) = 0.088, p = 0.766, χ^2/df = 0.088, SRMR=0.0003, GFI= 1.000, AGFI= 0.999, TLI=1.001, CFI=1.000, RMSEA=0.000.

Figure 4.13 One-factor congeneric model analysis results of ethical intention in the case of a local manager



Intent LocMan2:
If I were actually in this situation, I would most likely undertake the same action as the credit manager.

Intent LocMan4:
I would act in the same manner as the credit manager in the story in Case 1 above.

Intent LocMan5:
The probability that I would undertake the same action as the credit manager in the story in Case 1 above is:

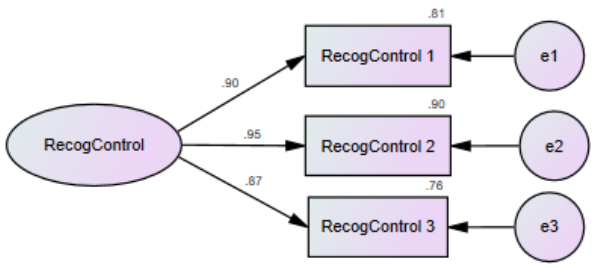
4.2.1.14 One-factor congeneric model of ethical recognition in the case of a controller

The evaluation of a one-factor congeneric model for the construct of ethical recognition in the case of a controller (RecogControl) indicated that the initial model was a poor fit. The modification indices and standardised residual covariance indicated that RecogControl4 and RecogControl5 were responsible for model misspecification. Therefore, the problematic items found in this analysis were removed, which generated the final model for this construct containing RecogControl1, RecogControl2, and

RecogControl3. The critical ratio difference (CRDIFF) method was then applied to select the parameters that were required to be constrained to ascertain model fit. The CRDIFF test (see *Appendix D12*) recommended that the first (RecogControl1) and second (RecogControl2) path needed to be constrained as their estimated values were less than 1.96 (Byrne 2009).

After constraining the parameters, the respecified model revealed a good fit to the data: Mardia's normalised estimate = 4.279, χ^2 (1, N = 693) = 2.352, p = 0.415, χ^2/df = 0.664, SRMR=0.0035, GFI= 0.999, AGFI= 0.996, TLI=1.001, CFI=1.000, RMSEA=0.000.

Figure 4.14 One-factor congeneric model analysis results of ethical recognition in the case of a controller



RecogControl1:
The situation above involves an ethical problem.

RecogControl2:
The situation above contains an ethical issue.

RecogControl3:
This story contains ethical implications.

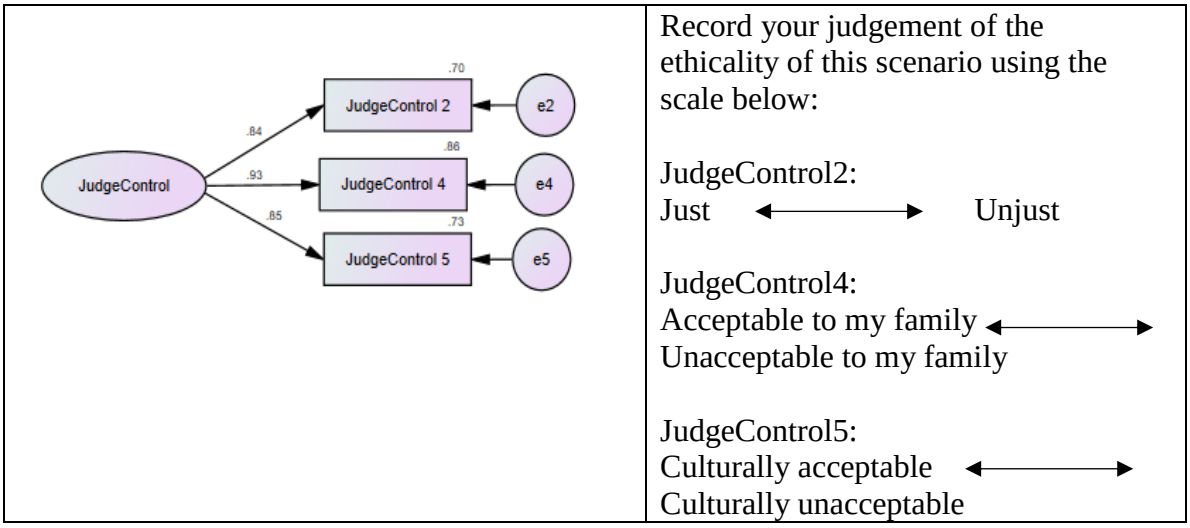
4.2.1.15 One-factor congeneric model of ethical judgement in the case of a controller

The evaluation of a one-factor congeneric model for the construct of ethical judgement in the case of a controller (JudgeControl) indicated that the initial model was a poor fit. The modification indices and standardised residual covariance indicated that JudgeControl1, JudgeControl3, JudgeControl6, JudgeControl7, and JudgeControl8 were responsible for model misspecification. Therefore, the problematic items found in this analysis were removed, which generated the final model for this construct containing JudgeControl2,

JudgeControl4, and JudgeControl5. The critical ratio difference (CRDIFF) method was then applied to select the parameters that were required to be constrained to ascertain model fit. The CRDIFF test (see *Appendix D13*) recommended that the first (JudgeControl2) and third (JudgeControl5) path needed to be constrained as their estimated values were less than 1.96 (Byrne 2009).

After constraining the parameters, the respecified model revealed a good fit to the data: Mardia's normalised estimate = 2.414, χ^2 (1, n = 693) = 0.237, p = 0.626, χ^2/df = 0.237, SRMR=0.0016, GFI= 1.000, AGFI= 0.999, TLI=1.002, CFI=1.000, RMSEA=0.000.

Figure 4.15 One-factor congeneric model analysis results of ethical judgement in the case of a controller



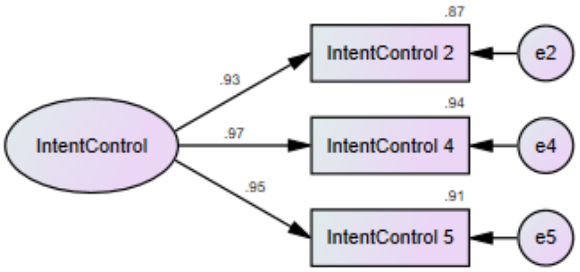
4.2.1.16 One-factor congeneric model of ethical intention in the case of a controller

The evaluation of a one-factor congeneric model for the construct of ethical intention in the case of a controller (IntentControl) indicated that the initial model was a poor fit. The modification indices and standardised residual covariance indicated that IntentControl1 and IntentControl3 were responsible for model misspecification. Therefore, the problematic items found in this analysis were removed, which generated the final model for this construct containing IntentControl2, IntentControl4, and IntentControl5. The

critical ratio difference (CRDIFF) method was then applied to select the parameters that were required to be constrained to ascertain model fit. The CRDIFF test (see *Appendix D14*) recommended that the first (IntentControl) and second (IntentControl) path needed to be constrained as their estimated values were less than 1.96 (Byrne 2009).

After constraining the parameters, the respecified model revealed a good fit to the data: Mardia's normalised estimate = 4.754, χ^2 (1, n = 693) = 0.178, p = 0.673, χ^2/df = 0.178, SRMR=0.0005, GFI= 1.000, AGFI= 0.999, TLI=1.001, CFI=1.000, RMSEA=0.000.

Figure 4.16 One-factor congeneric model analysis results of ethical intention in the case of a controller

	IntentControl2: If I were actually in this situation, I would most likely undertake the same action as the credit manager. Intent Control4: I would act in the same manner as the credit manager in the story in Case 1 above. Intent Control5: The probability that I would undertake the same action as the credit manager in the story in Case 1 above is:

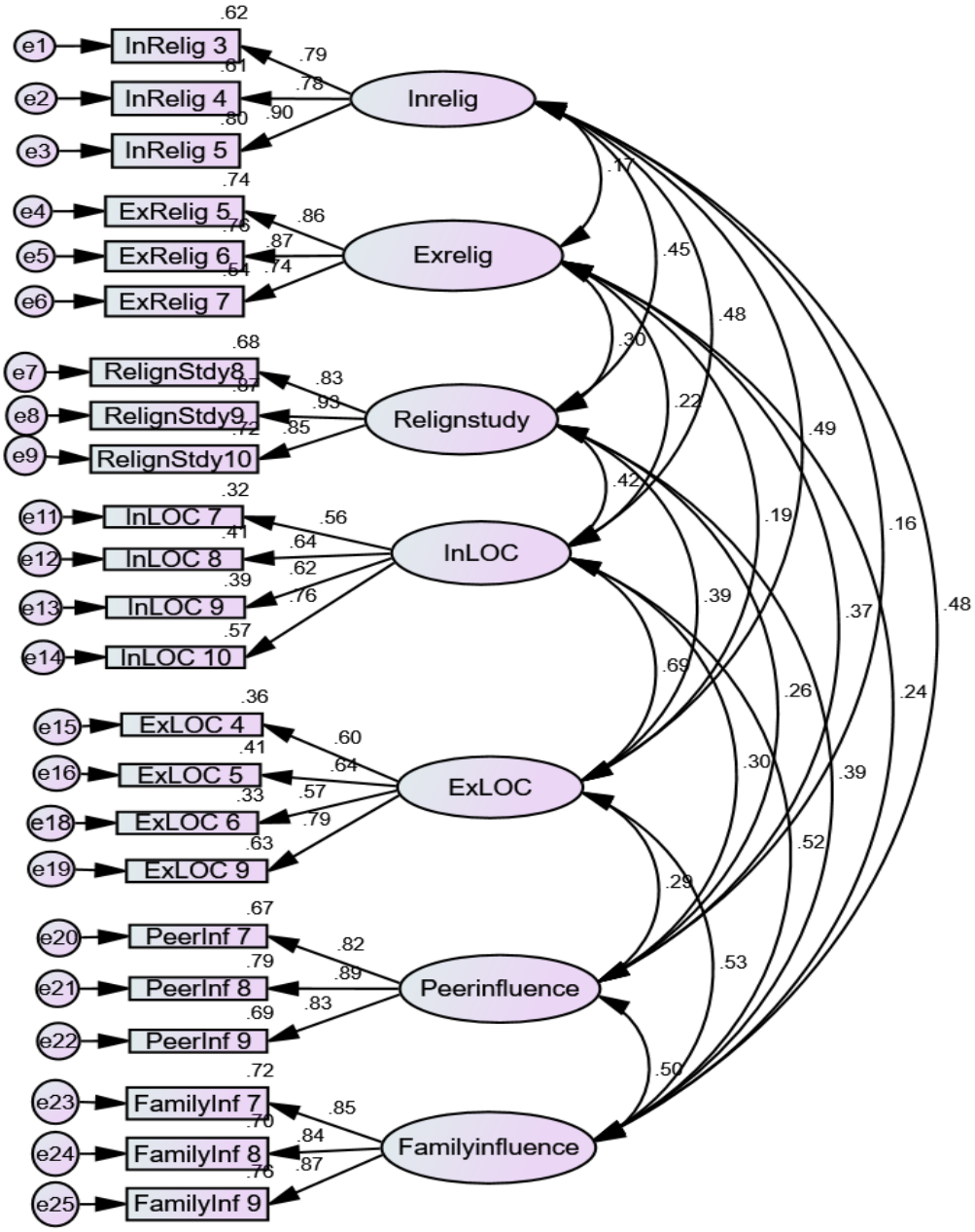
4.2.2 Full measurement analysis

After specifying the one-factor congeneric model for each of the seven constructs to relate the constructs to their item measures, the next step is to establish that the full CFA measurement model fits the data before the structural model is interpreted. The evaluation of the hypothesised seven-factor measurement model is in accordance with Byrne's (2009) procedures as follows:

(a) To assess whether the seven-factor model sufficiently describes the sample data.
(b) To confirm that there are no significant cross loadings among the factors.
(c) To assess the construct validity and reliability of the observed variables and latent variables in the measurement model.

The assessment of the full CFA measurement model in this study involved examining relationship between the seven latent factors and their measures. These seven latent factors were expected to have an influence on the ethical decision-making process of accounting students in Indonesia and they are intrinsic religiosity, extrinsic religiosity, religiosity-and-study, internal LOC, external LOC, peer influence, and family influence. These constructs and their scale items were assessed by employing the single-factor CFA model as shown in the earlier sections. Figure 4.17 shows that the seven constructs are allowed to co-vary, and covariance is symbolised by a curved, two-headed arrow relating each construct to all other constructs. Meanwhile, the constructs (latent variables) are depicted by an ellipse, error terms in circle, and observed variables (or indicators) in rectangles. In addition, correlations among error terms for observed variables were constrained to zero. Factor variances were set to one to identify the model. Parameter estimation and a range of model fit indices were calculated through a maximum likelihood estimation approach using AMOS version 24.

Figure 4.17 CFA model of factors influencing EDM of accounting students in Indonesia



4.2.2.1 Parameter estimates

Byrne (2009) prescribes the following criteria for researchers when they evaluate the model parameter estimates:

(a) The feasibility of the parameter estimates: the parameter estimates have to demonstrate the correct sign and size, and be consistent with the underlying theory.

(b) The suitability of the standard error: small values of standard error indicate a precise estimation; however, there is no absolute measure for deciding what is considered as a 'small value' in a standard error.

(c) In the case of the statistical significance of the parameter estimates, the critical ratio should be greater than ± 1.96 based on a probability level of 0.05.

Table 4.2 shows an output of the seven-factor measurement model pertaining to factors influencing the EDM of accounting students in Indonesia. The outputs are shown separately for the regression weights (or factor loadings), covariances (in this case, for factor only), and variances (for factors as well as measurement errors). The unstandardised regression coefficients are shown in the 'Estimates' column, standard error in the 'SE' column, T-values in the 'CR' column (CR stands for Critical Ratio), and *p*-values for statistical significance in the 'P' column. The unstandardised coefficients demonstrate that:

- All estimates have positive values. This indicates that the hypothesised model is correct and each construct has appropriate information (Byrne 2009).
- All standard errors are small, which indicates a high level of accuracy in the model estimation.
- The critical ratios are greater than ± 1.96 based on probability level of 0.05. This indicates that all parameter estimates are statistically significant.

Table 4.2 Output of the seven-factor measurement model pertaining to factors influencing EDM of accounting students in Indonesia

Items			Estimate	SE	CR	P	Significance
i) Regression Weights:							
RelignStdy10	<---	Relignstudy	1.000				
RelignStdy9	<---	Relignstudy	1.147	.033	34.460	.000	***
RelignStdy8	<---	Relignstudy	1.014	.036	28.013	.000	***
InRelig5	<---	Inrelig	1.000				
InRelig4	<---	Inrelig	.777	.041	18.843	.000	***
InRelig3	<---	Inrelig	.780	.041	18.952	.000	***
ExRelig7	<---	Exrelig	1.000				
ExRelig6	<---	Exrelig	1.108	.038	29.180	.000	***
ExRelig5	<---	Exrelig	1.101	.038	28.920	.000	***
PeerInf9	<---	PeerInfluence	1.000				
PeerInf8	<---	PeerInfluence	1.034	.033	31.791	.000	***
PeerInf7	<---	PeerInfluence	.968	.034	28.270	.000	***
InLOC10	<---	InLOC	1.000				
InLOC9	<---	InLOC	.826	.064	12.809	.000	***
ExLOC9	<---	ExLOC	1.000				
ExLOC6	<---	ExLOC	.640	.056	11.355	.000	***
InLOC8	<---	InLOC	.778	.060	12.948	.000	***
FamilyInf9	<---	FamilyInfluence	1.000				
FamilyInf8	<---	FamilyInfluence	.964	.036	26.455	.000	***
FamilyInf7	<---	FamilyInfluence	.974	.035	27.736	.000	***
InLOC7	<---	InLOC	.693	.062	11.214	.000	***
ExLOC5	<---	ExLOC	.861	.065	13.274	.000	***
ExLOC4	<---	ExLOC	.612	.050	12.137	.000	***
ii)Covariant:							
Inrelig	<-->	Exrelig	.169	.053	3.206	.001	***
Relignstudy	<-->	Inrelig	.450	.040	11.328	.000	***
Inrelig	<-->	FamilyInfluence	.483	**.039**	12.462	.000	***
Inrelig	<-->	PeerInfluence	.155	.052	2.974	.003	***
Inrelig	<-->	InLOC	.483	.050	9.653	.000	***
Inrelig	<-->	ExLOC	.494	.049	10.000	.000	***
Relignstudy	<-->	Exrelig	.303	.040	7.601	.000	***
Exrelig	<-->	FamilyInfluence	.244	.043	5.634	.000	***
Exrelig	<-->	PeerInfluence	.369	.037	10.105	.000	***
Exrelig	<-->	InLOC	.215	.053	4.045	.000	***
Exrelig	<-->	ExLOC	.189	.054	3.536	.000	***
Relignstudy	<-->	FamilyInfluence	.389	.037	10.522	.000	***
Relignstudy	<-->	PeerInfluence	.260	.040	6.429	.000	***

Relignstudy	<-->	InLOC	.415	.044	9.416	.000	***
Relignstudy	<-->	ExLOC	.392	.044	8.814	.000	***
InLOC	<-->	ExLOC	.694	.038	18.151	.000	***
PeerInfluence	<-->	FamilyInfluence	.503	.035	14.476	.000	***
PeerInfluence	<-->	ExLOC	.293	.050	5.859	.000	***
PeerInfluence	<-->	InLOC	.301	.050	6.021	.000	***
InLOC	<-->	FamilyInfluence	.519	.040	13.078	.000	***
ExLOC	<-->	FamilyInfluence	.532	.039	13.815	.000	***
iii) Variances:							
Relignstudy			1.000				
Inrelig			1.000				
Exrelig			1.000				
PeerInfluence			1.000				
InLOC			1.000				
ExLOC			1.000				
FamilyInfluence			1.000				
e9			.391	.029	13.612	.000	***
e8			.200	.028	7.254	.000	***
e7			.476	.033	14.592	.000	***
e3			.248	.030	8.295	.000	***
e2			.384	.029	13.464	.000	***
e1			.370	.028	13.116	.000	***
e6			.836	.054	15.582	.000	***
e5			.380	.041	9.235	.000	***
e4			.429	.042	10.181	.000	***
e22			.441	.033	13.275	.000	***
e21			.282	.029	9.663	.000	***
e20			.451	.033	13.609	.000	***
e14			.743	.058	12.905	.000	***
e13			1.077	.071	15.183	.000	***
e19			.587	.050	11.683	.000	***
e18			.830	.052	15.968	.000	***
e12			.887	.060	14.757	.000	***
e25			.313	.027	11.598	.000	***
e24			.397	.030	13.059	.000	***
e23			.368	.029	12.790	.000	***
e11			1.041	.065	16.068	.000	***
e16			1.052	.070	14.950	.000	***
e15			.658	.042	15.597	.000	***

*** significant at 1%, ** significant at 5%, * significant at 10%, ns = not significant

4.2.2.2 Assessment of measurement model fit

Having tested the hypothesised model for the adequacy of the parameter estimates, the researcher evaluated the fit of the measurement model to the data. The results of the seven-factor measurement model show that the data had a good fit to the model: χ^2 (1, n = 693) = 586.599 p = 0.000, χ^2/df = 2.716, SRMR=0.0907, GFI= 0.935, AGFI= 0.917, TLI=0.933, CFI=0.943, RMSEA=0.050.

Based on these results, the hypothesised model shows a statistically significant probability level ($p = 0.000 < 0.05$) which means a poor fit, but the other fit indices produce a substantially good fit of the model: GFI of 0.935 (scores above 0.90 indicate a good fit), CFI of 0.943 (scores above 0.90 indicate a good fit), and RMSEA of 0.050 (scores equal to or less than 0.05 indicate a good fit model). It is important to point out that the statistically significant probability level from the chi-square test ($p = 0.000 < 0.05$) in this model was influenced by the sample size (n = 693). This has been explained by Hair et al. (1992), Hair et al. (2010a) and Byrne (2009) who state that χ^2 statistic is sensitive to the sample size. Furthermore, Schumacker and Lomax (2004) argue that χ^2 statistic has a tendency to produce a significant probability level when the sample size is more than 200 respondents.

Since substantively correct models with large sample sizes can yield significant values for χ^2, other fit indices such as CFI, SRMS and RMSEA are commonly used (Alhija 2010; Byrne 2009; Hair et al. 2014; Schumacker & Lomax 2004).

4.2.2.3 Construct validity

The assessment of the seven-factor CFA model in section 4.2.2.2 has established the feasibility and statistical significance of all parameter estimates in addition to a good model fit. The subsequent process of CFA for the hypothesised seven-factor measurement model is the evaluation of construct validity. Hair et al. (2010a, p. 708) describe construct validity as "the extent to which a set of measured items actually reflects the theoretical

latent construct those items are designed to measure". Construct validity measures the accuracy of the measurement items in the model. Evidence of construct validity indicates that the item measures accurately and represents the intended concept, and the survey data actually measures what it is intended to measure. Generally, construct validity is assessed through the test of convergent and discriminant validity.

Convergent validity

According to Kline (2005, p. 73), a test for convergent validity requires "the indicators specified to measure a common underlying factor all have relatively high standardised loadings on that factor". Hair et al. (2010a) explain that a convergent validity can be assessed in a CFA procedure by using the attributes of factor loading, average variance extracted (AVE), and construct reliability. The descriptions of these attributes are as follows:

- Factor loading is high standardised loadings on a factor indicating the high convergent validity. The threshold for these standardised loading estimates should preferably be above 0.7 or at least larger than 0.05 (Hair et al. 2010a).
- AVE is a summary of convergence validity. The score of AVE is computed as the mean variance extracted for the items loading on a construct (Hair et al. 2010). The standardised factor loadings of each construct in the seven-factor CFA model are utilised to calculate AVE by using the formula below (L_i = standardised factor loadings of each construct in the seven-factor loading, i = number of items).

$$AVE = \frac{\sum_{i=1}^{n} L_i^2}{n}$$

An AVE of 50% or higher (0.5 or higher) shows acceptable convergent validity whereas an AVE less than 50% or 0.5 shows that there are more errors remaining in the items than variance explained by the latent factor structure imposed on the measure (Forness & Larcker 1981; Hair et al. 2010a). Ping (2009) explains that an AVE which is slightly lower than 0.50 may be acceptable for research that is materially different from previous studies if it does not create a discriminant validity problem.

- Reliability is also an indicator of convergent validity as it shows how well an item measures a construct. Although Cronbach's alpha coefficient (α) is a common method used to evaluate reliability (Pallant 2011), the construct reliability (CR) score has been recommended by Hair et al. (2010b) for evaluating reliability to supplement the validating procedure in the SEM model. This is because the coefficient alpha may understate reliability as it is only a lower bound on reliability. The CR score can be calculated by using scores from the square sum of factor loadings (*Li*) for each construct and the sum of the error variance term for a construct (*ei*) as suggested by various authors (Fornell & Lacker 1981; Hair et al. 2010b).

$$CR = \frac{(\sum_{i=1}^{n} L_i)^2}{(\sum_{i=1}^{n} L_i)^2 + (\sum_{i=1}^{n} e_i)}$$

  DeVellis (2003) explains that internal consistency can also be evaluated with item-to-scale correlations and intercorrelations of items within a scale. Furthermore, BrckaLorenz, Chiang and Nelson (2013) explicate that if a group of items measures a single latent construct, it will be assumed that each item alone correlates with the scale overall and that items within such a scale are positively correlated. Furthermore, they explain that an acceptable range of inter-item correlations is between 0.15 and 0.85.

Table 4.3 shows the scores of factor loading including AVE, items reliability, and CR which were employed to assess the convergent validity for the seven-factor CFA model. The item loadings of the seven-factor CFA model indicate that all the scale items are highly loaded with respect to their constructs, the majority of factor loadings being above the rule of thumb of 0.70. The high loadings suggest that the indicators converge on a common point and the indicators are strongly related to their associated constructs. Furthermore, most of the AVE scores of each construct demonstrate good convergence (rule of thumb at 50% or higher). However, the AVE scores for constructs InLOC and ExLOC were found to be slightly below 0.5 but do not pose a problem to discriminant

validity, which is further explained in the next section. According to Ping (2009), an AVE which is slightly lower than 0.5 may be acceptable for research that is materially different from previous studies and if it does not create a discriminant validity problem. In addition, this research study is among the first to examine the significance of the locus of control in Rest's (1986) EDM model (ethical recognition, ethical judgement, and ethical intention). Furthermore, this study is the first to adopt Likert scales to measure attitudes for locus of control in contrast to previous studies that predominantly used a dichotomous scale that is too constricting for analysis since it does not encapsulate the degree of compliance the respondent has towards the attitudinal statements on locus of control. Hence, this research study offers a materially different approach as compared to previous studies. Finally, the scores of item reliability of each indicator are above 0.15 and the scores of construct reliability (CR) are above 0.7 which indicate good reliability as well as good convergence validity. Notably, the CR scores of the seven constructs in the model are all above 0.7 which constitutes strong evidence of measures consistently representing the same latent construct.

Table 4.3 Standardised factor loadings, AVE, item reliability, construct reliability and Cronbach's alpha of the seven-factor CFA model

No. Code	Questionnaire items	Factor loadings	Items reliability	Construct reliability	Cronbach's alpha
	Intrinsic religiosity				
	AVE = 0.663			0.855	0.785
InRelig3	It is important to me to spend time in private thought and prayer.	0.788	0.625		
InRelig4	I have often had a strong sense of God's presence.	0.782	0.621		
InRelig5	I try hard to live all my life according to my religious belief.	0.895	0.624		
	Extrinsic religiosity				
	AVE = 0.757			0.903	0.869
ExRelig5	I go to religious services mostly to spend time with my friends.	0.860	0.772		
ExRelig6	I go to religious services because I enjoy seeing people I know there.	0.874	0.778		
ExRelig7	I go to religious services to broaden my business networks.	0.738	0.705		

	Religiosity and study **AVE** = 0.769			0.909	0.892
RelignStdy8	My university study is influenced by God's action in my life.	0.827	0.759		
RelignStdy9	My university study represents the holy work of God.	0.932	0.836		
RelignStdy10	My university study represents God's presence in my life.	0.848	0.772		
	Internal LOC **AVE** = 0.449			0.764	0.641
InLOC7	Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.	0.562	0.400		
InLOC8	In the case of the well-prepared student, there is rarely, if ever, such a thing as an unfair test.	0.637	0.461		
InLOC9	Becoming a success is a matter of hard work; luck has little or nothing to do with it.	0.623	0.435		
InLOC10	The average citizen can have an influence on government decisions.	0.757	0.387		
	External LOC **AVE** = 0.432			0.751	0.652
ExLOC4	Most students don't realise the extent to which their grades are influenced by accidental happenings.	0.603	0.449		
ExLOC5	Capable people who fail to become leaders have not taken advantage of their opportunities.	0.643	0.469		
ExLOC9	Getting a good job depends mainly on being the right place at the right time.	0.794	0.417		
	Peer influence **AVE** = 0.742			0.896	0.885
Peerinf7	I rarely make a decision until I am sure my friends approve it.	0.822	0.760		
Peerinf8	I often identify with my friends by making the same decision as they make.	0.889	0.799		
Peerinf9	When making a decision, I make one that I think my friends will approve of.	0.833	0.768		

	Family influence **AVE** = 0.691			0.870	0.870
Familyinf7	I rarely make a decision until I am sure my family members approve it.	0.849	0.581		
Familyinf8	I often identify with my family members by making the same decision as they make.	0.837	0.639		
Familyinf9	When making a decision, I make one that I think my family members will approve of.	0.873	0.595		

Discriminant validity

Discriminant validity is the extent to which a construct is dissimilar from other constructs. A high level of discriminant validity indicates that the construct is unique and captures particular phenomena that are not captured by other constructs (Hair et al. 2010a). Table 4.4 presents the results of a discriminant validity test using the structural equation modelling technique suggested by Bagozzi, Youjae and Lynn (1991). In this procedure, discriminant validity of the factors is examined by constraining the correlation between two constructs to 1.00 (constrained model) and the results are then compared against those of the model where the correlation is freely estimated (unconstrained model). If the constrained model is significantly worse in model fit compared to the unconstrained model, we can determine that the constructs are not the same. In AMOS, we employ the p-value of the nested model comparison (tested on the assumption that the model unconstrained is correct) for the discriminant validity. If this p-value is less than 0.05, we determine that the two constructs are not a single construct and this gives evidence for discriminant validity for these two constructs. The results reveal that discriminant validity holds for all these pairwise relationships.

Table 4.4 A summary of discriminant validity results in the measurement model

Correlation between a pair of constructs:	p-value	Constrained Model	Results
'ExLoc' & 'Inrelig'	0	Significantly worsen	Discriminant validity holds
'ExLoc' & 'Exrelig'	0	Significantly worsen	Discriminant validity holds
'ExLoc' & 'RelignStdy'	0	Significantly worsen	Discriminant validity holds
'ExLoc' & 'InLoc'	0	Significantly worsen	Discriminant validity holds
'ExLoc' & 'Peerinf'	0	Significantly worsen	Discriminant validity holds
'ExLoc' & 'Familyinf'	0	Significantly worsen	Discriminant validity holds
'InLoc' & 'Inrelig'	0	Significantly worsen	Discriminant validity holds
'InLoc' & 'Exrelig'	0	Significantly worsen	Discriminant validity holds
'InLoc' & 'RelignStdy'	0	Significantly worsen	Discriminant validity holds
'InLoc' & 'Peerinf'	0	Significantly worsen	Discriminant validity holds
'InLoc' & 'Familyinf'	0	Significantly worsen	Discriminant validity holds
'Inrelig' & 'Exrelig'	0	Significantly worsen	Discriminant validity holds
'Inrelig' & 'RelignStdy'	0	Significantly worsen	Discriminant validity holds
'Inrelig' & 'Peerinf'	0	Significantly worsen	Discriminant validity holds
'Inrelig' & 'Familyinf'	0	Significantly worsen	Discriminant validity holds
'Exrelig' & 'RelignStdy'	0	Significantly worsen	Discriminant validity holds
'Exrelig' & 'Peerinf'	0	Significantly worsen	Discriminant validity holds
'Exrelig' & 'Familyinf'	0	Significantly worsen	Discriminant validity holds
'RelignStdy' & 'Peerinf'	0	Significantly worsen	Discriminant validity holds
'RelignStdy' & 'Familyinf'	0	Significantly worsen	Discriminant validity holds
'Peerinf' & 'Familyinf'	0	Significantly worsen	Discriminant validity holds

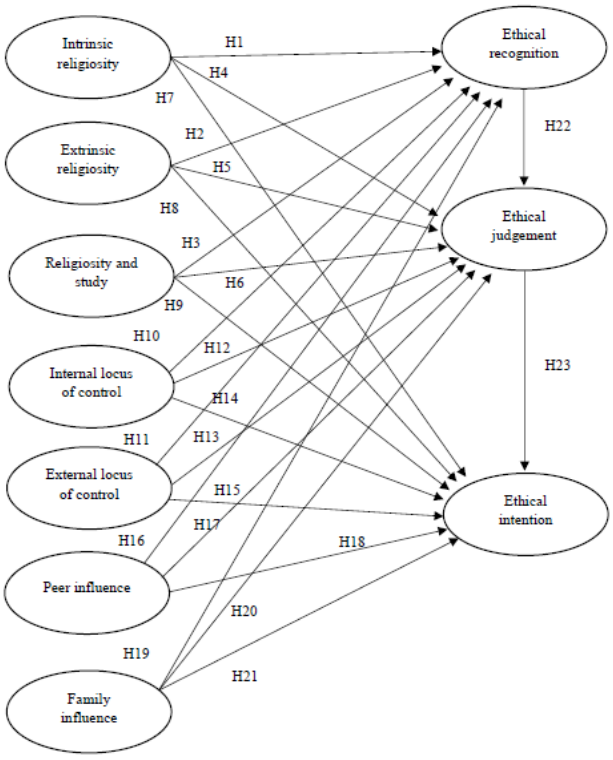
In summary, the assessment of the seven-factor CFA model indicates that the observed variables or measurement items have a substantial loading on the constructs they belong to and there is no significant cross loading on other constructs. The sample data also revealed a good fit to the model. Equally important, the evaluation of construct validity illustrated that there was no multicollinearity among these seven independent variables. In other words, the seven constructs in the measurement model were empirically distinguishable. These results suggest that the measurement model of this study is reliable

for structural model analysis. This will be explained in further details in the following section.

4.3 Data Analysis Part Two: Structural model analysis and hypotheses testing

Arbuckle (2011) describes a structural model analysis as a process of determining how latent variables are correlated with each other within a model. Furthermore, Byrne (2009) explains that a structural model analysis includes the assessment of the correlation of significant paths among the latent constructs in the model. Performing a structural model analysis enables testing the correlation among the constructs in the model and subsequently determining the significant paths between the constructs. It also allows the testing of the research hypotheses that have been proposed for the study. Figure 4.18 describes the proposed research model and hypotheses in this study.

Figure 4.18 The proposed research model



H1: Intrinsic religiosity has a positive effect on ethical recognition.
H2: Extrinsic religiosity has a negative effect on ethical recognition.
H3: Religiosity and study has a positive effect on ethical recognition.
H4: Intrinsic religiosity has a positive effect on ethical judgement.
H5: Extrinsic religiosity has a negative effect on ethical judgement.
H6: Religiosity and study has a positive effect on ethical judgement.
H7: Intrinsic religiosity has a positive effect on ethical intention.
H8: Extrinsic religiosity has a negative effect on ethical intention.
H9: Religiosity and study has a positive effect on ethical intention.
H10: Internal LOC has a positive effect on ethical recognition.
H11: External LOC has a negative effect on ethical recognition.
H12: Internal LOC has a positive effect on ethical judgement.
H13: External LOC has a negative effect on ethical judgement.
H14: Internal LOC has a positive effect on ethical intention.
H15: External LOC has a negative effect on ethical intention.
H16: Peer influence affects ethical recognition.
H17: Peer influence affects ethical judgement.
H18: Peer influence affects ethical intention.
H19: Family influence affects ethical recognition.
H20: Family influence affects ethical judgement.
H21: Family influence affect ethical intention.
H22: Ethical recognition has a positive effect on ethical judgement.
H23: Ethical judgement has a positive effect on ethical intention.

4.3.1 Structural model analysis

The structural model imputes relationships between the independent and dependent variables that are made up of latent variables. In this study, the full structural equation model is comprised of the seven-factor measurement model (independent variables) and the three-factor congeneric measurement model of ethical recognition, ethical judgement, and ethical intention (dependent variables).

A path diagram for the research model is depicted in Figure 4.19, Figure 4.20, and Figure 4.21. The observed variables and measured variables are symbolised in rectangles, the latent variables in ellipses and the measurements of errors in circles. The single-headed arrows in the path diagram refer to causal paths, while the double-headed arrows represent correlations between the latent variables. In the context of SEM analysis, the seven predictor variables (independent variables) – intrinsic religiosity (Inrelig), extrinsic religiosity (Exrelig), religiosity and study (Relignstudy), internal LOC (InLoc), and external LOC (Exloc) – are referred to as exogenous variables. These exogeneous variables have arrows pointing toward the dependent variables of ethical recognition, ethical judgement, and ethical intention which are referred to as endogenous variables.

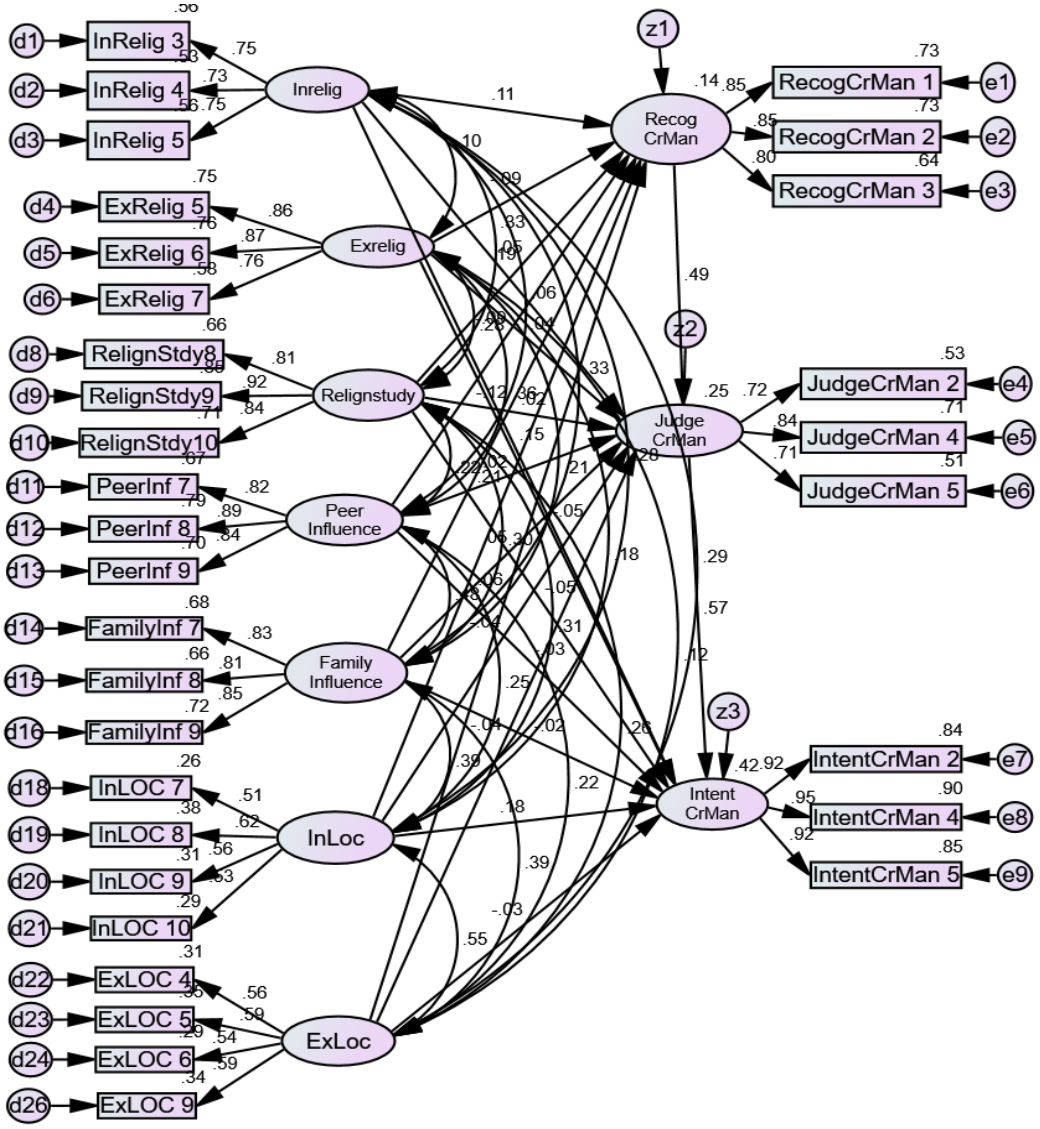
In this research study, we employed three scenarios (credit manager, local manager, and controller) in measuring the dependent variables (ethical recognition, ethical judgement, and ethical intention). Therefore, we have three structural models: one for each case context.

4.3.1.1 Structural model analysis in the case of a credit manager

The path diagram in Figure 4.19 presents the standardised estimates of the structural modelling in the case of a credit manager. The overall fit of the structural model is satisfactory with all the relevant goodness of fit indices greater than 0.90: the GFI is 0.937, the AGFI is 0.921, and the TLI is 0.967. Similarly, there is no significant evidence of misfit with the RMSEA indicating a very satisfactory level of 0.032 which compares favourably to the rule of thumb of 0.05 or less, as specified by Schumacker and Lomax

(2004). The SRMR is also acceptable, at 0.038, within the threshold of a good overall fit. Another positive test statistic is the normed chi-square score (×/df) of 1.717, a score that is appropriately below the rule of thumb of 3.0 for a good fit, demonstrating a good overall model performance.

Figure 4.19 Path diagram of the hypothesised structural model in the case of a credit manager



The next step is to explore the path significance of each causal relationship for each hypothesis, as well as to examine the variance explained by each path in the model. Table 4.5 shows the unstandardised parameter estimates or regression weights of the structural paths in the column under 'Estimate'. SE is the estimate of standard error of the regression weight, while CR (critical ratio) is a t-value obtained by dividing the estimate of the covariance by its standard error. According to Arbuckle (2011), CR values greater than 1.96 are statistically significant at p-value of 0.05. Each structural path hypothesis was tested at conventional significance levels of 1%, 5%, and 10%. The smaller the p-value, the stronger the evidence provided by the data towards rejecting the null hypothesis. Paths which are statistically significant at more than one of these conventional significance levels are reported at the highest significance level in the column under 'Significance'.

Based on the structural paths in the case of a credit manager of Table 4.5, the results indicate that the independent variables Inrelig, Exrelig, Relignstudy, InLoc, Peer_Influence, and Family_Influence significantly influenced the dependent variable ethical recognition (Recog_CrMan). Among the dependent variables, it was only Recog_CrMan that significantly influenced ethical judgement variable Judge_CrMan. Lastly, this study's results reveal that the independent variables Inrelig and InLoc, and the dependent variable Judge_CrMan significantly influenced the ethical intention variable Intent_CrMan in the case of a credit manager.

Table 4.5 Results of structural paths analysis in the case of a credit manager

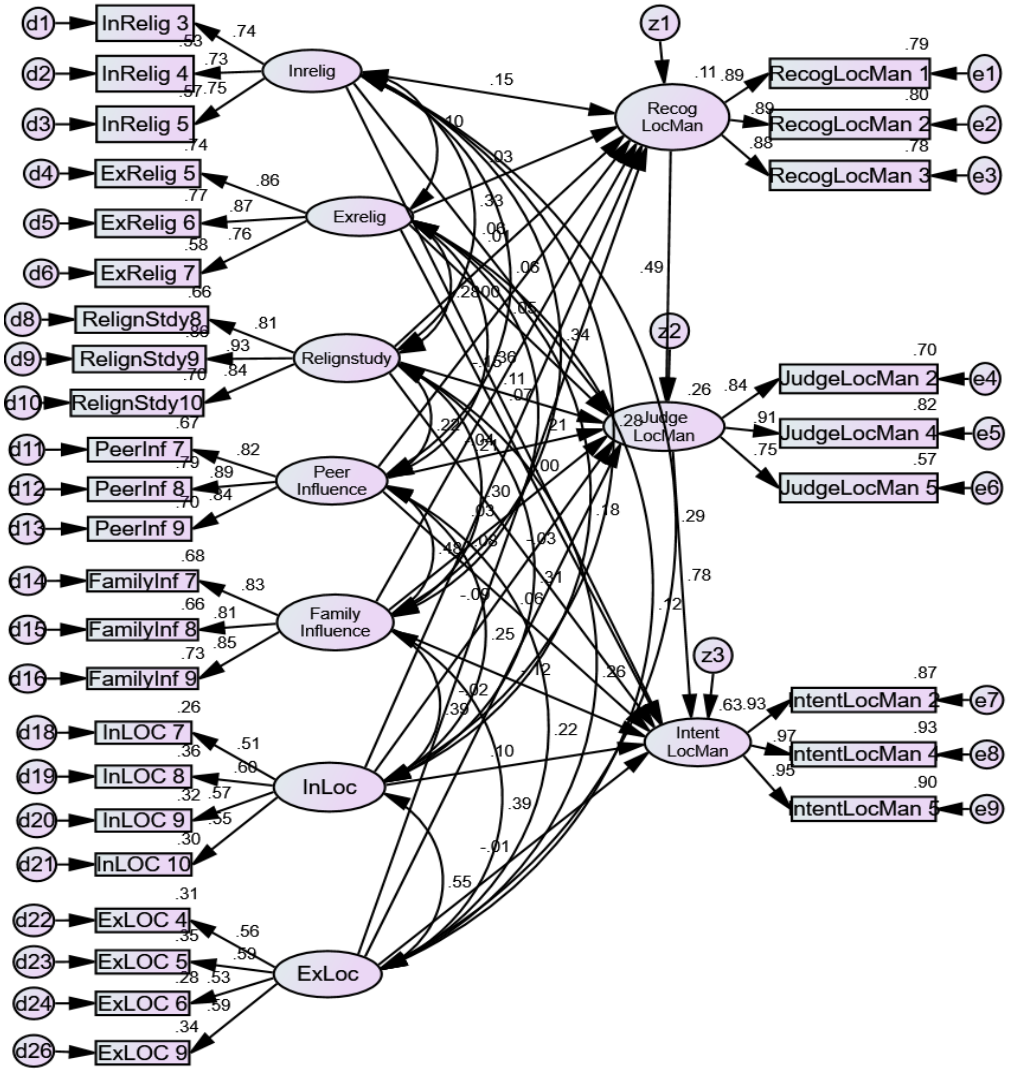
Structural Paths	Estimate	S.E.	C.R.	P	Significance
Recog_CrMan <--- Inrelig	.151	.069	2.179	**.029**	**
Recog_CrMan <--- Exrelig	-.068	.037	-1.840	**.066**	*
Recog_CrMan <--- Relignstudy	.150	.037	4.007	**.000**	***
Recog_CrMan <--- InLoc	.248	.086	2.896	**.004**	***
Recog_CrMan <--- ExLoc	.096	.104	.924	.356	ns
Recog_CrMan <--- Peer_Influence	-.079	.044	-1.791	**.073**	*
Recog_CrMan <--- Family_Influence	-.109	.053	-2.060	**.039**	**
Judge_CrMan <--- Relignstudy	.022	.044	.493	.622	ns
Judge_CrMan <--- Family_Influence	.057	.062	.909	.363	ns
Judge_CrMan <--- Recog_CrMan	.579	.061	9.495	**.000**	***
Judge_CrMan <--- Peer_Influence	.022	.052	.431	.667	ns
Judge_CrMan <--- Inrelig	.075	.081	.922	.356	ns
Judge_CrMan <--- InLoc	-.058	.100	-.580	.562	ns
Judge_CrMan <--- ExLoc	-.068	.121	-.565	.572	ns
Judge_CrMan <--- Exrelig	.042	.043	.971	.332	ns
Intent_CrMan <--- Inrelig	.306	.088	3.460	**.000**	***
Intent_CrMan <--- Exrelig	-.054	.046	-1.176	.239	ns
Intent_CrMan <--- InLoc	.325	.107	**3.053**	**.002**	***
Intent_CrMan <--- ExLoc	-.059	.129	-.457	.648	ns
Intent_CrMan <--- Peer_Influence	-.042	.055	-.769	.442	ns
Intent_CrMan <--- Relignstudy	-.059	.046	-1.272	.204	ns
Intent_CrMan <--- Family_Influence	-.034	.066	-.514	.607	ns
Intent_CrMan <--- Judge_CrMan	.716	.053	13.451	**.000**	***
*** significant at 1%, ** significant at 5%, * significant at 10%, ns = not significant					

4.3.1.2 Structural model analysis in the case of a local manager

The path diagram in Figure 4.20 presents the standardised estimates of the structural modelling in the case of a local manager. The overall fit of the structural model is satisfactory with all the relevant goodness of fit indices greater than 0.90: the GFI is 0.931, the AGFI is 0.945 and the TLI is 0.979. Similarly, there is no significant evidence of misfit, with the RMSEA showing a very satisfactory level of 0.028 which compares favourably to the rule of thumb of 0.05 or less as specified by Schumacker and Lomax (2004). The SRMR is also acceptable, at 0.033, within the threshold of a good overall fit. Another positive test statistic is the normed chi-square value (×/df) of 1.524, a value that

is appropriately below the rule of thumb of 3.0 for a good fit, indicating a good overall model performance.

Figure 4.20 Path diagram of the hypothesised structural model in the case of a local manager



Based on the structural paths in the case of a local manager in Table 4.6, the results indicate that the independent variables Inrelig, InLoc, and Peer_Influence significantly influenced dependent variable ethical recognition (Recog_LocMan). Furthermore, the results indicate that independent variable Relignstudy and dependent variable

Recog_LocMan significantly influenced dependent variable ethical judgement (Judge_LocMan). Lastly, this study's results reveal that the independent variables Inrelig, InLoc, Peer_Influence, Family_Influence and dependent variable Judge_LocMan significantly influenced dependent variable ethical intention (Intent_LocMan).

Table 4.6 Results of structural path analysis in the case of a local manager

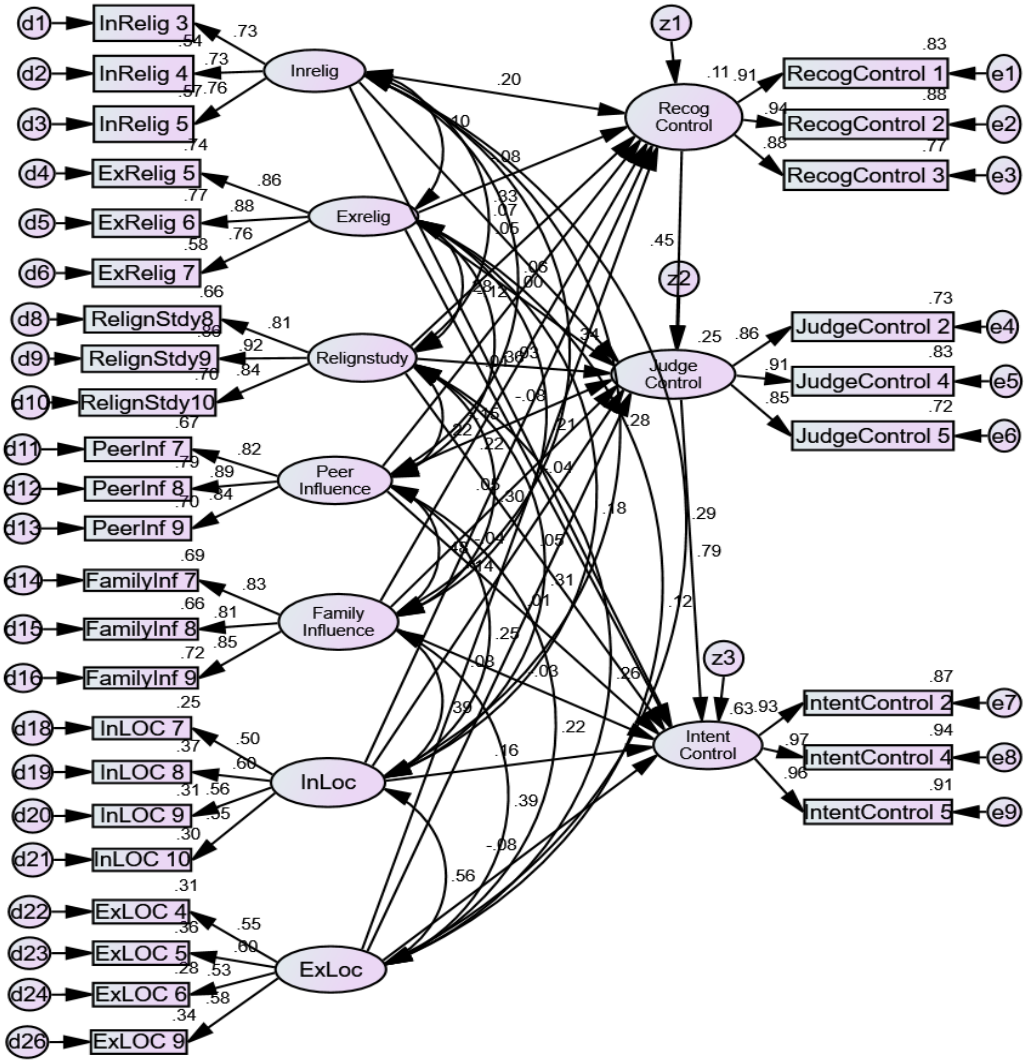
Structural paths			Estimate	S.E.	C.R.	P	significance
Recog_LocMan	<---	Inrelig	.236	.080	2.952	**.003**	***
Recog_LocMan	<---	Exrelig	.024	.043	.553	.580	ns
Recog_LocMan	<---	Relignstudy	.056	.043	1.316	.188	ns
Recog_LocMan	<---	InLoc	.305	.103	2.962	**.003**	***
Recog_LocMan	<---	ExLoc	.141	.120	1.178	.239	ns
Recog_LocMan	<---	Peer_Influence	.001	.051	.027	.979	ns
Recog_LocMan	<---	Family_Influence	-.166	.062	-2.686	**.007**	***
Judge_LocMan	<---	Relignstudy	.117	.047	2.498	**.012**	**
Judge_LocMan	<---	Family_Influence	.044	.069	.638	.523	ns
Judge_LocMan	<---	Recog_LocMan	.582	.051	11.511	**.000**	***
Judge_LocMan	<---	Peer_Influence	-.044	.056	-.776	.438	ns
Judge_LocMan	<---	Inrelig	.018	.088	.206	.837	ns
Judge_LocMan	<---	InLoc	-.154	.112	-1.373	.170	ns
Judge_LocMan	<---	ExLoc	-.048	.132	-.366	.714	ns
Judge_LocMan	<---	Exrelig	.056	.047	1.183	.237	ns
Intent_LocMan	<---	Inrelig	.143	.073	1.959	**.050**	**
Intent_LocMan	<---	Exrelig	-.006	.039	-.143	.887	ns
Intent_LocMan	<---	InLoc	.193	.092	2.089	**.037**	**
Intent_LocMan	<---	ExLoc	-.034	.110	-.310	.757	ns
Intent_LocMan	<---	Peer_Influence	.080	.047	1.710	**.087**	*
Intent_LocMan	<---	Relignstudy	-.035	.039	-.899	.368	ns
Intent_LocMan	<---	Family_Influence	-.169	.057	-2.978	**.003**	***
Intent_LocMan	<---	Judge_LocMan	.883	.040	22.096	**.000**	***
*** significant at 1%, ** significant at 5%, * significant at 10%, ns = not significant							

4.3.1.3 Structural model analysis in the case of a controller

The path diagram in Figure 4.21 shows the standardised estimates of the structural modelling in the case of a controller. The overall fit of the structural model is satisfactory, with all the relevant goodness of fit indices greater than 0.90: the GFI is 0.942, the AGFI

is 0.927, and the TLI is 0.976. Similarly, there is no significant evidence of misfit with the RMSEA showing a very satisfactory level of 0.030 which compares favourably with the rule of thumb of 0.05 or less as specified by Schumacker and Lomax (2004). The SRMR is also acceptable, at 0.034, within the threshold of a good overall fit. Another positive test statistic is the normed chi-square score (×/df) of 1.617, a score that is appropriately below the rule of thumb of 3.0 for a good fit, indicating a good overall model performance.

Figure 4.21 Path diagram of the hypothesised structural model in the case of a controller



Based on the structural paths in the case of a controller in Table 4.7, the results indicate that the independent variables Inrelig, Exrelig, InLoc, and Peer_Influence significantly influenced dependent variable ethical recognition (Recog_Control). Furthermore, the results reveal that the independent variables Peer_Influence, InLoc and dependent variable Recog_Control significantly influenced dependent variable ethical judgement (Judge_Control). Lastly, this study's results reveal that the independent variables Inrelig, InLoc, ExLoc and dependent variable Judge_Control significantly influenced dependent variable ethical intention (Intent_Control).

Table 4.7 Results of structural path analysis in the case of a controller

Structural Paths			Estimate	S.E.	C.R.	P	Significance
Recog_Control	<---	Inrelig	.320	.082	3.903	**.000**	***
Recog_Control	<---	Exrelig	-.073	.044	-1.656	.098	*
Recog_Control	<---	Relignstudy	.046	.044	1.045	.296	ns
Recog_Control	<---	InLoc	.324	.105	3.079	.002	***
Recog_Control	<---	ExLoc	-.076	.125	-.609	.543	ns
Recog_Control	<---	Peer_Influence	-.118	.053	-2.238	.025	**
Recog_Control	<---	Family_Influence	.011	.063	.174	.862	ns
Judge_Control	<---	Relignstudy	.035	.047	.756	.450	ns
Judge_Control	<---	Family_Influence	.065	.067	.973	.331	ns
Judge_Control	<---	Recog_Control	.511	.047	10.830	**.000**	***
Judge_Control	<---	Peer_Influence	-.169	.056	-3.009	.003	***
Judge_Control	<---	Inrelig	.121	.088	1.375	.169	ns
Judge_Control	<---	InLoc	-.235	.113	-2.077	.038	**
Judge_Control	<---	ExLoc	.171	.133	1.288	.198	ns
Judge_Control	<---	Exrelig	.005	.047	.103	.918	ns
Intent_Control	<---	Inrelig	-.160	.074	-2.162	.031	**
Intent_Control	<---	Exrelig	-.045	.040	-1.139	.255	ns
Intent_Control	<---	InLoc	.310	.096	3.216	.001	***
Intent_Control	<---	ExLoc	-.197	.113	-1.740	.082	*
Intent_Control	<---	Peer_Influence	.016	.048	.334	.739	ns
Intent_Control	<---	Relignstudy	.058	.039	1.480	.139	ns
Intent_Control	<---	Family_Influence	-.042	.057	-.745	.456	ns
Intent_Control	<---	Judge_Control	.896	.040	22.416	**.000**	***
*** significant at 1%, ** significant at 5%, * significant at 10%, ns = not significant							

4.3.2 Summary of the hypothesis test results

This section presents a summary of the hypothesis test results of the effect of religiosity, LOC, peer influence, and family influence on EDM process (ethical recognition, ethical judgement, and ethical intention) across three scenarios (a credit manager, a local manager, and a controller). Hypothesis testing across these three scenarios will ensure that the results are consistent for obtaining a robust conclusion. An independent variable is considered supported if it significantly affects the dependent variable in all the three scenarios. In contrast, an independent variable is considered not supported if it does not significantly affect the dependent variable in all the three scenarios. Meanwhile, an independent variable is considered inconclusive if it only affects the dependent variable in one or two scenarios.

4.3.2.1 The effect of religiosity on EDM

Table 4.8 below reveals the summary of the hypothesis test results of the effect of independent variables intrinsic religiosity, extrinsic religiosity, and religiosity and study on dependent variables ethical recognition, ethical judgement, and ethical intention.

The results related to the effect of religiosity on ethical recognition reveal that H1 is supported because independent variable intrinsic religiosity has a significant positive effect on dependent variable ethical recognition across all the three scenarios. Meanwhile, H2 is inconclusive because independent variable extrinsic religiosity has a significant positive effect on dependent variable ethical recognition only in two scenarios (credit manager and controller). Lastly, H3 is also inconclusive because independent variable religiosity and study has a significant positive effect on dependent variable ethical recognition only in one scenario (credit manager).

The results related to the effect of religiosity on ethical judgement show that H4 and H5 are not supported because both the independent variables intrinsic religiosity and extrinsic religiosity have no significant effect on dependent variable ethical judgement in all

scenarios. Meanwhile, H6 is inconclusive because independent variable religiosity and study has a significant positive effect on dependent variable ethical judgement only in one scenario (local manager).

The results related to the effect of religiosity on ethical intention indicate that H7 is supported because independent variable intrinsic religiosity has a significant positive effect on dependent variable ethical intention in all the three scenarios. In contrast, H8 and H9 are not accepted because both of the independent variables extrinsic religiosity and religiosity and study have no significant effect on the dependent variable ethical recognition across all scenarios.

Table 4.8 A summary of the hypothesis test results of the effect of religiosity on EDM

Study hypotheses	Test results			
	Credit manager	**Local manager**	**Controller**	**Overall**
H1: Intrinsic religiosity has a positive effect on ethical recognition.	**	***	***	Supported
H2: Extrinsic religiosity has a negative effect on ethical recognition.	*	ns	*	Inconclusive
H3: Religiosity and study has a positive effect on ethical recognition.	***	ns	ns	Inconclusive
H4: Intrinsic religiosity has a positive effect on ethical judgement.	ns	ns	ns	Not supported
H5: Extrinsic religiosity has a negative effect on ethical judgement.	ns	ns	ns	Not supported
H6: Religiosity and study has a positive effect on ethical judgement.	ns	**	ns	Inconclusive
H7: Intrinsic religiosity has a positive effect on ethical intention.	***	**	**	Supported
H8: Extrinsic religiosity has a negative effect on ethical intention.	ns	ns	ns	Not Supported
H9: Religiosity and study has a positive effect on ethical intention.	ns	ns	ns	Not Supported
*** significant at 1%; ** significant at 5%; * significant at 10%; ns = not significant				

4.3.2.2 The effect of LOC on EDM

Table 4.9 reveals the summary of the hypothesis test results of the effect of independent variables internal LOC and external LOC on dependent variables ethical recognition, ethical judgement, and ethical intention.

The results related to the effect of LOC on ethical recognition reveal that H10 is supported because independent variable internal LOC has a significant positive effect on dependent variable ethical recognition in all the three scenarios. Meanwhile, H11 is not supported because independent variable external LOC has no significant negative effect on dependent variable ethical recognition across all the three scenarios.

Furthermore, the results related to the effect of LOC on ethical judgement indicate that H12 and H13 are not supported because both of the independent variables internal LOC and external LOC have no significant effect on dependent variable ethical judgement in all scenarios.

The results related to the effect of LOC on ethical intention reveal that H14 is supported because independent variable internal LOC has a significant positive effect on dependent variable ethical intention in all the three scenarios. In contrast, H15 is not supported because independent variable external LOC has no significant negative effect on dependent variable ethical intention in all scenarios.

Table 4.9 A summary of the hypothesis test results of the effect of LOC on EDM

Study hypotheses	Test results			
	Credit manager	**Local manager**	**Controller**	**Overall**
H10: Internal LOC has a positive effect on ethical recognition.	***	***	***	Supported
H11: External LOC has a negative effect on ethical recognition.	ns	ns	ns	Not supported
H12: Internal LOC has a positive effect on ethical judgement.	ns	ns	ns	Not supported
H13: External LOC has a negative effect on ethical judgement.	ns	ns	ns	Not supported
H14: Internal LOC has a positive effect on ethical intention.	***	**	***	Supported
H15: External LOC has a negative effect on ethical intention.	ns	ns	ns	Not Supported
*** significant at 1%; ** significant at 5%; * significant at 10%; ns = not significant				

4.3.2.3 The effect of peer influence on EDM

Table 4.10 reveals the summary of the hypothesis test results of the effect of independent variable peer influence on dependent variables ethical recognition, ethical judgement, and ethical intention. The results reveal that H16 is inconclusive because independent variable peer influence has a significant effect on dependent variable ethical recognition only in two scenarios (credit manager and controller). Furthermore, H17 is inconclusive because independent variable peer influence has a significant effect on the dependent variable ethical judgement only in one scenario (controller). Lastly, H18 is also inconclusive because independent variable peer influence has a significant effect on dependent variable ethical intention only in one scenario (local manager).

Table 4.10 A summary of the hypothesis test results of the effect of peer influence on EDM

Study hypotheses	Test results			
	Credit manager	**Local manager**	**Controller**	**Overall**
H16: Peer influence affects ethical recognition.	*	ns	**	Inconclusive
H17: Peer influence affects ethical judgement.	ns	ns	***	Inconclusive
H18: Peer influence affects ethical intention.	ns	*	ns	Inconclusive
*** significant at 1%; ** significant at 5%; * significant at 10%; ns = not significant				

4.3.2.4 The effect of family influence of EDM

Table 4.11 reveals the summary of the hypothesis test results of the effect of independent variable family influence on dependent variables ethical recognition, ethical judgement, and ethical intention. The results reveal that H19 is inconclusive because the independent variable family influence has a significant effect on dependent variable ethical recognition only in two scenarios (credit manager and local manager). Furthermore, H20 is not accepted because independent variable family influence has no significant effect on dependent variable ethical judgement across all scenarios. Lastly, H21 is inconclusive because independent variable family influence has a significant effect on dependent variable ethical intention only in one scenario (local manager).

Table 4.11 A summary of the hypothesis test results of the effect of family influence on EDM

Study hypotheses	Test results			
	Credit manager	**Local manager**	**Controller**	**Overall**
H19: Family influence affects ethical recognition.	**	***	ns	Inconclusive
H20: Family influence affects ethical judgement.	ns	ns	ns	Not supported
H21: Family influence affects ethical intention.	ns	***	ns	Inconclusive
*** significant at 1%; ** significant at 5%; * significant at 10%; ns = not significant				

4.3.2.5 The effect of ethical recognition on ethical judgement

Table 4.12 below reveals the hypothesis test results of the effect of independent variable ethical recognition on dependent variable ethical judgement. The result indicates that H22 is accepted because independent variable ethical recognition has a significant positive effect on dependent variable ethical judgement in all the three scenarios.

Table 4.12 A The hypothesis test result of the effect of ethical recognition on ethical judgement

Study hypothesis	Test results			
	Credit manager	**Local manager**	**Controller**	**Overall**
H22: Ethical recognition has a positive effect on ethical judgement.	***	***	***	Supported
*** significant at 1%; ** significant at 5%; * significant at 10%; ns = not significant				

4.3.2.6 The influence of ethical judgement on ethical intention

Table 4.13 below reveals the hypothesis test results of the effect of independent variable ethical judgement on dependent variable ethical intention. The result indicates that H23 is accepted because independent variable ethical judgement has a significant positive effect on dependent variable ethical intention in all the three scenarios.

Table 4.13 The hypothesis test result of the effect of ethical judgement on ethical intention

Study hypotheses	**Test results**	**Study hypotheses**	**Test results**	**Study hypotheses**
H23: Ethical judgement has a positive effect on ethical intention	***	***	***	Supported
*** significant at 1%; ** significant at 5%; * significant at 10%; ns = not significant				

4.4 Data Analysis Part Three: Descriptive analysis and reliability analysis

This section presents the demographic profile of the respondents, frequency distribution, and descriptive statistics (means and standard deviations) on the degree of compliance of respondents towards each item in the research questionnaire. In addition, this study evaluated the construct reliability by using Cronbach's alpha to determine the reliability of the measurement scale and the internal consistency. Each of these steps is discussed in detail in the following subsections.

4.4.1 Demographic profile

The sample size of this study was large at 693 respondents. The respondents were accounting students at 11 universities across four different cities in Indonesia. The survey on these respondents was conducted from 1 August to 30 September 2016. Table 4.14 presents a summary of the demographic profile of the respondents including gender, age, university affiliations, years of study, work experience, and business ethics course attendance.

Table 4.14 Demographic profile

Characteristics	Categories	Frequency	Relative frequency (%)
Locations of universities (cities)	Yogyakarta	217	31.3
	Solo	234	33.8
	Semarang	175	25.3
	Bogor	67	9.7
Gender	Female	496	71.6
	Male	197	28.4
Age	17 to less than 21 years old	492	71.0
	21 to less than 25 years old	198	28.6
	Older than 25 years old	3	0.4
University affiliations	Secular universities	183	26.4
	Islamic universities	285	41.1
	Islamic accounting schools	225	32.5
Years of study	1st year	17	2.5
	2nd year	257	37.1
	3rd year	209	30.2
	4th year	210	30.3
Possess work experience	Yes	245	35.4
	No	448	64.6
Have attended business ethics course	Yes	418	60.3
	No	275	39.7

As shown in Table 4.14, the participants come from 11 universities located in four different cities: Surakarta, Yogyakarta, Semarang, and Bogor. Most data were obtained from Surakarta (234 respondents), followed by Yogyakarta (217 respondents). There were 175 respondents from Semarang, and 67 respondents were from Bogor. This sample was approximately representative of the population spread of accounting students across the four universities' locations. Of the respondent sample, 496 were female (71.6%), while 197 (28.4%) were male. The gender distribution in this sample approximately corresponded with the pattern of accounting students in Indonesia. The majority (71%) of respondents in this study were aged between 17 and 21-year-old. These age groups were found to be consistent with the pattern of accounting students in the country.

In terms of university affiliations, 285 respondents (41.1%) were students from conventional accounting schools of Islamic universities, 225 respondents (32.5%) from Islamic accounting schools of Islamic universities, and 183 respondents (26.4%) from accounting schools of secular universities. In terms of years of study, most respondents (257 students [37.09%]) were second year students, 210 respondents (30.30%) were fourth year students, 209 (30.16%) respondents were third year students, and 17 (2.45%) respondents were first year students. In terms of work experience and business ethics course attendance, most respondents had no work experience (64.64%), and most of them had attended business ethics courses (60.03%).

In summary, the demographic characteristics show that the number of female respondents of 496 was higher than the 197 male respondents. Of this respondent sample, most of them had a similar age (17 to 21). Additionally, more than a half of the respondents in this survey had no work experience. Table 4.15 below presents the means and standard deviations of all constructs used in this study.

4.4.2 Descriptive statistics

Table 4.15 below presents respondents' reactions to each item in the questionnaire in the descriptive measures of means and standard deviations, many being in between the mean scores of 5 and 6. This suggests that the respondents were inclined to show agreement with all the statements posed to them in the survey questionnaire. However, definitive conclusions cannot be drawn from merely looking at these means and further analysis of the preliminary survey data is required to provide more a meaningful and conclusive interpretation that will enable the research questions in this study to be addressed.

Table 4.15 Means and standard deviations of all constructs used in the study

No. code	Questionnaire item (under each construct)	Mean	Standard Deviation
	Intrinsic religiosity		
InRelig3	It is important to me to spend time in private thought and prayer.	6.13	0.863
InRelig4	I have often had a strong sense of God's presence.	6.09	0.870
InRelig5	I try hard to live all my life according to my religious belief.	6.01	0.844
	Extrinsic religiosity		
ExRelig5	I go to religious services mostly to spend time with my friends.	4.31	1.296
ExRelig6	I go to religious services because I enjoy seeing people I know there.	4.48	1.283
ExRelig7	I go to religious services to broaden my business networks.	3.97	1.396
	Religiosity and study		
RelignStdy8	My university study is influenced by God's action in my life.	5.23	1.185
RelignStdy9	My university study represents the holy work of God.	5.07	1.179
RelignStdy10	My university study represents God's presence in my life.	5.27	1.143

	Internal LOC		
InLOC7	Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.	4.81	1.171
InLOC8	In the case of the well-prepared student, there is rarely, if ever, such a thing as an unfair test.	5.04	1.142
InLOC9	Becoming a success is a matter of hard work; luck has little or nothing to do with it.	4.98	1.243
InLOC10	The average citizen can have an influence on government decisions.	5.06	1.091
	External LOC		
ExLOC4	Most students don't realise the extent to which their grades are influenced by accidental happenings.	5.00	0.954
ExLOC5	Capable people who fail to become leaders have not taken advantage of their opportunities.	4.77	1.245
ExLOC6	No matter how hard you try, some people just don't like you.	5.51	1.052
ExLOC9	Getting a good job depends mainly on being in the right place at the right time.	5.15	1.023
	Peer influence		
Peerinf7	I rarely make a decision until I am sure my friends approve it.	4.25	1.175
Peerinf8	I often identify with my friends by making the same decision as they make.	4.29	1.159
Peerinf9	When making a decision, I make one that I think my friends will approve of.	4.25	1.206
	Family influence		
Familyinf7	I rarely make a decision until I am sure my family members approve it.	5.19	1.078
Familyinf8	I often identify with my family members by making the same decision as they make.	4.93	1.085
Familyinf9	When making a decision, I make one that I think my family members will approve of.	5.24	1.071
	Ethical recognition in the case of credit manager		
RecogCrMan1	The situation above involves an ethical problem.	5.43	1.376

RecogCrMan2	The situation above contains an ethical issue.	4.90	1.299
RecogCrMan3	This story contains ethical implications.	4.85	1.358
	Ethical judgement in the case of credit manager Record your judgement of the ethicality of this scenario using the scale below:		
JudgeCrMan2	Just ◄——► Unjust	5.43	1.376
JudgeCrMan4	Acceptable to my family ◄——► Unacceptable to my family	4.90	1.299
JudgeCrMan5	Culturally acceptable ◄——► Culturally unacceptable	4.85	1.358
	Intention in the case of credit manager		
IntentCrMan2	If I were actually in this situation, I would most likely undertake the same action as the credit manager.	4.94	1.356
IntentCrMan4	I would act in the same manner as the credit manager in the story in case 1 above.	5.06	1.324
IntentCrMan5	The probability that I would undertake the same action as the credit manager in the story in case 1 above is:	5.04	1.274
	Ethical recognition in the case of local manager		
RecogLocMan1	The situation above involves an ethical problem.	5.16	1.110
RecogLocMan2	The situation above contains an ethical issue.	5.09	1.081
RecogLocMan3	This story contains ethical implications.	5.20	1.096
	Ethical judgement in the case of local manager Record your judgement of the ethicality of this scenario using the scale below:		
JudgeLocMan2	Just ◄——► Unjust	4.63	1.385
JudgeLocMan4	Acceptable to my family ◄——► Unacceptable to my family	4.74	1.376
JudgeLocMan5	Culturally acceptable ◄——► Culturally unacceptable	4.50	1.402

	Ethical intention in the case of local manager		
IntentLocMan2	If I were actually in this situation, I would most likely undertake the same action as the local manager.	4.56	1.413
IntentLocMan4	I would act in the same manner as the local manager in the story in case 2 above.	4.69	1.376
IntentLocMan5	The probability that I would undertake the same action as the local manager in the story in case 2 above is:	4.71	1.379
	Ethical recognition in the case of controller		
RecogControl1	The situation above involves an ethical problem.	5.21	1.128
RecogControl2	The situation above contains an ethical issue.	5.20	1.044
RecogControl3	This story contains ethical implications.	5.30	1.066
	Ethical judgement in the case of controller		
	Record your judgement of the ethicality of this scenario using the scale below:		
JudgeControl2	Just ⟷ Unjust	4.91	1.354
JudgeControl4	Acceptable to my family ⟷ Unacceptable to my family	4.97	1.353
JudgeControl5	Culturally acceptable ⟷ Culturally unacceptable	4.82	1.346
	Ethical intention in the case of controller		
IntentControl2	If I were actually in this situation, I would most likely undertake the same action as the credit manager.	4.75	1.406
IntentControl4	I would act in the same manner as the credit manager in the story in case 3 above.	4.82	1.362
IntentControl5	The probability that I would undertake the same action as the credit manager in the story in case 3 above is:	4.81	1.353

4.5 Data Analysis Part Four: Demographic group comparisons using a non-parametric test (Mann-Whitney U Test) and a parametric test (ANOVA).

In this section, data analysis is undertaken to determine whether there are statistically significant differences in seven influencing factors on EDM due to respondents' gender and university affiliations. For this purpose, the statistical non-parametric techniques of the Mann-Whitney U Test and ANOVA were employed. The Mann-Whitney U Test was employed to find out if there were significant differences between male and female respondents according to these seven influencing factors. Meanwhile, the ANOVA Test was employed to test for significant differences according to university affiliations (secular university, Islamic accounting, and Islamic university).

4.5.1 Gender

Table 4.16 shows the results from the Mann-Whitney U Test on differences of the perceptions between male (n=197) and female (n=496) towards seven influencing factors on EDM in this study.

Table 4.16 Mann-Whitney U Test results on differences in the perception of seven influencing factors on EDM between male and female respondents

Influencing factors towards EDM	Male (n=197)		Female (n=496)		Mann-Whitney U	P	Significance
	Mean rank	Sum of ranks	Mean rank	Sum of ranks			
Intrinsic religiosity							
InRelig3: It is important to me to spend time in private thought and prayer.	301.20	59337.00	365.19	181134.00	39834.000	**0.000**	***
InRelig4: I have often had a strong sense of God's presence.	307.30	60537.50	362.77	179933.50	41034.500	**0.000**	***
InRelig5: I try hard to live all my life according to my religious belief.	314.97	62048.50	359.72	178422.50	62048.500	**0.004**	***

Extrinsic religiosity ExRelig5: It is important to me to spend time in private thought and prayer.	369.61	72812.50	338.02	167658.50	44402.500	**0.054**	*
ExRelig6: I have often had a strong sense of God's presence.	355.15	69964.00	343.76	170507.00	47251.000	0.486	ns
ExRelig7: I try hard to live all my life according to my religious belief.	341.81	67336.00	349.06	173135.00	47833.000	0.657	ns
Religiosity and study RelignStdy8: My university study is influenced by God's action in my life.	350.18	68986.00	345.74	171485.00	48229.000	0.783	ns
RelignStdy9: My university study represents the holy work of God.	347.15	68388.50	346.94	172082.50	48826.500	0.990	ns
RelignStdy10: My university study represents God's presence in my life.	348.33	68620.50	346.47	171850.50	48594.500	0.908	ns
Internal LOC InLoc7: Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.	372.63	73408.00	336.82	167063.00	43807.000	**0.027**	**

InLoc8: In the case of the well-prepared student, there is rarely, if ever, such a thing as an unfair test.	359.53	70828.00	342.02	169643.00	46387.000	0.277	ns
InLoc9: Becoming a success is a matter of hard work; luck has little or nothing to do with it.	350.77	69101.00	345.50	171370.00	48114.000	0.747	ns
InLoc10: The average citizen can have an influence on government decisions.	364.40	71787.50	340.09	168683.50	45427.500	0.131	ns
External LOC							
ExLoc4: Most students don't realise the extent to which their grades are influenced by accidental happenings.	333.28	65657.00	352.45	174814.00	46154.000	0.232	ns
ExLoc5: Capable people who fail to become leaders have not taken advantage of their opportunities.	348.53	68661.00	346.39	171810.00	48554.000	0.896	ns
ExLoc6: No matter how hard you try, some people just don't like you.	314.45	61947.50	359.93	178523.50	61947.500	**0.004**	***
ExLoc9: Getting a good job depends mainly on being in the right place at the right time.	327.00	64419.50	354.94	176051.50	44916.500	**0.083**	*

Family influence							
Familyinf7: I rarely make a decision until I am sure my family members approve it.	316.09	62270.50	359.28	178200.50	42767.500	**0.008**	***
Familyinf8: I often identify with my family members by making the same decision as they make.	336.84	66356.50	351.04	174114.50	4683.500	0.380	ns
Familyinf9: When making a decision, I make one that I think my family members will approve of.	326.75	64370.50	355.04	176100.50	44867.500	**0.079**	*
Peer influence							
Peerinf7: I rarely make a decision until I am sure my friends approve it.	373.08	73497.50	336.64	166973.50	43717.500	**0.025**	**
Peerinf8: I often identify with my friends by making the same decision as they make	382.95	75442.00	332.72	165029.00	41773.000	**0.002**	***
Peerinf9: When making a decision, I make one that I think my friends will approve of.	368.39	72573.50	338.50	167897.50	44641.500	**0.068**	*
*** significant at 1%; ** significant at 5%; * significant at 10%; ns = not significant							

Based on Table 4.16, the results of this analysis show that there are significant differences between the male and female students in their perceptions on intrinsic religiosity and peer influence while there is no significant difference in the perception for religiosity and study between them. Four variables – extrinsic religiosity, internal locus of control, external locus of control, and family influence – are inconclusive from the Mann-Whitney U Test.

4.5.2 University affiliations

This study employed one-way ANOVA to test differences in multiple groups based on university affiliations (accounting schools from secular universities, accounting schools from Islamic universities, and Islamic accounting schools from Islamic universities). Furthermore, the confidence interval of significant differences between pairs of university affiliation groups for significant constructs were analysed using Tukey post hoc test. Since the one-way ANOVA requires the data to be normally distributed, we need to look at the skewness and kurtosis of the influencing factors to detect any outliers.

Outliers are unusual or extreme observations that result in non-normality in data distribution (Black et al. 2013). According to Blanca et al. (2013), outliers are characterised by values of skewness less than -1.5 or greater than 1.6, and/or values of kurtosis greater than 2.7. The skewness and kurtosis measures presented in Table 4.17 show none of the items are outliers. InRelig3 in Islamic University affiliation exhibits the highest skewness measure (-1.153) and the highest kurtosis measure (1.440) compared to other items but it is not an outlier. Hence, it is appropriate to use one-way ANOVA to test differences based on university affiliations in this study.

Table 4.17 Results of skewness and kurtosis of the influence of the seven independent factors on EDM

Influencing Factors	University affiliations					
	Secular university		Islamic university		Islamic accounting	
	N = 183		N = 285		N = 225	
	Skewness	Kurtosis	Skewness	Kurtosis	Skewness	Kurtosis
Intrinsic Religiosity						
InRelig3	-.773	-.249	-1.153	1.440	-.847	.752
InRelig4	-1.111	1.284	-.944	.342	-1.017	1.418
InRelig5	-.721	.028	-.846	.419	-.775	.866
Extrinsic Religiosity						
ExRelig5	-.016	-.554	.027	-.450	-.035	-.586
ExRelig6	-.088	-.596	-.084	-.437	-.358	-.222
ExRelig7	.113	-.272	.117	-.347	-.131	-.195
Religiosity and Study						
RelignStdy8	-.387	-.830	-.245	-1.016	-.325	-.553
RelignStdy9	.087	-1.035	-.137	-.743	-.047	-1.203
RelignStdy10	-.037	-1.133	-.231	-.891	-.427	-.687
Internal LOC						
InLOC7	-.220	-.402	-.223	-.409	-.479	.021
InLOC8	-.406	-.609	-.277	-.699	-.730	.022
InLOC9	-.462	-.125	-.486	-.445	-.454	-.081
InLOC10	-.512	.090	-.309	-.797	-.457	-.393
External LOC						
ExLOC4	-.503	-.007	-.245	-.006	-.531	.022
ExLOC5	-.200	-.529	-.388	-.375	-.447	-.694
ExLOC6	-.554	-.177	-.432	-.542	-.925	.766
ExLOC9	-.219	-.612	-.258	-.467	-.458	-.470
Peer Influence						
PeerInf7	.048	-.196	-.106	-.523	.081	-.728
PeerInf8	.168	-.224	-.198	-.539	.227	-.298
PeerInf9	.144	-.498	-.038	-.481	-.126	-.637
Family Influence						
FamilyInf7	-.232	-.853	-.343	-.683	-.135	-.686
FamilyInf8	-.156	-.480	-.235	-.546	-.010	-.531
FamilyInf9	-.313	-.425	-.588	-.208	-.340	-.490

Table 4.18, Table 4.19, Table 4.20, and Table 4.21 show the results from one-way ANOVA and Tukey post hoc tests on the seven independent factors influencing the ethical decision-making process.

Table 4.18 Results of one-way ANOVA test on the influence of the seven independent factors on EDM

Influencing factors in EDM	ANOVA		Significance	Conclusion
	F	P		
Intrinsic religiosity				
InRelig3: It is important to me to spend time in private thought and prayer.	6.763	**0.004**	***	Inconclusive
InRelig4: I have often had a strong sense of God's presence.	0.016	0.985	ns	
InRelig5: I try hard to live all my life according to my religious belief.	4.707	**0.016**	***	
Extrinsic religiosity				
ExRelig5: I go to religious services mostly to spend time with my friends.	4.248	**0.015**	***	Significant
ExRelig6: I go to religious services because I enjoy seeing people I know there.	5.057	**0.007**	***	
ExRelig7: I go to religious services to broaden my business network.	11.656	**0.000**	***	
Religiosity and study				
RelignStdy8: My university study is influenced by God's action in my life	1.357	0.241	ns	Inconclusive
RelignStdy9: My university study represents the holy work of God.	3.588	**0.023**	***	

RelignStdy10: My university study represents God's presence in my life.	6.044	**0.002**	***	
Internal LOC InLoc7: Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.	2.212	0.107	ns	Inconclusive
InLoc8: In the case of the well-prepared student, there is rarely, if ever, such a thing as an unfair test.	3.516	**0.039**	**	
InLoc9: Becoming a success is a matter of hard work; luck has little or nothing to do with it.	1.335	0.253	ns	
InLoc10: The average citizen can have an influence on government decisions.	2.394	**0.091**	*	
External LOC ExLoc4: Most students don't realise the extent to which their grades are influenced by accidental happenings.	2.320	**0.083**	*	Inconclusive
ExLoc5: Capable people who fail to become leaders have not taken advantage of their opportunities.	0.887	0.382	ns	
ExLoc6: No matter how hard you try, some people just don't like you.	2.578	**0.076**	*	

ExLoc9: Getting a good job depends mainly on being in the right place at the right time.	0.681	0.494	ns	
Peer influence Peerinf7: I rarely make a decision until I am sure my friends approve it. Peerinf8: I often identify with my friends by making the same decision as they make Peerinf9: When making a decision, I make one that I think my friends will approve of.	11.421 9.160 5.880	**0.000** **0.000** **0.003**	*** *** ***	Significant
Family influence Familyinf7: I rarely make a decision until I am sure my family members approve it. Familyinf8: I often identify with my family members by making the same decision as they make. Familyinf9: When making a decision, I make one that I think my family members will approve of.	2.661 4.800 4.565	**0.071** **0.009** **0.011**	* *** **	Significant
*** significant at 1%; ** significant at 5%; * significant at 10%; ns = not significant				

Based on Table 4.18, the results of this analysis show that there are significant differences in the perceptions of extrinsic religiosity, peer influence, and family influence in terms of university affiliations. The confidence interval of significant differences between pairs of university affiliation groups for these latent variables are provided in Table 4.19, Table 4.20, as well as in Table 4.21.

Table 4.19 Multiple comparisons of extrinsic religiosity Tukey HSD

Dependent Variable	(I) University Affiliation	(J) University Affiliation	Mean Difference (I-J)	Std. Error	P	Sig
ExRelig5	Secular University	Islamic University	-.223	.122	.163	ns
		Islamic Accounting	-.374	.128	.010	***
	Islamic University	Secular University	.223	.122	.163	ns
		Islamic Accounting	-.151	.115	.389	ns
	Islamic Accounting	Secular University	.374	.128	.010	***
		Islamic University	.151	.115	.389	ns
ExRelig6	Secular University	Islamic University	-.242	.121	.113	ns
		Islamic Accounting	-.403	.127	.004	***
	Islamic University	Secular University	.242	.121	.113	ns
		Islamic Accounting	-.161	.114	.333	ns
	Islamic Accounting	Secular University	.403	.127	.004	***
		Islamic University	.161	.114	.333	ns
ExRelig7	Secular University	Islamic University	-.406	.130	.005	***
		Islamic Accounting	-.659	.137	.000	***
	Islamic University	Secular University	.406	.130	.005	***
		Islamic Accounting	-.252	.123	.100	*
	Islamic Accounting	Secular University	.659	.137	.000	***
		Islamic University	.252	.123	.100	*
*** significant at 1%; ** significant at 5%; * significant at 10%; ns = not significant						

Based on Table 4.19, there is a consistent significant difference across all the items measuring the perceptions of extrinsic religiosity between secular university and Islamic accounting. Islamic accounting schools' students have a higher degree of extrinsic religiosity compared to accounting students from secular universities.

Table 4.20 Multiple comparisons of peer influence Tukey HSD

Dependent Variable	(I) University Affiliation	(J) University Affiliation	Mean Difference (I-J)	Std. Error	P	Sig.
PeerInf7	Secular University	Islamic University	-.523	.110	.000	***
		Islamic Accounting	-.291	.115	.031	**
	Islamic University	Secular University	.523	.110	.000	**
		Islamic Accounting	.232	.103	.064	**
	Islamic Accounting	Secular University	.291	.115	.031	**
		Islamic University	-.232	.103	.064	*
PeerInf8	Secular University	Islamic University	-.460	.109	.000	***
		Islamic Accounting	-.335	.114	.009	***
	Islamic University	Secular University	.460	.109	.000	***
		Islamic Accounting	.125	.102	.442	ns
	Islamic Accounting	Secular University	.335	.114	.009	***
		Islamic University	-.125	.102	.442	ns
PeerInf9	Secular University	Islamic University	-.389	.113	.002	***
		Islamic Accounting	-.234	.119	.123	ns
	Islamic University	Secular University	.389	.113	.002	****
		Islamic Accounting	.156	.107	.313	ns
	Islamic Accounting	Secular University	.234	.119	.123	ns
		Islamic University	-.156	.107	.313	ns
*** significant at 1%; ** significant at 5%; * significant at 10%; ns = not significant						

Table 4.20 shows that there is a consistent significant difference across all the items measuring the perceptions of peer influence between accounting students from accounting schools of secular universities and those from accounting schools of Islamic universities. Accounting students from accounting schools of Islamic universities have a higher degree of peer influence compared to those from accounting schools of secular universities.

Table 4.21 Multiple comparisons of family influence Tukey HSD

Dependent Variable	(I) University Affiliation	(J) University Affiliation	Mean Difference (I-J)	Std. Error	P	Sig.
FamilyInf7	Secular University	Islamic University	-.235	.102	.056	*
		Islamic Accounting	-.137	.107	.405	ns
	Islamic University	Secular University	.235	.102	.056	*
		Islamic Accounting	.098	.096	.567	ns
	Islamic Accounting	Secular University	.137	.107	.405	ns
		Islamic University	-.098	.096	.567	ns
FamilyInf8	Secular University	Islamic University	-.310	.102	.007	***
		Islamic Accounting	-.243	.107	.062	*
	Islamic University	Secular University	.310	.102	.007	***
		Islamic Accounting	.067	.096	.765	ns
	Islamic Accounting	Secular University	.243	.107	.062	*
		Islamic University	-.067	.096	.765	ns
FamilyInf9	Secular University	Islamic University	-.283	.101	.014	**
		Islamic Accounting	-.269	.106	.030	**
	Islamic University	Secular University	.283	.101	.014	**
		Islamic Accounting	.014	.095	.989	ns
	Islamic Accounting	Secular University	.269	.106	.030	**
		Islamic University	-.014	.095	.989	ns
*** significant at 1%; ** significant at 5%; * significant at 10%; ns = not significant						

Table 4.21 indicates that there is a consistent significant difference across all the items measuring the perceptions of family influence between accounting students from secular universities and those from Islamic universities. Students from accounting schools of Islamic universities have a higher degree of family influence compared to students of accounting schools of secular universities.

4.6 Data Analysis Part Five: Testing mediating effects in the structural model

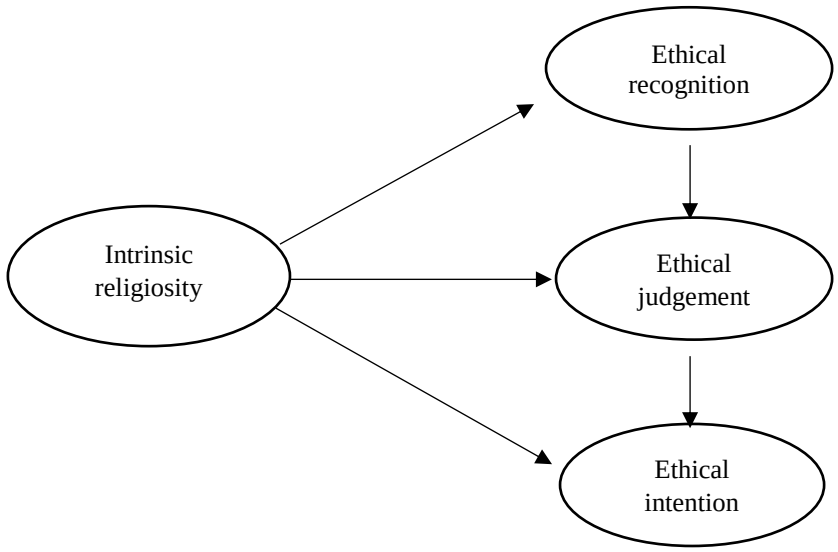
This section investigates the effect of a mediating variable in the relationship between an independent variable and its correspondent variable. The relationship among mediation effects in this study are divided into two mediation relationships as shown in Figure 4.22.

The mediation analysis in this section will first identify the direct effect which is that part of the exposure effect between the independent and dependent variables not mediated by a potential mediator. In other words, the direct effect focuses on the relationship between the independent and dependent variables in the absence of its potential mediator. The subsequent analysis will identify the indirect/mediated effect which is that part of the exposure effect between the independent and dependent variables being mediated by a potential mediator. The mediation effects (as depicted in Figure 4.22) that were evaluated in this study are shown in Table 4.22.

Table 4.22 Mediating effects in the structural model

Hypothesis No.	Mediator	Independent variable	Dependent variable	Hypothesis on mediation relationship
H24	Ethical recognition	Intrinsic religiosity	Ethical judgement	Ethical recognition mediates the impact of intrinsic religiosity on ethical judgement.
H25	Ethical judgement	Intrinsic religiosity	Ethical intention	Ethical judgement mediates the impact of intrinsic religiosity on intention ethical intention.

Figure 4.22 Mediating relationship in the structural model



4.6.1 Ethical recognition (RecogCrM) mediates the impact of intrinsic religiosity (Inrelig) on ethical judgement (JudgeCrM) in the case of a credit manager

Table 4.23 reveals the direct effect of intrinsic Inrelig on JudgeCrM with a standardised factor loading of 0.216 is significant at 1% level of significance.

Figure 4.23 Direct effect of Inrelig on JudgeCrM in the case of a credit manager

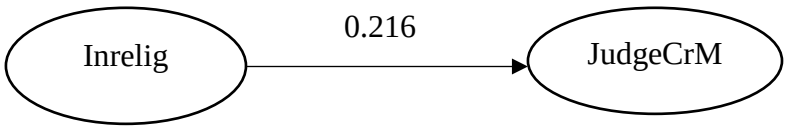


Table 4.23 Results for direct effect of Inrelig on JudgeCrM in the case of a credit manager

	Standardised Estimate	**SE**	**CR**	**P**
JudgeCrM ← Inrelig	0.216	0.070	3.092	***

Notes: *** *significant at 1%, ** significant at 5%, * significant at 10%*

Figure 4.24 Mediating effect for hypothesis 24 in the case of a credit manager

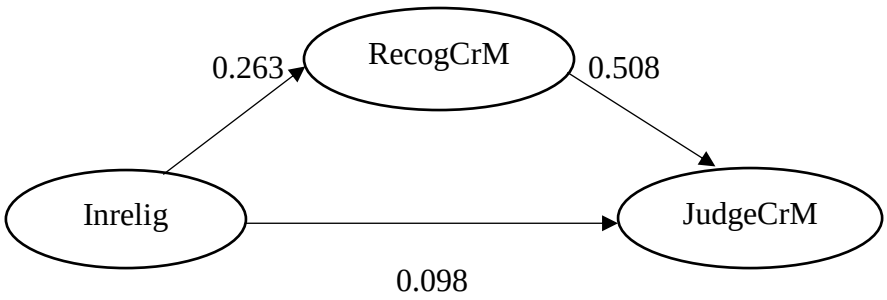


Table 4.24 Results of mediating effect in the case of a credit manager

	Standardised Estimate	SE	CR	P
RecogCrM ← Inrelig	0.263	0.062	4.228	***
JudgeCrM ← RecogCrM	0.508	0.054	9.382	***
JudgeCrM ← Inrelig	0.098	0.069	1.425	ns

Notes: *** *significant at 1%, ** significant at 5%, * significant at 10% ns = not significant*

Table 4.24 reveals the direct effect of Inrelig on RecogCrM with a standardised factor loading of 0.263 is significant at 1% level of significance. Furthermore, the direct effect of RecogCrM on JudgeCrM with a standardised factor loading of 0.508 is significant at 1% level of significance. However, the direct effect of Inrelig on JudgeCrM with a standardised factor loading of 0.098 is not significant.

From the analysis, we can conclude that RecogCrM is a mediating variable in the relationship between Inrelig and JudgeCrM. This type of mediation is known as full mediation, since the direct effect of Inrelig on JudgeCrM is not significant after RecogCrM is introduced into the model. The standardised factor loading for direct effect (Inrelig → JudgeCrM) is reduced from 0.216 (see Figure 4.23) to 0.098 (see Figure 4.24) as a result of mediating variable RecogCrM. The indirect effect of Inrelig → RecogCrM and RecogCrM → JudgeCrM are significant and the direct effect of Inrelig → JudgeCrM is not significant. The following calculation in Figure 4.25 shows the total, indirect, and direct effects as well as the variance accounted by indirect and direct effects. The variance accounted by the indirect effect is 57.69% whereas the direct effect is 42.31%.

Figure 4.25 Total effect in the case of a credit manager

Total effect = indirect effect (Inrelig → RecogCrM → JudgeCrM) + direct effect (Inrelig → JudgeCrM)

= (0.263*0.508) + 0.098

= 0.1336 + 0.098

= 0.2316

Variance accounted for by indirect effect (Inrelig → RecogCrM→ JudgeCrM)

= 0.1336/ 0.2316

= 0.5769@57.69%

Variance accounted for by direct effect (Inrelig →JudgeCrM)

= 0.098/0.2316

= 0.4231@42.31%

4.6.2 Ethical recognition (RecogLocM) mediates the impact of intrinsic religiosity (Inrelig) on ethical judgement (JudgeLocM) in the case of a local manager

Table 4.25 reveals the direct effect of Inrelig on JudgeLocM with a standardised factor loading of 0.226 is significant at 1% level of significance.

Figure 4.26 Direct effect of Inrelig on JudgeLocM in the case of a local manager

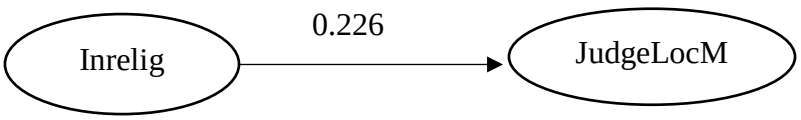


Table 4.25 Results for direct effect of Inrelig on JudgeLocM in the case of a local manager

	Standardised Estimate	SE	CR	P
JudgeLocM ← Inrelig	0.226	0.080	2.819	***

Notes: *** *significant at 1%, ** significant at 5%, * significant at 10% ns = not significant*

Figure 4.27 Mediating effect for hypothesis 24 in the case of a local manager

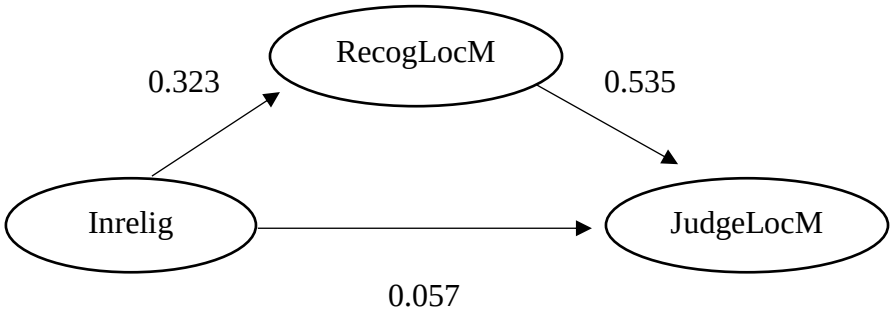


Table 4.26 Results of mediating effect in the case a local manager

	Standardised Estimate	SE	CR	P
RecogLocM ← Inrelig	0.323	0.071	4.545	***
JudgeLocM ← RecogLocM	0.535	0.048	11.156	***
JudgeLocM ← Inrelig	0.057	0.075	0.764	ns

Notes: *** *significant at 1%, ** significant at 5%, * significant at 10% ns = not significant*

Table 4.26 reveals the direct effect of Inrelig on RecogLocM with a standardised factor loading of 0.323 is significant at 1% level of significance. Furthermore, the direct effect of RecogLocM on JudgeLocM with a standardised factor loading of 0.535 is significant

at 1% level of significance. However, the direct effect of Inrelig on JudgeLocM with a standardised factor loading of 0.057 is not significant.

Based on the results, we can conclude that RecogLocM is a mediating variable in the relationship between Inrelig and JudgeLocM. This type of mediation is named full mediation, since the direct effect of Inrelig on JudgeLocM is not significant after RecogLocM is introduced into the model. It is obviously seen that the standardised factor loading for direct effect (Inrelig → JudgeLocM) is reduced from 0.226 (see Figure 4.26) to 0.057 (see Figure 4.27). The indirect effects of Inrelig → RecogLocM and RecogLocM → JudgeLocM are significant and the direct effect of Inrelig → JudgeLocM is not significant. The following calculation in Figure 4.28 shows the total, indirect, and direct effects as well as the variance accounted by indirect and direct effects. The variance accounted by the indirect effect is 75.20% whereas the direct effect is 24.80%.

Figure 4.28 Total effect in the case of a local manager

Total effect = indirect effect (Inrelig → RecogLocM → JudgeLocM) + direct effect (Inrelig → JudgeLocM)
= (0.323*0.535) + 0.057
= 0.1728 + 0.057
= 0.2298
Variance accounted for by indirect effect (Inrelig → RecogLocM → JudgeLocM)
= 0.1728/ 0.2298
= 0.7520@75.20%
Variance accounted for by direct effect (Inrelig → JudgeLocM)
= 0.057/ 0.2298
= 0.2480@24.80%

4.6.3 Ethical recognition (RecogCon) mediates the impact of intrinsic religiosity (Inrelig) on ethical judgement (JudgeCon) in the case of a controller

Table 4.27 reveals the direct effect of Inrelig on JudgeCon with a standardised factor loading of 0.334 is significant at 1% level of significance.

Figure 4.29 Direct effect of Inrelig on JudgeCon in the case of a controller

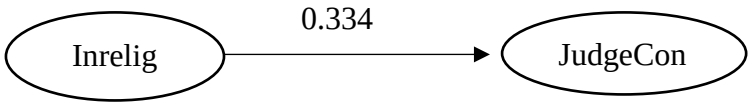


Table 4.27 Results for direct effect of Inrelig on JudgeCon in the case of a controller

	Standardised Estimate	SE	CR	P
JudgeCon ← Inrelig	0.334	0.081	4.115	***

Notes: *** *significant at 1%, ** significant at 5%, * significant at 10% ns = not significant*

Figure 4.30 Mediating effect for hypothesis 24 in the case of a controller

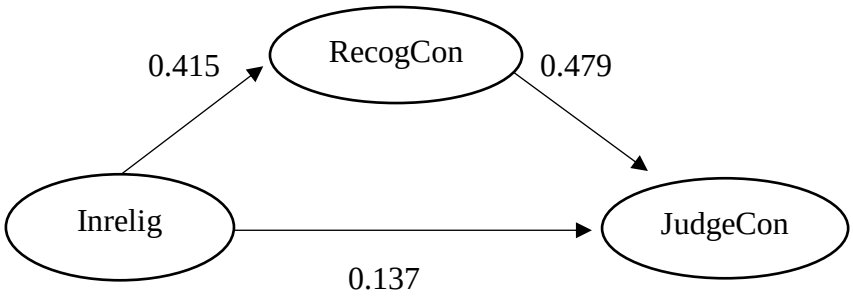


Table 4.28 Results of mediating effect in the case of a controller

	Standardised Estimate	SE	CR	P
RecogCon ← Inrelig	0.415	0.045	10.587	***
JudgeCon ← RecogCon	0.479	0.054	9.382	***
JudgeCon ← Inrelig	0.137	0.077	1.781	*

Notes: *** *significant at 1%, ** significant at 5%, * significant at 10% ns = not significant*

Table 4.28 reveals the direct effect of Inrelig on RecogCon with a standardised factor loading of 0.415 is significant at 1% level of significance. Furthermore, the direct effect of RecogCon on JudgeCon with a standardised factor loading of 0.479 is significant at 1% level of significance. Lastly, the direct effect of Inrelig on JudgeCon with a standardised factor loading of 0.137 is significant at 10% level of significance.

Based on the results, we can conclude that RecogCon is a mediating variable in the relationship between Inrelig and JudgeCon. This type of mediation is called partial mediation, since the direct effect of Inrelig on JudgeCon is still significant after RecogCon is introduced into the model. The standardised factor loading for direct effect (Inrelig → JudgeCon) is reduced from 0.334 (see Figure 4.29) to 0.137 (see Figure 4.30). The indirect effects of Inrelig → RecogCon and RecogCon → JudgeCon are significant and the direct effect of Inrelig → JudgeCon is also significant. The following calculation in Figure 4.31 shows the total, indirect, and direct effects as well as the variance accounted by indirect and direct effect. The variance accounted by the indirect effect is 59.2% whereas the direct effect is 40.8%.

Figure 4.31 Total effect in the case of a controller

Total effect = indirect effect (Inrelig → RecogCon and RecogCon → JudgeCon) + direct effect (Inrelig → JudgeCon)

= (0.415*0.479) + 0.137

= 0.199 + 0.137

= 0.336

Variance accounted for by indirect effect (Inrelig → RecogCon → JudgeCon)

= 0.199/ 0.336

= 0.592@59.2%

Variance accounted for by direct effect (Inrelig → JudgeCon)

= 0.137/ 0.336

= 0.408@40.8%

4.6.4 Ethical judgement (JudgeCrM) mediates the impact of intrinsic religiosity (Inrelig) on ethical intention (IntentCrM) in the case of a credit manager

Table 4.29 reveals the direct effect of Inrelig on IntentCrM with a standardised factor loading of 0.510 is significant at 1% level of significance.

Figure 4.32 Direct effect of Inrelig on IntentCrM in the case of a credit manager

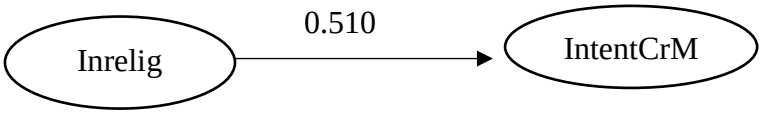


Table 4.29 Results for direct effect of Inrelig on IntentCrM in the case of a credit manager

	Standardised Estimate	SE	CR	P
IntentCrM ← Inrelig	0.510	0.089	5.708	***

Notes: *** *significant at 1%, ** significant at 5%, * significant at 10% ns = not significant*

Figure 4.33 Mediating effect for hypothesis 25 in the case of a credit manager

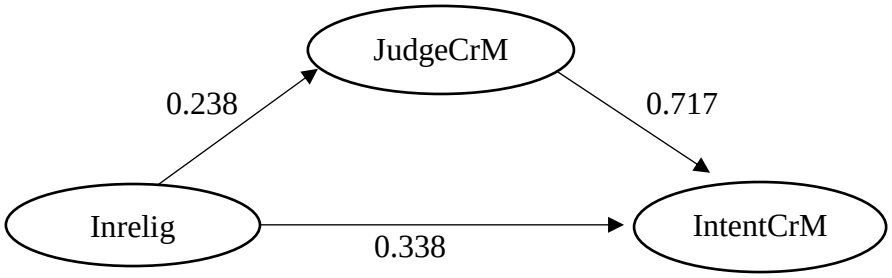


Table 4.30 Results of mediating effect in the case of a credit manager

	Standardised Estimate	SE	CR	P
JudgeCrM ← Inrelig	0.238	0.075	3.187	***
IntenCrM ← JudgeCrM	0.717	0.056	12.807	***
IntentCrM ← Inrelig	0.338	0.077	4.370	***

Notes: *** *significant at 1%, ** significant at 5%, * significant at 10% ns = not significant*

Table 4.30 reveals the direct effect of Inrelig on JudgeCrM with a standardised factor loading of 0.238 is significant at 1% level of significance. Furthermore, the direct effect of JudgeCrM on IntentCrM with a standardised factor loading of 0.717 is significant at 1% level of significance. Lastly, the direct effect of Inrelig on IntentCrM with a standardised factor loading of 0.338 is also significant at 1% level of significance.

From the analysis, we can conclude that JudgeCrM is a mediating variable in the relationship between Inrelig and IntentCrM. This type of mediation is named partial mediation, since the direct effect of Inrelig on IntentCrM is still significant after JudgeCrM is introduced into the model. It is obviously seen that the standardised factor loading for direct effect (Inrelig → IntentCrM) is reduced from 0.510 (see Figure 4.32) to 0.338 (see Figure 4.33). The indirect effects of Inrelig → JudgeCrM and JudgeCrM → IntentCrM are significant and the direct effect of Inrelig → IntentCrM is also significant. The following calculation in Figure 4.25 shows the total, indirect, and direct effects as well as the variance accounted by indirect and direct effect. The variance accounted by the indirect effect is 33.54% whereas the direct effect is 66.46%.

Figure 4.34 Total effect in the case of a credit manager

Total effect = indirect effect (Inrelig → JudgeCrM and JudgeCrM →IntentCrM) + direct effect (Inrelig → IntentCrM)

= (0.238*0.717) + 0.338

= 0.1706 + 0.338

= 0.5086

Variance accounted for by indirect effect (Inrelig → JudgeCrM → IntentCrM)

= 0.1706/ 0.5086

= 0.3354@33.54%

Variance accounted for by direct effect (Inrelig →IntentCrM)

= 0.338/0.5086

= 0.6646@66.46%

4.6.5 Ethical judgement (JudgeLocM) mediates the impact of intrinsic religiosity (Inrelig) on ethical intention (IntentLocM) in the case of a local manager

Table 4.27 reveals the direct effect of Inrelig on IntentLocM with a standardised factor loading of 0.309 is significant at 1% level of significance.

Figure 4.35 Direct effect of Inrelig on IntentLocM in the case of a local manager

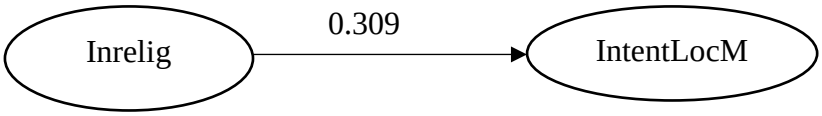


Table 4.31 Results for direct effect of Inrelig on IntentLocM

	Standardised Estimate	**SE**	**CR**	**P**
IntentLocM ← Inrelig	0.309	0.091	3.381	***

Notes: *** *significant at 1%, ** significant at 5%, * significant at 10% ns = not significant*

Figure 4.36 Mediating effect for hypothesis 25 in the case of a local manager

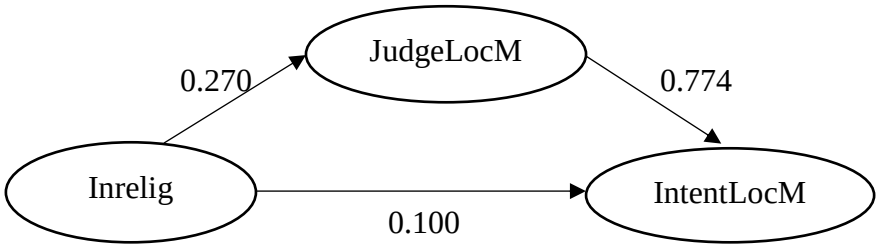


Table 4.32 Results of mediating effect in the case of a local manager

	Standardised Estimate	SE	CR	P
JudgeLocM ← Inrelig	0.270	0.093	2.916	***
IntentLocM ← JudgeLocM	0.774	0.039	19.945	***
IntentLocM ← Inrelig	0.100	0.067	1.495	ns

Notes: *** *significant at 1%, ** significant at 5%, * significant at 10% ns = not significant*

Table 4.32 reveals the direct effect of Inrelig on JudgeLocM with a standardised factor loading of 0.270 is significant at 1% level of significance. Furthermore, the direct effect of JudgeLocM on IntentLocM with a standardised factor loading of 0.774 is significant at 1% level of significance. However, the direct effect of Inrelig on IntentLocM with a standardised factor loading of 0.100 is not significant.

Based on the results, we can conclude that JudgeLocM is a mediating variable in the relationship between Inrelig and IntentLocM. This type of mediation is named full mediation, since the direct effect of Inrelig on IntentLocM is not significant after JudgeLocM is introduced into the model. It is obviously seen that the standardised factor loading for direct effect (Inrelig → IntentLocM) is reduced from 0.309 (see Figure 4.35) to 0.100 (see Figure 4.36). The indirect effects of Inrelig → JudgeLocM and JudgeLocM → IntentLocM are significant and the direct effect of Inrelig → IntentLocM is not significant. The following calculation in Figure 4.28 shows the total, indirect, and direct effects as well as the variance accounted by indirect and direct effect. The variance accounted by the indirect effect is 67.64% whereas the direct effect is 32.36%.

Figure 4.37 Total effect in the case of a local manager

Total effect = indirect effect (Inrelig → JudgeLocM → IntentLocM) + direct effect (Inrelig → IntentLocM)

= (0.270*0.774) + 0.100

= 0.209 + 0.100

= 0.309

Variance accounted for by indirect effect (Inrelig → JudgeLocM → IntentLocM)

= 0.209/0.309

= 0.6764@67.64%

Variance accounted for by direct effect (Inrelig → IntentLocM)

= 0.100/0.309

= 0.3236@32.36%

4.6.6 Ethical judgement (JudgeCon) mediates the impact of intrinsic religiosity (Inrelig) on ethical intention (IntentCon) in the case of a controller

Table 4.29 reveals the direct effect of Inrelig on IntentCon with a standardised factor loading of 0.188 is significant at 5% level of significance.

Figure 4.38 Direct effect of Inrelig on IntentCon in the case of a controller

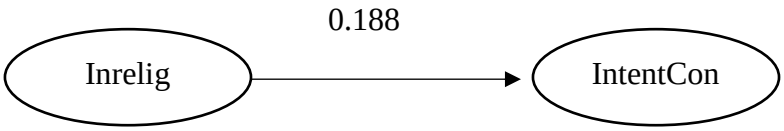


Table 4.33 Results for direct effect of Inrelig on IntentCon

	Standardised Estimate	**SE**	**CR**	**P**
IntentCon ← Inrelig	0.188	0.091	2.058	**

Notes: *** *significant at 1%, ** significant at 5%, * significant at 10% ns = not significant*

Figure 4.39 Mediating effect for hypothesis 25 in the case of a controller

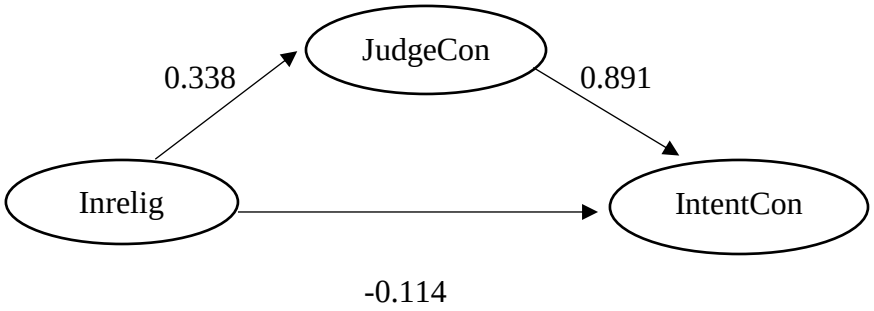


Table 4.34 Results of mediating effect in the case of a controller

	Standardised Estimate	**SE**	**CR**	**P**
JudgeCon ← Inrelig	0.338	0.083	4.081	***
IntentCon ← JudgeCon	0.891	0.040	22.307	***
IntentCon ← Inrelig	-0.114	0.065	-1.761	*

Notes: *** *significant at 1%, ** significant at 5%, * significant at 10% ns = not significant*

Table 4.34 reveals the direct effect of Inrelig on JudgeCon with a standardised factor loading of 0.338 is significant at 1% level of significance. Furthermore, the direct effect of JudgeCon on IntentCon with a standardised factor loading of 0.891 is significant at 1% level of significance. Lastly, the direct effect of Inrelig on IntentCon with a standardised factor loading of -0.114 is significant at 10% level of significance.

Based on the results, we can conclude that JudgeCon is a mediating variable in the relationship between Inrelig and IntentCon. This type of mediation is called partial mediation, since the direct effect of Inrelig on IntentCon is still significant after JudgeCon is introduced into the model. It is obviously seen that the standardised factor loading for direct effect (Inrelig → IntentCon) is reduced from 0.188 (see Figure 4.38) to -0.114 (see Figure 4.39). The indirect effect of Inrelig → JudgeCon and JudgeCon → IntentCon are

significant and the direct effect of Inrelig → IntentCon is also significant. The following calculation in Figure 4.40 shows the total, indirect, and direct effects as well as the variance accounted by indirect and direct effect. The variance accounted by the indirect effect is 160.9% whereas the direct effect is -60.90%.

Figure 4.40 Total effect in the case of a controller

Total effect = indirect effect (Inrelig→ JudgeCon → IntentCon) + direct effect (Inrelig → IntentCon)

= (0.338*0.891) - 0.114

= 0.3012-0.114

= 0.1872

Variance accounted for by indirect effect (Inrelig → JudgeCon → IntentCon)

= 0.3012/ 0.1872

= 1.6090@160.9%

Variance accounted for by direct effect (Inrelig→ IntentCon)

= -0.114/ 0.1872

= -0.6090@-60.90%

4.7 Summary of mediating effects

Table 4.30 summarises the hypothesis test results of mediating effects in the structural model. The test results show that H24 is supported because ethical recognition mediates the impact of intrinsic religiosity on ethical judgement in all three scenarios. Similarly, the test results indicate that H25 is supported because ethical judgement mediates the impact of intrinsic religiosity on ethical intention across all three scenarios.

Table 4.35 A summary of the hypothesis test results of mediating effects in the structural model

Study Hypothesis	Test results			
	Credit Manager	**Local Manager**	**Controller**	**Overall**
H24: Ethical recognition mediates the impact of intrinsic religiosity on ethical judgement.	Supported	Supported	Supported	Supported
H25: Ethical judgement mediates the impact of intrinsic religiosity on ethical intention.	Supported	Supported	Supported	Supported

4.8 Summary

This chapter presented the CFA that have been performed on the single factor measurement models, the full measurement model, and the structural model. The CFA results indicated that all models have a good fit to the data. This chapter also presented the results of the structural analysis and hypothesis testing using SEM showing that H1, H7, H10, H14, H22, H23 were supported. This study found that intrinsic religiosity has a positive effect on ethical recognition and ethical intention (H1, H7). Furthermore, this study found that internal LOC has a positive effect on ethical recognition and ethical intention (H10, H14). In addition, this study found that ethical recognition has a positive effect on ethical judgement (H22). Lastly, this study found that ethical judgement had a significant positive effect on ethical intention (H23).

This chapter also presented the demographic profile of the respondents and descriptive statistics (means and standard deviations). Lastly, this chapter presented the mediating effects in the structural model using SEM, which supported H24 and H25. This study found that ethical recognition mediated the impact of intrinsic religiosity on ethical judgement. Furthermore, this study found that ethical judgement mediated the impact of intrinsic religiosity on ethical intention.

This chapter also identified the effect of demographic factors in terms of gender and university affiliations using a non-parametric (Mann-Whitney U Test) and a parametric test (ANOVA). This research study found that there are significant differences in the perception of intrinsic religiosity and peer influence in relation to the gender of accounting students. The results also show that there is a consistent significant difference in the perception of extrinsic religiosity, peer influence and family influence in terms of university affiliations. Furthermore, Islamic accounting schools' students have been found to have a higher degree of extrinsic religiosity and family influence compared to accounting students from secular universities and Islamic Universities. Meanwhile, students from accounting schools of Islamic universities have a higher degree of peer influence compared to their counterparts in accounting schools of secular universities and Islamic accounting. The next chapter will elaborate the results of this research study in detail and respond to the research questions emphasised in Chapter 1.

Chapter 5 Research Findings

5.1 Introduction

This study examined the effect of intrinsic and extrinsic religiosity, religiosity and study, internal and external LOC, and peer and family influence on the ethical recognition, ethical judgement, and ethical intention of accounting students in Indonesia. Furthermore, this research investigated if there were significant differences for each influencing factor based on gender and university affiliations. Lastly, this study investigated if the relationship between key influencing factors (religiosity, LOC, peer influence, or family influence) and EDM variables was mediated by other EDM variables.

The research model constructed for this study was based on Rest's (1986) EDM model, but extended with additional constructs. This model, together with the research hypotheses, were taken from the existing literature and validated using a data sample of 693 accounting students from 11 accounting schools located in four cities in Indonesia. SEM, a non-parametric test, a Mann-Whitney U Test, and a parametric test, one-way ANOVA, were employed to analyse the data quantitatively.

As Chapter 4 has presented the results of this study, this chapter reveals a critical explanation of those findings by comparing them with earlier studies and examining the reasons that could perhaps shed light on the nature of the findings. The following section commences with a discussion of the demographic profiles and characteristics of the respondents of the study. It is followed by a discussion on the effect of religiosity, LOC, peer influence, and family influence on the EDM of Indonesian accounting students. The subsequent section discusses the influence of gender and university affiliations on key influencing factors. The last section discusses the mediating effects in the structural model.

5.2 Major findings

In this section, the major findings of this study are compared to those of previous studies. The discussion is divided into four sections: respondent characteristics; factors influencing EDM of accounting students in Indonesia; the effect of gender and university affiliation across independent variables; and the effect of mediating variables on the relationship between the key influencing factors and EDM.

5.2.1 Respondent characteristics

The respondents who participated in this study (n = 693) were accounting students from 11 accounting schools located in Yogyakarta, Surakarta, Semarang, and Bogor, Indonesia. They were asked to complete a paper-based questionnaire. Of these 693 accounting students, 496 were female and 197 were male students, with 492 (71%) of them aged between 17 to less than 21 years old and 198 (28.6%) aged between 21 to less than 25 years old. Previous studies on accounting students' EDM in other countries, such as Johl and Jackling (2012) in Australia and Eweje and Brunton (2010) in New Zealand, indicated a similar age range of respondents.

As stated above, respondents participating in this study came from 11 accounting schools (four accounting schools in secular universities; four accounting schools in Islamic universities; and three Islamic accounting schools in Islamic universities). Of the 693 respondents, 183 (26.4%) were from accounting schools in secular universities, 285 respondents (41.1%) from accounting schools in Islamic universities, and 225 (32.5%) from Islamic accounting schools in Islamic universities. This study's sample adopts a wider coverage involving a cross comparison of three groups of university affiliations with each group comprising a number of universities, as compared to other studies that focus on one or two universities. A study by Ponemon (1993) only compared accounting students from a liberal arts university and a religious affiliated university in the US. Johl and Jackling (2012) only investigated the EDM of accounting students from one

university in Australia. Keller et al. (2007) investigated the influence of religiosity on EDM among accounting students from a university in the US.

5.2.2 Influencing factors on EDM

5.2.2.1 The effect of religiosity on EDM

The concept of religiosity has been identified as an influencing factor in determining EDM (Kohlberg 1981; Hunt & Vitell 1986, 1993; Rest et al. 1999; Weaver & Agle 2002). As previously discussed, this study employed three religiosity measurements: intrinsic religiosity and extrinsic religiosity, developed by Allport and Ross (1967) and religiosity and study, developed from Pargament and Mahoney's (1999) MOG. This scale measures the extent to which individuals have faith in God and how this is manifested in certain facets of their lives (in this case, their status as university students).

The results of the hypotheses testing on the effect of intrinsic religiosity, extrinsic religiosity, and religiosity and study on the ethical recognition, ethical judgement, and ethical intention of accounting students in Indonesia are summarised in Table 5.1 and discussed in detail across three scenarios (credit manager, local manager, and controller) in sections 5.2.2.1.1, 5.2.2.1.2, and 5.2.2.1.3. The results of this current study are compared with the findings of previous studies.

Table 5.1 A summary of the hypotheses test results on the effect of religiosity on EDM among accounting students in Indonesia

Study hypotheses	Variables	Results of this study	Conclusion	Results of previous studies
H1: Intrinsic religiosity has a significant positive effect on ethical recognition.	**Independent variable:** Intrinsic religiosity **Dependent variable:** Ethical recognition	Supported in three scenarios.	Intrinsic religiosity has a significant positive effect on ethical recognition.	**Supported** Uyar et al. (2015) **Not supported** Kurpis et al. (2008)
H2: Extrinsic religiosity has a significant negative effect on ethical recognition.	**Independent variable:** Extrinsic religiosity **Dependent variable:** Ethical recognition	Supported in two scenarios.	Inconclusive.	No prior study
H3: Religiosity and study has a positive effect on ethical recognition.	**Independent variable:** Religiosity and study **Dependent variable:** Ethical recognition	Supported in one scenario.	Inconclusive.	No prior study
H4: Intrinsic religiosity has a significant positive effect on ethical judgement.	**Independent variable:** Intrinsic religiosity **Dependent variable:** Ethical judgement	Not supported in all three scenarios.	Intrinsic religiosity does not have a significant positive effect on ethical judgement.	**Supported** Walker et al. (2014) Arli and Tjiptono (2014) Walker et al. (2012) **Not supported** Vitell et al. (2005) Vitell et al. (2007)
H5: Extrinsic religiosity has a significant negative effect on ethical judgement.	**Independent variable:** Extrinsic religiosity **Dependent variable:** Ethical judgement	Not supported in all three scenarios.	Extrinsic religiosity does not have a significant negative effect on ethical judgement.	**Supported** Walker et al. (2012) Walker et al. (2014) **Not supported** Vitell et al. (2005) Vitell et al. (2007) Arli and Tjiptono (2014)

H6: Religiosity and study has a positive effect on ethical judgement.	**Independent variable:** Religiosity and study **Dependent variable:** Ethical judgement	Supported in one scenario.	Inconclusive.	**Not supported** Walker et al. (2012)
H7: Intrinsic religiosity has a significant positive effect on ethical intention.	**Independent variable:** Intrinsic religiosity **Dependent variable:** Ethical intention	Supported in all three scenarios.	Intrinsic religiosity has a significant positive effect on ethical intention.	**Supported** Singhapakdi et al. (2013) **Not supported** Kurpis et al. (2008)
H8: Extrinsic religiosity has a significant negative effect on ethical intention.	**Independent variable:** Extrinsic religiosity **Dependent variable:** Ethical intention	Not supported in all three scenarios.	Extrinsic religiosity does not have a significant negative effect on ethical intention.	**Supported** Singhapakdi et al. (2013)
H9: Religiosity and study has a positive effect on ethical intention.	**Independent variable:** Religiosity and study **Dependent variable:** Ethical intention	Not supported in all three scenarios.	Religiosity and study does not have a significant positive effect on ethical intention.	No prior study

5.2.2.1.1 The effect of intrinsic religiosity, extrinsic religiosity, and religiosity and study on ethical recognition

This study's results show that intrinsic religiosity has a significant positive effect on ethical recognition across all three scenarios. These results affirmed that accounting students with higher levels of intrinsic religiosity, who are committed to religion and its principles as part of one's daily life, tend to be more ethical in their recognition of ethical problems. This also means that intrinsic religiosity can enhance accounting students' ability to recognise ethical problems. This significant positive relationship between intrinsic religiosity and ethical recognition is consistent with Hunt and Vitell's (1993)

suggested ethics model. Furthermore, this result confirms an empirical study undertaken by Uyar et al. (2015) which found that intrinsic religiosity had a significant positive effect on accountants' ethical recognition in Turkey. In contrast to the mixed findings from a study undertaken by Kurpis et al. (2008), this study provides evidence in support of a significant relationship between intrinsic religiosity and ethical recognition.

This study's results, on the other hand, show that the effect of extrinsic religiosity on ethical recognition was only supported in two out of three scenarios (a credit manager and a controller). The findings on the effect of extrinsic religiosity on ethical recognition were therefore inconclusive. This result is not consistent with Hunt and Vitell's (1993) suggested conceptual model in ethics. There have been no prior empirical studies on the effect of extrinsic religiosity on ethical recognition despite Hunt and Vitell's suggestion on the direction of this relationship from their model. Hence, this study is the first attempt at investigating this relationship.

The findings of this study suggest that the effect of religiosity and study on ethical recognition was only supported in one scenario (a credit manager) and therefore, the relationship between religiosity and study on ethical recognition is inconclusive. In addition, this result is not consistent with Hunt and Vitell's (1993) ethics model, which postulates that religiosity influences ethical recognition. Similarly, there has been no prior empirical studies that investigate the influence of religiosity and study on ethical recognition.

This study found the significant influence of intrinsic religiosity on ethical recognition. However, the effect of extrinsic religiosity, and religiosity and study on ethical recognition was inconclusive.

5.2.2.1.2 The effect of intrinsic religiosity, extrinsic religiosity, and religiosity and study on ethical judgement

The findings of this study suggest that the effect of intrinsic religiosity on ethical judgement was not supported in all three scenarios. These results indicate that the intrinsic

religiosity of accounting students has no significant positive effect on their ethical judgement. Therefore, this study concludes that intrinsic religiosity does not enhance accounting students' ability to judge ethical problems. This result is not consistent with Weaver and Agle's (2002) symbolic interactionist theory that supports the effect of intrinsic religiosity on ethical judgement. Furthermore, the findings of this study contradict empirical studies undertaken by Walker et al. (2012), Walker et al. (2014), and Arli and Tjiptono (2014). Walker et al. (2012) found that intrinsic religiosity was negatively correlated to endorsing ethically questionable vignettes. Walker et al. (2014) found that individuals who were more intrinsically religious were less accepting of ethically questionable scenarios. They found that individuals with a stronger sense of intrinsic religiosity tended to judge various questionable consumer activities as wrong. Similarly, Arli and Tjiptono (2014) found that intrinsic religiosity positively influenced individual attitudes to ethically questionable consumer practices in Indonesia. On the other hand, Vitell et al. (2005) and Vitell et al. (2007) found inconclusive findings when examining the effect of intrinsic religiosity on consumers' ethical beliefs in the US.

In regard to the effect of extrinsic religiosity on ethical judgement, the findings of this study do find no statistically significant relationship between these two variables in all three scenarios. It was found that extrinsic religiosity has no significant negative effect on ethical judgement. Therefore, this study concludes that extrinsic religiosity does not reduce accounting students' ability to judge ethical problems. Again, this result is inconsistent with Weaver and Agle's (2002) symbolic interactionist theory. Similarly, results are not consistent with empirical studies by Walker et al. (2012) and Walker et al. (2014) who found that individuals with extrinsic religiosity were more accepting of ethically questionable scenarios. There are other studies that produced not significant and inconclusive results (Arli and Tjiptono 2014; Vitell et al. 2005; Vitell et al. 2007). Vitell et al. (2005) found the effect of extrinsic religiosity on consumers' ethical beliefs in the US was not significant. Vitell et al.'s (2007) findings were inconclusive in their study on the effect of extrinsic religiosity on consumers' ethical beliefs in the US. Arli and Tjiptono (2014) also found mixed results in their investigation of the effect of extrinsic religiosity on consumers' ethical beliefs in Indonesia.

As for the effect of religiosity and study on ethical judgement, the hypothesised positive relationship between these two variables was supported only in one scenario (local manager). The overall result on the positive effect of religiosity and study on ethical judgement was inconclusive. This finding is not consistent with Weaver and Agle's (2002) symbolic interactionist theory, which supports the effect of religiosity on ethical judgement. It is also not consistent with previous empirical study by Walker et al. (2012), who found that perceived sacred qualities of work (job sanctifying) did not affect ethical judgement. There is no prior study investigating the effect of religiosity and study on ethical judgement in the context of university students. The empirical study undertaken by Walker et al. (2012) on the impact of perceived sacred quality work on ethical judgement offered insight into the hypothesis direction and measurement scale for this study on university students in regard to the influence of religiosity and study on ethical judgement.

This study found no significant influence of intrinsic and extrinsic religiosity on ethical recognition. Furthermore, the effect of religiosity and study on ethical recognition was inconclusive.

5.2.2.1.3 The effect of intrinsic religiosity, extrinsic religiosity, and religiosity and study on ethical intention

This study's results show that intrinsic religiosity has a significant positive effect on ethical intention across all three scenarios. These results affirmed that accounting students with higher levels of intrinsic religiosity, who are committed to religion and its principles as part of one's daily life, tend to be more ethical in their intention about engaging in ethically questionable activities. This significant positive relationship between intrinsic religiosity and ethical intention is consistent with Hunt and Vitell's (1993) suggested ethics model. Hunt and Vitell (1993) contend that religion can affect different components of a marketer's EDM process.

Furthermore, this result confirms empirical studies undertaken by Kennedy and Lawton (1998) and Singhapakdi et al. (2013). Kennedy and Lawton's (1998) study on students at

universities with evangelical, Catholic, and no affiliations, found that intrinsic religiosity has a negative relationship with intention to behave unethically. Furthermore, Singhapakdi et al. (2013) found that managers with higher levels of intrinsic religiosity tended to be more ethical in their intentions. In contrast to the mixed findings from studies undertaken by Kurpis et al. (2008) and Singhapakdi et al. (2000b), this study provides evidence in support of a significant relationship between intrinsic religiosity and ethical intention.

In regard to the effect of extrinsic religiosity on ethical intention, the findings of this study did not find a statistically significant relationship between these two variables in all three scenarios. It was found that extrinsic religiosity has no significant negative effect on ethical intention. Therefore, this study concludes that extrinsic religiosity does not reduce accounting students' ethicality in their intention about engaging in ethically questionable activities. In addition, this result is not consistent with Hunt and Vitell's (1993) ethics model, which postulates that religion influences different components of the EDM process. There have also been no prior studies that investigate the influence of extrinsic religiosity on ethical recognition.

As for the effect of religiosity and study on ethical intention, this relationship was not supported in all three scenarios. These results indicate that religiosity and study has no significant positive effect on ethical intention. Therefore, this study can conclude that religiosity and study does not enhance accounting students' ethicality in their intention about engaging in ethically questionable activities. In addition, this result is not consistent with Hunt and Vitell's (1993) ethics model, which postulates that religion influences different component of the EDM process. Similarly, there have been no prior studies that investigate the influence of religiosity and study on ethical intention.

This study found the significant influence of intrinsic religiosity on ethical intention. However, the effect of extrinsic religiosity, and religiosity and study on ethical intention was not significant.

5.2.2.2 The effect of LOC on EDM

The results of the hypotheses testing on the effect of internal and external LOC on the ethical recognition, ethical judgement, and ethical intention of accounting students in Indonesia are shown in Table 5.2. The results are also compared with the findings of previous studies.

Table 5.2 A summary of the hypotheses test results on the effect of LOC on EDM among accounting students in Indonesia

Study hypotheses	Variables	Results of this study	Conclusion	Results of previous studies
H10: Internal LOC has a positive effect on ethical recognition.	**Independent variable:** Internal LOC **Dependent variable:** Ethical recognition	Supported in all three scenarios.	Internal LOC has a significant positive effect on ethical recognition.	**Supported** Ho (2010) **Not supported** No prior study
H11: External LOC has a negative effect on ethical recognition.	**Independent variable:** External LOC **Dependent variable:** Ethical recognition	Not supported in all three scenarios.	External LOC does not have a significant negative effect on ethical recognition.	**Supported** Ho (2010) **Not supported** No prior study
H12: Internal LOC has a positive effect on ethical judgement.	**Independent variable:** Internal LOC **Dependent variable:** Ethical judgement	Not supported in all three scenarios.	Internal LOC does not have a significant positive effect on ethical judgement.	**Supported** McCuddy and Peery (1996) Cherry and Fraedrich (2000) **Not supported** Forte (2005)
H13: External LOC has a negative effect on ethical judgement.	**Independent variable:** External LOC **Dependent variable:** Ethical judgement	Not supported in all three scenarios.	External LOC does not have a significant negative effect on ethical judgement.	**Supported** McCuddy and Peery (1996) Cherry and Fraedrich (2000) **Not supported** Forte (2005)

H14: Internal LOC has a positive effect on ethical intention.	**Independent variable:** Internal LOC **Dependent variable:** Ethical Intention	Supported in all three scenarios.	Internal LOC has a significant positive effect on ethical intention.	**Supported** Suryaningrum et al. (2013) Cherry and Fraedrich (2000) **Not supported** Jones and Kavanagh (1996)
H15: External LOC has a negative effect on ethical intention.	**Independent variable:** External LOC **Dependent variable:** Ethical intention	Not supported in all three scenarios.	External LOC does not have a significant negative effect on ethical intention.	**Supported** Suryaningrum et al. (2013) Cherry and Fraedrich (2000) **Not supported** Jones and Kavanagh (1996)

5.2.2.2.1 The effect of LOC on ethical recognition

In terms of the effect of internal LOC on ethical recognition, the findings of this research study suggest that this relationship was supported in all three scenarios. These results indicated that accounting students at Indonesian universities who have internal LOC, that is, they rely on their inner strength and beliefs about right and wrong to guide their behaviours, tend to be able to recognise ethical problems or issues in situations. This also means that internal LOC can enhance accounting students' ability to recognise ethical problems. This significant positive relationship between internal LOC and ethical recognition is consistent with Trevino's (1986) EDM theory which postulates that individuals with internal LOC will take responsibility for outcomes of ethical/unethical behaviour. Furthermore, this finding confirms an empirical study undertaken by Ho (2010) which found that LOC significantly influenced the ethical perceptions of managers.

In terms of the effect of external LOC on ethical recognition, the findings of this study suggest that this relationship was not supported in all three scenarios. According to this study, the lack of responsible and ethical behaviour of accounting students in Indonesia has no influence on their ability in ethical recognition. Trevino's (1986) EDM theory postulates that individuals with external LOC will not take personal responsibility for the

outcomes of ethical/unethical behaviour. The result from this study indicates that external LOC does not have a significant negative effect on ethical recognition. This means that the external LOC did not decrease accounting students' ability to recognise ethical problems. Similarly, the result is not consistent with an empirical study undertaken by Ho (2010) which found that LOC significantly influenced the ethical perceptions of managers in their recognition of ethical problems.

This found the significant influence of internal LOC on ethical recognition. In contrast, the influence of external LOC on ethical recognition was not significant.

5.2.2.2.2 The effect of LOC on ethical judgement

In terms of the effect of internal LOC on ethical judgement, the findings of this study suggest that this relationship was not supported in all three scenarios. According to this study, accounting student at Indonesian universities who have an internal LOC rely on their inner strength and beliefs about right and wrong to guide their behaviours, but this attitude does not impact on their ability in ethical judgement. Trevino's (1986) EDM theory contends that individuals with internal LOC will take personal responsibility for the outcomes of ethical/unethical behaviour. The results from this study indicate that internal LOC does not have a significant positive effect on ethical judgement. Therefore, this study concludes that internal LOC cannot enhance accounting students' ability to judge ethical problems. This result is not consistent with an empirical study undertaken by Cherry and Fraedrich (2000), which found sales managers with internal LOC express firmer ethical judgements of unethical behavior than do sales managers with external LOC. Their findings suggest that sales managers with internal LOC exhibit harsher judgements of bribery. On the other hand, a study by Forte (2005) found no statistically significant relationship when examining the influence of LOC on ethical judgement.

In terms of the effect of external LOC on ethical judgement, the findings of this study suggest that this relationship was not supported in all three scenarios. According to this study, accounting student at Indonesian universities who have an external LOC rely on

external forces, but this attitude does not impact on their ability in ethical judgement. These results indicate that external LOC does not have a significant negative effect on ethical judgement. Therefore, this study concludes that external LOC does not reduce accounting students' ability to judge ethical problems. Trevino's (1986) EDM theory postulates that individuals with external LOC will not take personal responsibility for the outcomes of ethical/unethical behaviour. This insignificant negative relationship between external LOC and ethical judgement is not consistent with an empirical study undertaken by Cherry and Fraedrich (2000) which found sales managers with external LOC express less firm ethical judgements of unethical behavior than do sales managers with internal LOC. Their findings suggest that sales managers with external LOC exhibit less harsh judgements of bribery. Another study, by Forte (2005), found no statistically significant relationship when examining the influence of LOC on ethical judgement.

This study concludes that the effects of internal and external LOC of accounting students in Indonesia on their ethical judgement were not significant.

5.2.2.2.3 The effect of LOC on ethical intention

In terms of the effect of internal LOC on ethical intention, the findings of this research study suggest that this relationship was supported in all three scenarios. These results indicated that accounting students at Indonesian universities who have internal LOC, that is, they rely on their inner strength and beliefs about right and wrong to guide their behaviours, tend to be more ethical in their intention about engaging in ethically questionable activities. These results indicate that internal LOC has a significant positive effect on ethical intention. Therefore, this study concludes that internal LOC can enhance the ethicality of accounting students in their intention to do an ethically questionable activity. Trevino's (1986) EDM theory postulates that individuals with internal LOC will take responsibility for outcomes of ethical/unethical behaviour. This significant positive relationship between internal LOC and ethical intention is consistent with Cherry and Fraedrich (2000), who found sales managers with internal LOC indicate less intention to

behave unethically than sales managers with external LOC by exhibiting less intention to pay a bribe.

In terms of the effect of external LOC on ethical intention, the findings of this study suggest that this relationship is not supported in all three scenarios. Accounting students at Indonesian universities, who have an external LOC, rely on external forces, but this attitude does not impact on their intention about engaging in ethically questionable activities. These results indicate that external LOC does not have a significant negative effect on ethical intention. Therefore, this study concludes that external LOC does not reduce accounting students' ethical intention about engaging in ethically questionable activities. Trevino's (1986) EDM theory postulates that individuals with external LOC will not take personal responsibility for the outcomes of ethical/unethical behaviour. This insignificant negative relationship between external LOC and ethical intention is not consistent with an empirical study undertaken by Cherry and Fraedrich (2000) which found sales managers with external LOC indicate more intention to behave unethically than sales managers with internal LOC by exhibiting more intention to pay a bribe. In contrast to the mixed findings from a study undertaken by Jones and Kavanagh (1996) on the relationship between overall LOC (without distinguishing between external LOC or internal LOC) and ethical intention, this study provides evidence in support of a significant relationship between internal LOC and ethical intention, and a non-significant relationship between external LOC and ethical intention.

This study found the significant effect of internal LOC on ethical intention. In contrast, the effect of external LOC on ethical intention was not significant.

5.2.2.3 The effect of peer influence on EDM

The results from the hypotheses testing on the effect of peer influence on ethical recognition, ethical judgement, and ethical intention of accounting students in Indonesia are shown in Table 5.3. The results are also compared with the findings of previous studies.

Table 5.3 A summary of the hypotheses test results on the effect of peer influence on EDM among accounting students in Indonesia

Study hypotheses	Variables	Results of this study	Conclusion	Results of previous studies
H16: Peer influence has a significant effect on ethical recognition.	**Independent variable:** Peer influence **Dependent variable:** Ethical recognition	Supported in two scenarios.	Inconclusive.	**Supported** Ponemon (1992b)
H17: Peer influence has a significant effect on ethical judgement.	**Independent variable:** Peer influence **Dependent variable:** Ethical judgement	Supported in one scenarios.	Inconclusive.	**Supported** Ponemon (1992b)
H18: Peer influence has a significant effect on ethical intention.	**Independent variable:** Peer influence **Dependent variable:** Ethical Intention	Supported in one scenario.	Inconclusive.	**Supported** Beam et al. (2003) **Not supported** Jones and Kavanagh (1996)

5.2.2.3.1 The effect of peer influence on ethical recognition

The findings of this study on the effect of peer influence on the ethical recognition of accounting students in Indonesia were inconclusive. This is because the effect was significant only in two (credit manager and controller) of the three scenarios. The peer influence of Indonesian accounting students does not affect their recognition of an ethical problem. This result is not consistent with Bandura's (1977) social learning theory which contends that individuals learn from others via observation, imitation, and modelling, particularly if the role-model is well-regarded. Similarly, this finding is not consistent

with the work of Ponemon (1992b), which found that peer pressure had the most significant influence on underreporting of audit tasks.

5.2.2.3.2 The effect of peer influence on ethical judgement

The findings of this study on the effect of peer influence on ethical judgement were inconclusive. This is because the effect of peer influence on ethical judgement was significant only in one (controller) of three scenarios. The influence of peers of Indonesian accounting students does not affect their judgement on an ethical problem. This result is not consistent with Bandura's (1977) social learning theory which postulates a positive relationship between peer influence and ethical judgement. Similarly, this finding is not consistent with a previous empirical study by Ponemon (1992b) which supports Bandura's (1977) postulation for these two variables.

5.2.2.3.3 The effect of peer influence on ethical intention

The findings of this study also reveal the effect of peer influence on ethical intention were inconclusive. This is because the effect of peer influence on ethical intention was significant only in one (local manager) of three scenarios. The influence of peers of Indonesian accounting students does not affect their intention about whether to engage in ethically questionable activities or not. This result is also not consistent with Bandura's (1977) social learning theory advocating a positive association between peer influence and ethical intention on the grounds that people's behaviour is influenced by individual(s) who they look up to and revere. Like this study, Jones and Kavanagh (1996) also reached an inconclusive outcome when examining the influence of peers on behaviour.

This research study found inconclusive evidence on the effect of peer influence on Indonesian accounting students' ethical recognition, ethical judgement and ethical intention.

5.2.2.4 The effect of family influence on EDM

The results from the hypotheses testing on the effect of family influence on the ethical recognition, ethical judgement, and ethical intention of accounting students in Indonesia are shown in Table 5.4. The results are also compared with the findings of previous studies.

Table 5.4 A summary of the hypotheses test results on the effect of family influence on EDM among accounting students in Indonesia

Study hypotheses	Variables	Results of this study	Conclusion	Results of previous studies
H19: Family influence has a significant effect on ethical recognition.	**Independent variable:** Family influence **Dependent variable:** Ethical recognition	Supported in two scenarios.	Inconclusive.	**Supported** Basow and Howe (1980) Mascarenhas and Higby (1993)
H20: Family influence has a significant effect on ethical judgement.	**Independent variable:** Family influence **Dependent variable:** Ethical judgement	Not supported in three scenarios.	Family influence does not have a significant effect on ethical judgement.	**Supported** Basow and Howe (1980) Mascarenhas and Higby (1993)
H21: Family influence has a significant effect on ethical intention.	**Independent variable:** Family influence **Dependent variable:** Ethical intention	Supported in one scenario.	Inconclusive.	**Supported** Basow and Howe (1980) Mascarenhas and Higby (1993)

5.2.2.4.1 The effect of family influence on ethical recognition

The findings of this study on the effect of family influence on ethical recognition were inconclusive. This is because the effect of family influence on ethical recognition was significant only in two (credit manager and local manager) of three scenarios. Family influence does not positively affect Indonesian accounting students in their recognition of an ethical problem. This result is not consistent with Mochis' (1985) notion that family

has an essential role in helping children in their socialisation with others and behaving in ways that are acceptable to others and society. Similarly, this finding is not consistent with the work of Basow and Howe (1980), which found that both fathers and mothers had a more significant effect on young adult career and education objectives than other groups, including peers, teachers, and other adult role models. Furthermore, Mascarenhas and Higby (1993) found that parental influence exceeds almost all others.

5.2.2.4.2 The effect of family influence on ethical judgement

The findings of this study reveal that the effect of family influence on ethical judgement was not supported. This is because this effect was not significant in any of the three scenarios meaning that family influence does not affect Indonesian accounting students' judgement on an ethical problem. Therefore, this study concludes that family influence does not have a significant effect on accounting students' ability to judge an ethical problem.

This result is not consistent with Mochis' (1985) contention that family can have a significant influence on the social behaviour of their children. Similarly, this result is not consistent with previous empirical studies separately undertaken by Basow and Howe (1980), and Mascarenhas and Higby (1993), which found parental influence constitutes a significant and strongest source of influence on adolescent and young adults as compared to other sources such as peers, teachers and role models.

5.2.2.4.3 The effect of family influence on ethical intention

The findings of this study on the effect of family influence on ethical intention were inconclusive. This is because the effect of family influence on ethical intention was significant only in one (local manager) of the three scenarios. Therefore, the effect of family influence on Indonesian accounting student's intention relating to whether to engage in ethically questionable activities was inconclusive.

This study again did not produce a result that is consistent with Mochis (1985), Basow and Howe (1980), and Mascarenhas and Higby (1993) in regard to the effect of family influence on the behaviour and thinking of young individuals. Those studies affirmed parents exert a strong source of influence on their children who tend to adopt their parents' beliefs and ape their behaviour. However, this study was not able to reach the same conclusion.

In this research study, the effect of family influence on Indonesian accounting students' ethical recognition, ethical judgement and ethical intention was inconclusive.

5.2.2.5 The effect of ethical recognition on ethical judgement

According to Rest (1986), ethical recognition precedes ethical judgement in the EDM process. In other words, the EDM process commences when someone becomes aware that a particular situation contains an ethical problem. Rest (1986) postulates a positive effect of ethical recognition on ethical judgement in his model.

The results from the hypotheses testing on the effect of ethical recognition on the ethical judgement of accounting students in Indonesia are shown in Table 5.5. The results are also compared with the findings of previous studies.

Table 5.5 A summary of the hypotheses test results on the effect of ethical recognition on ethical judgement among accounting students in Indonesia

Study hypotheses	Variables	Results of this study	Conclusion	Results of previous studies
H22: Ethical recognition has a positive effect on ethical judgement.	**Independent variable:** Ethical recognition **Dependent variable:** Ethical judgement	Supported in all three scenarios.	Ethical recognition has a significant positive effect on ethical judgement.	**Supported** Singhapakdi et al. (1996)

The findings of this study suggest that the positive effect of ethical recognition on ethical judgement was supported. This is because ethical recognition had significant positive

effects on ethical judgment in all three scenarios. Therefore, this study concludes that accounting students' recognition of an ethical problem can enhance their ability to judge ethical problems. This finding supports Rest's (1986) EDM theory that ethical recognition is positively associated with ethical judgment. Similarly, this finding is consistent with the work of Singhapakdi et al. (1996), which confirmed the significant positive effect of ethical recognition on ethical judgement.

5.2.2.6 The effect of ethical judgement on ethical intention

The results from the hypotheses testing on the effect of ethical judgement on the ethical intention of Indonesian accounting students are shown in Table 5.6. The results are also compared with the findings of previous studies.

Table 5.6 A summary of the hypotheses test results on the effect of ethical judgement on ethical intention among accounting students in Indonesia

Study hypotheses	Variables	Results of this study	Conclusion	Results of previous studies
H23: Ethical judgement has a positive effect on ethical intention.	**Independent variable:** Ethical judgement **Dependent variable:** Ethical intention	Supported in all three scenarios.	Ethical judgement has a significant positive effect on ethical intention.	**Supported** Vitell and Hunt (1990) Mayo and Marks (1990) Singhapakdi et al. (2013)

The findings of this study suggest that the positive effect of ethical judgement on ethical intention was supported. This is because ethical judgement had significant positive effects on ethical intention in all three scenarios. Indonesian accounting students' judgement (perceived degree of ethicalness of a certain action in responding to an ethical problem) can enhance accounting students' intention not to engage in unethical conduct. This finding is consistent with the proposed relationship between ethical judgement and ethical intention in Rest's (1986) EDM theory and Hunt and Vitell's (1986) models. It also supports the findings of Vitell and Hunt (1990), Mayo and Marks (1990), and

Singhapakdi et al. (2013) which confirmed the significant positive influence of ethical judgement on ethical intention.

5.2.3 Testing for differences in the statistically significant influencing factors based on gender and university affiliations

5.2.3.1 Testing for differences based on gender

The findings of this study show that there are significant differences in the perception of intrinsic religiosity and peer influence between male and female accounting students at universities in Indonesia. Female accounting students had a higher score on intrinsic religiosity compared to male accounting students, meaning female students are more committed to religion and their beliefs are shaped by the principles of their faith as compared to their male counterparts. Male accounting students, on the other hand had a higher score on peer influence compared to female accounting students suggesting that males are susceptible to peer influence as compared to females.

However, there was no significant difference in the perception of religiosity and study based on gender. The comparison between males and females on their perception of extrinsic religiosity, internal LOC, external LOC, and family influence was inconclusive in this study.

The test for differences in the perception of intrinsic religiosity between males and females provides further insight into the relationship between intrinsic religiosity and ethical recognition identified in section 5.2.2.1.1 (in which it was highlighted that intrinsic religiosity has a significant positive impact on ethical recognition). The results in this study, of female accounting students having higher intrinsic religiosity than male accounting students, suggest the former possess higher ethical recognition ability than the latter. This complements the findings of Eweje and Brunton's (2010) study that found that females were more ethically aware than males. However, future research should examine the direct impact of this gender difference in perception of intrinsic religiosity on ethical recognition.

As for intrinsic religiosity and ethical judgement, it has been identified in section 5.2.2.1.2 that there is no significant relationship between intrinsic religiosity and ethical judgement. However, the study undertaken by Herrington and Weaven (2008) investigating gender differences in ethical judgement, found that females scored higher in moral reasoning ability than males. This study suggests examining the direct impact of this gender difference in perception of intrinsic religiosity on ethical judgement is an area for future research.

Krambia-Kapardis and Zopiatis (2008) in a study on gender differences in perception found that females were more ethical than males. Section 5.2.2.1.3 identified that intrinsic religiosity has a significant positive impact on ethical intention and this warrants further investigation into the direct impact of gender difference in perception of intrinsic religiosity on ethical intention in the future. The rationale behind the future direction for study is to determine whether females are more ethical than males from the perspective of intrinsic religiosity.

While the findings in this study indicate that the impact of peer influence on ethical recognition, ethical judgement and ethical intention (refer to sections 5.2.2.3.1 to 5.2.2.3.3 for impact of extrinsic religiosity on these variables) is inconclusive, this study indicates that male students are more susceptible to peer influence as compared to female students. This result is consistent with a study by Walidy (2017) which found that peer influence correlates with male high school students' smoking habits in Yogyakarta. Therefore, it is important for male accounting students in Indonesia to make good individuals as their friends, because they may possibly be influenced by unethical behavior of their friends.

5.2.3.2 Testing for differences based on university affiliations

The results of this analysis show that there were significant differences in the perception of extrinsic religiosity, peer influence and family influence based on university affiliation. The study found that there was a consistent significant difference across all the items

measuring the perception of extrinsic religiosity between secular universities and Islamic accounting. Islamic accounting school students had a higher degree of extrinsic religiosity compared to accounting students from secular universities. This implies that Islamic accounting school students are less committed to their religion or less ethically sensitive (Vitell et al. 2005) than accounting students from secular universities. Although this study did not find a significant negative impact of extrinsic religiosity on ethical recognition, ethical judgement and ethical intention (refer to sections 5.2.2.1.1 to 5.2.2.1.3 for impact of extrinsic religiosity on these variables), this significant difference between university affiliations should be investigated in future research. This is because EDM theories (Hunt & Vitell 1993; Weaver & Agle 2002) and previous empirical studies (Walker et al. 2012; Walker et al. 2014) have found that extrinsic religiosity can lead to ethically questionable behaviour. It is imperative to determine from future study whether accounting curricula implemented at Islamic accounting schools might have led to a higher degree of extrinsic religiosity or Islamic accounting schools might not have provided enough subjects to nurture intrinsic religiosity.

In regard to differences in the perception of peer influence among students from different university affiliations, this study found that there was a consistent significant difference across all the items measuring this perception between accounting students from secular universities and those from accounting schools of Islamic universities. Accounting students from accounting schools of Islamic universities had a higher degree of peer influence compared to those from secular universities and Islamic accounting schools. Although the findings in this study show the effect of peer influence on ethical recognition, ethical judgement and ethical intention (refer to sections 5.2.2.3.1 to 5.2.2.3.3 for impact of peer influence on these variables) is inconclusive, it is important for students to select ethical individuals as their peers. This is because peer influence can have a negative effect on accounting students if those peers conduct unethical activities.

This study also found that there was a consistently significant difference across all the items measuring the perception of family influence between accounting students from secular universities and those from Islamic accounting schools. Students from Islamic accounting schools had a higher degree of family influence compared to students of

secular universities and Islamic universities. This result suggests that Islamic accounting students' decisions tend to be influenced by their parents or family.

5.2.4 Mediating effects in the structural model

Two mediating effects were tested in this study: the mediation of ethical recognition on the relationship between intrinsic religiosity and ethical judgement, and the mediation of ethical judgement on the relationship between intrinsic religiosity and ethical intention. A summary of the hypotheses test results is shown in Table 5.7.

Table 5.7 A summary of the hypotheses test results for mediating influences

Study hypotheses	Results of this study	Conclusion	Results of previous studies
H24: Ethical recognition mediates the relationship between intrinsic religiosity and ethical judgement.	Supported in all three scenarios.	Supported	No prior study
H25: Ethical judgement mediates the relationship between intrinsic religiosity and ethical intention.	Supported in all three scenarios.	Supported	No prior study

5.2.4.1 Ethical recognition mediates the relationship between intrinsic religiosity and ethical judgement

The test results show that ethical recognition mediated the relationship between intrinsic religiosity and ethical judgement in all three scenarios. This means that the effect of intrinsic religiosity on ethical judgement is indirect: the effect is through ethical recognition. From the analysis, we can conclude that the type of mediation that occurred was complete, since the direct path from intrinsic religiosity to ethical judgement was reduced in absolute size and was no longer significant after ethical recognition was entered into the model. Therefore, the mediation effect that occurred in this research

model may explain why the effect of intrinsic religiosity on ethical judgement was not significant.

5.2.4.2 Ethical judgement mediates the relationship between intrinsic religiosity and ethical intention

The test results show that ethical judgement mediated the relationship between intrinsic religiosity and ethical intention in all three scenarios. This means that the effect of intrinsic religiosity on ethical intention is indirect, the effect is through ethical judgement. From the analysis, we can conclude that the type of mediation that occurred was partial, since the direct path from intrinsic religiosity to ethical intention was reduced in absolute size but was still significant after ethical judgement was entered into the model.

5.3 Summary

This study has confirmed the positive effect of intrinsic religiosity and internal LOC on the ethical recognition and ethical intention of accounting students in Indonesia. This suggests that intrinsic religiosity and internal LOC can enhance accounting students' ability to recognise ethical problems and their intention about engaging in ethically questionable activities. Furthermore, it has confirmed the positive effect of ethical recognition on ethical judgement and the positive effect of ethical judgement on ethical intention among accounting students. The research also determined that female accounting students had a higher score on intrinsic religiosity compared to male accounting students and male accounting students had a higher score on peer influence compared to female accounting students.

Islamic accounting schools' students were found to have a higher degree of extrinsic religiosity and family influence compared to accounting students from secular universities and Islamic Universities. Accounting schools of Islamic universities had a higher degree of peer influence compared to students of secular universities and Islamic accounting schools.

This study has succeeded in confirming two mediating effects on EDM. Ethical recognition mediates the relationship between intrinsic religiosity and ethical judgement; and ethical judgement mediates the relationship between intrinsic religiosity and the ethical intention of accounting students in Indonesia.

The next chapter will provide summaries of the research and findings. Furthermore, it will discuss implications from practical and theoretical points of view. Lastly it will also reveal the limitations of the study and recommendations for future studies, and provides the final conclusions.

Chapter 6 Conclusion and Implications

6.1 Introduction

This chapter provides summaries of the issues associated with this research across five sections. The first section summarises the research objectives and explains the research process. The second section provides a summary of the study's findings related to the influence of religiosity, LOC, peer influence, and family influence on the EDM of accounting students in Indonesia. The third section outlines the implications of this research study in both theoretical and practical terms. The fourth section outlines the limitations of this study, whilst the fifth section provides recommendations for future work.

6.2 Summary of the research

There have been a number of high profile scandals related to unethical behaviour in the field of accounting around world (including Indonesia). This has led people to question the ethicality of accountants and the role of accounting education in nurturing ethical accountants. In response to this criticism, accounting researchers started to investigate factors that influence accounting EDM. Some accounting schools in Indonesia have reformed their curricula by adding more religious subjects for the purpose of nurturing ethical accountants. Based on the above motivation and after conducting a preliminary literature review, this study established the following three objectives:

- First, to investigate the influence of religiosity, LOC, peer influence, and family influence on the EDM (ethical recognition, ethical judgement, and ethical intention) of accounting students in Indonesia.
- Second, to investigate the significant differences in perceptions of each influencing factor according to gender and university affiliations.
- Third, to find out the extent to which the relationship between key influencing factors (religiosity, LOC, peer influence, or family influence) and EDM variables

are mediated by other EDM variables in this study on accounting students in Indonesia.

After conducting the literature review, this study formulated a research model based on Rest's (1986) EDM model. This study extends Rest's model by including the following constructs: intrinsic religiosity, extrinsic religiosity, religiosity and study, internal LOC, external LOC, peer influence, and family influence.

6.3 Summary of findings

The sample size of this study was 693 respondents who are accounting student studying at universities in Indonesia. In terms of gender, 496 were female (71.6%), while 197 (28.4%) were male. The majority (71%) of respondents in this study were aged between 17 and 21 years old. The gender distribution and the age groups in this sample approximately corresponded with the pattern of accounting students in Indonesia. Data were collected from this sample through a survey conducted in Surakarta (234 respondents), Yogyakarta (217 respondents), Semarang (175 respondents), and Bogor (67 respondents). In terms of years of study, most respondents (257 students [37.09%]) were second year students, 210 respondents (30.30%) were fourth year students, 209 (30.16%) respondents were third year students, and 17 (2.45%) respondents were first year students. In terms of work experience and business ethics course attendance, a majority of respondents had no work experience (64.64%), and a majority of them had attended business ethics courses (60.03%).

This study found a positive significant effect of intrinsic religiosity on ethical recognition. This result is consistent with studies by Walker et al. (2012) and Walker et al. (2014) in the US, Arlie and Tjiptono (2014) in Indonesia, and Uyar et al. (2015) in Turkey. In addition, this study found that intrinsic religiosity has a significant positive effect on ethical intention of accounting students in Indonesia, which is consistent with a study by Singhapakdi et al. (2013) in the US.

Internal LOC was also a key influencing factor on ethical recognition and ethical intention. This relationship supports Trevino's (1986) contention that individuals with internal LOC take responsibility for outcomes of ethical/unethical behaviour.

In addition, this study found a positive significant effect of ethical recognition on ethical judgement. Furthermore, it found a positive significant effect of ethical judgement on ethical intention of accounting students in Indonesia. This result is consistent with Cherry and Fraedrich (2000), who found sales managers with internal LOC indicate less intention to behave unethically than sales managers with external LOC by exhibiting less intention to pay a bribe.

The research also found that female accounting students had a significantly higher score on intrinsic religiosity compared to male accounting students and male accounting students had a higher score on peer influence compared to female accounting students.

Islamic accounting schools' students were found to have a higher degree of extrinsic religiosity and family influence compared to accounting students from secular universities and Islamic Universities. Meanwhile, accounting schools of Islamic universities had a higher degree of peer influence compared to students of secular universities and Islamic accounting schools.

Furthermore, the results show that there is a consistent significant difference across all the items measuring the perception of peer influence between accounting students of secular universities and those from Islamic universities. Students from accounting schools in Islamic universities had a higher degree of peer influence compared to students of secular universities and Islamic accounting schools.

This study has also found two mediating variables on the relationship between religiosity and EDM. Ethical recognition mediates the relationship between intrinsic religiosity and ethical judgement; and ethical judgement mediates the relationship between intrinsic religiosity and the ethical intention of accounting students in Indonesia.

6.4 Implications of the study

This study has implications for the body of research in accounting/business ethics in several ways.

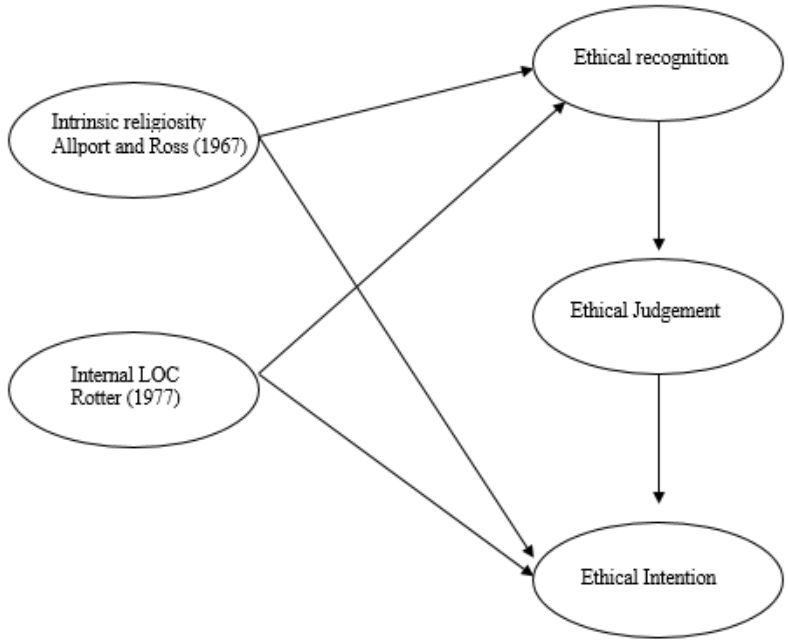
6.4.1 Theoretical implications

From a theoretical perspective, the outcomes of this study had several implications for scholars in field of EDM.

- Firstly, this study has succeeded in modifying Rest's (1986) EDM model in accordance with recommendations from previous studies (Hunt & Vitell 1993; Trevino 1986; Weaver & Agle 2002) by incorporating new constructs intrinsic religiosity, extrinsic religiosity, religiosity and study, internal LOC, external LOC, peer influence, and family influence in a model that not only incorporates these new constructs but also adopts a holistic integration of three EDM processes (ethical recognition, ethical judgement, and ethical intention). The modified model was tested with those constructs using SEM. Most previous studies only examine one EDM process (Walker et al. 2012; Walker et al. 2014) or two processes (Singhapakdi et al. 2013) and does not use SEM. The extended Rest's EDM model employed in this study when applied to the EDM of accounting students in Indonesia, on average, can explain 12% of ethical recognition, 25% of ethical judgement, and 56% of ethical intention, while there has been no prior study that utilises a model that explains these three EDM processes.
- Secondly, this study contributes to EDM theory by examining the effect of gender on key influencing factors, while most previous studies only examine the effect of gender on EDM. The investigation of key influencing factors rather than EDM processes offers valuable information regarding how ethical recognition, ethical judgement, and ethical intention are formed or affected. Accounting schools in Indonesia can improve their curricula in nurturing ethical accountants by considering the impact of differences in gender perception.

- Most previous studies only used one single religiosity measurement. This study contributes to theory by examining the effect of religiosity on EDM using three measurements (intrinsic religiosity, extrinsic religiosity, and religiosity and study).
- Most previous studies only used an overall LOC when examining the effect of LOC on EDM. This study contributes to theory by distinguishing between internal LOC and external LOC and examining their effect on EDM.
- This study contributes to theory by finding a significant effect of ethical recognition as a mediating variable on the impact of intrinsic religiosity on ethical judgement. Furthermore, this study also found a significant effect of ethical judgement as a mediating variable on the impact of intrinsic religiosity on ethical intention. There have been no previous studies that have examined the effect of an EDM variable as a mediating variable on the impact of religiosity on another EDM variable. This mediating variable may explain why some studies did not find a significant direct effect of religiosity on an EDM variable.
- Lastly, the testing of the model with Indonesian accounting students contributes to the literature on EDM in an Indonesian setting. The outcomes of model testing (in Figure 6.1) show that intrinsic religiosity and internal LOC are variables that initially have a significant positive effect on Indonesian accounting students' ethical recognition. Furthermore, ethical recognition is the only variable that has a significant positive effect on the ethical judgement of Indonesian accounting students. Since intrinsic religiosity and internal LOC have a direct impact on ethical recognition, and ethical recognition has a direct impact on ethical judgement, we can conclude that intrinsic religiosity and internal LOC have an indirect impact on ethical judgement. Lastly, intrinsic religiosity, internal LOC, and ethical judgement are variables that have a significant positive effect on Indonesian accounting students' ethical intention.

Figure 6.1 An extended Rest's EDM model for investigating Indonesian accounting students' EDM



6.4.2 Practical implications

This study has been motivated by several business scandals happening in the world that led people question the ethicality of accountants and the role of accounting education in nurturing ethical accountants. This made some Indonesian accounting schools improve their curricula by including more religious subjects (Islamic studies), assuming that religiosity will enhance students' EDM abilities, and introduce Islamic accounting schools. The findings of this study suggest several practical implications for accounting schools, government agencies, companies, and accounting firms, as follows:

- The study found that intrinsic religiosity and internal LOC significantly influenced ethical recognition and ethical intention of accounting students in Indonesia. Therefore, it is important for accounting schools in Indonesia to provide curricula that emphasises intrinsic religiosity and internal LOC.

- The Indonesian government and other policy-makers also need to encourage accounting education to place an emphasis on intrinsic religiosity and internal LOC when they design their curricula.
- Companies and accounting firms also need to consider the intrinsic religiosity and internal LOC aspects of their employees when conducting training to increase their EDM abilities.
- The study results indicate that ethical judgement has a significant positive influence on ethical intention. Accounting students with higher levels of ethical judgement tend to be more ethical in their intention. Therefore, accounting schools should provide curricula and ethical training that nurtures the ethical judgement of students.
- This study's results indicate that accounting students from Islamic accounting schools had higher extrinsic religiosity compared to those studying conventional accounting from secular and Islamic universities. Unlike ethics theories and previous studies (Walker et al. 2012; Walker et al. 2014; Weaver & Agle 2002) which found a negative relationship between extrinsic religiosity and EDM, suggesting extrinsic religiosity may lead to an inclination to unethical behaviour, this study did not find any negative effect on ethical judgement and ethical intention. This is maybe because the extrinsic religiosity construct in this study measures the social and pecuniary motives behind religious participation, which the respondents viewed as positive aspects of Islamic principles. This higher extrinsic religiosity would probably reflect Islamic teaching in the curricula of Islamic accounting schools. Islamic teaching encourages Muslims to bond with family members and others in kinship, brotherhood or friendship for harmonious community living, strengthening their faith[2] and receiving God's provision[3] (social motive). In addition, Islamic principle teaches Muslims that a man should

[2] Prophet Muhammad (PBUH) said: "Whoever believes in Allah and the hereafter let him uphold the ties of kindship. And whoever believes in Allah and the hereafter let him speak good or else keep silent" (narrated by Bukhari).
[3] Prophet Muhammad (PBUH) said: "Whoever would like his provision in this world to be increased and his life span to be extended, let him uphold the ties of kinship" (narrated by Bukhari & Muslim).

go and earn his living and this is a noble act in the eyes of God[4] (pecuniary motive). This may also because one of the purposes of establishing Islamic accounting schools in Indonesia was to encourage Muslims to get involved in business activities. Although this study did not find any negative effect of extrinsic religiosity on EDM, ethics theories and previous studies have found that extrinsic religiosity may lead to an inclination to engage in ethically questionable conduct.

- This study also found that accounting students from Islamic accounting schools have a higher level of family influence compared to those from secular and Islamic universities. This may suggest that they have a better relationship with their family members or they tend to turn to family members for advice. Therefore, the family of accounting students can influence their ethicality.
- This study also found that accounting students from Islamic accounting schools had a higher degree of peer influence compared to those from secular and Islamic universities. Since peer influence may have a negative effect on accounting students if those peers conduct unethical activities, Islamic accounting schools need to encourage their students to be selective in making friendships.

6.5 Limitations of this study

Although this study has made theoretical and practical contributions, it also has some limitations, as follows:

- It used accounting students as a sample, not accountants. Therefore, we need to be cautious when applying the results to accountants. Nonetheless, accounting students are future accountants. Furthermore, the practical contributions of this research can benefit accounting schools in improving their curricula and companies or public accountancy firms when designing training to improve their employees' EDM.

[4] Allah says in the Qur'an: "And when the prayer is ended, then disperse in the land and seek of Allah's bounty" (Surah Al-Jumu'ah:10).

- It only conducted a survey on 11 accounting schools across four cities in Indonesia instead of all accounting schools across all cities. Nonetheless, the sample represented big cities that host many of the accounting schools in Indonesia.

6.6 Recommendations for future research

This study provides the following recommendations for future research:

- This study examined the ethical recognition, ethical judgement, and ethical intention of accounting students in Indonesia. Future studies could consider measurement alternatives to DIT (Rest et al. 1999) to measure ethical judgement. Future studies could also use actual behaviour instead of ethical intention.
- This study focuses on accounting students. Future studies might also use samples other than accounting students, including accountants or other similar professions such as auditors. Furthermore, this study used samples only from cities in Java. Future studies might use samples from cities in another Indonesian's island.
- This study suggests examining the direct impact of the observed gender difference in perceptions of intrinsic religiosity on ethical judgement in future research.
- Future studies could include other situational factors such as commitment to moral self-improvement, as recommended by Kurpis et al. (2008), as moderating variables or consider other mediating variables in the relationship between religiosity with EDM.

6.7 Concluding remarks

Global accounting and business scandals have encouraged accounting scholars to investigate factors that influence accountants' EDM. However, this type of research is still underdeveloped in the field of accounting. This study has investigated the effect of religiosity, LOC, peer influence, and family influence on accounting students' EDM, making a theoretical contribution by extending Rest's (1986) EDM model.

This study found that intrinsic religiosity and internal LOC had a significant positive effect on accounting students' ethical recognition and ethical intentions. It also confirmed the effect of ethical recognition on ethical judgement, and the effect of ethical judgement on ethical intention. Furthermore, it found the effect of ethical recognition as a mediating variable on the relationship between intrinsic religiosity and ethical judgement and it found the effect of ethical judgement as a mediating variable on the relationship between intrinsic religiosity and ethical intention.

The findings of this study suggest that accounting schools place greater emphasis on developing intrinsic religiosity, internal LOC and ethical judgement when they design curricula and train their students. Intrinsic religiosity and internal LOC have been empirically found to increase the ability of accounting students to recognise ethical problems. Furthermore, intrinsic religiosity, internal LOC and ethical judgement have been empirically found to decrease their intention to engage in unethical conduct. The inclusion of these factors in university curriculum design and training programs will enhance the ethical decision-making process for future accountants.

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Appendix A Questionnaire survey

Appendix A1 Questionnaire survey in English

INFORMATION TO SURVEY PARTICIPANTS INVOLVED IN RESEARCH

Invitation to participate
You are invited to participate in a research project entitled "The influence of religiosity on ethical decision making: A study on Indonesian accounting students". The project is being conducted by a student researcher Mr. Zaki Mubarak, who is currently doing a DBA study at Victoria university Melbourne, Australia under the supervision of Dr. Michelle Fong and Associate Professor Lily Wong from College of Business, Victoria University Melbourne.

Project explanation
The primary objective of this research is to investigate the influence of religiosity on ethical decision making.This study also determines the impact of university affiliation and gender as moderating variables in the relationship between religiosity and EDM. This study applies a quantitative method in which data will be collected in a survey of undergraduate accounting students from universities in Indonesia.

What will I be asked to do?
You are requested to answer questions in the questionnaire. The survey will take ±20 minutes to complete.

What will I gain from participating?
As accounting students, your views are very valuable for the study. Your participation will contribute to the development of accounting education for nurturing ethical accountants. Findings of this project will be produced and submitted to accounting education stakeholders to allow them to provide better accounting education system.

How will the information I give be used?
The information that participants provide will be analysed and used to complete a Doctoral thesis. Raw data collected from all participants will be kept in a safe place and will only be viewed and accessed by the researcher and research supervisors. The information you provide will be kept confidential at all stages of the project. The information may also be used to develop academic publications and participations will not be named.

What are the potential risks of participating in this project?
There are no expected risks from participation. Your participation in the questionnaire survey is voluntary. If you think you would like to withdraw or not answer certain questions, you may do so, and it will not affect you directly or indirectly whatsoever.

Who is conducting the study?
The study is being conducted through the College of Business at Victoria University, Melbourne, Australia. The researcher's details are as follows:
Principal Researcher : Dr. Michelle Fong
Student Researcher : Mr. Zaki Mubarak

Any queries about your participation in this project may be directed to contact details below:
Student Researcher: Mr. Zaki Mubarak; phone +61 416 680 234; email: zaki.mubarak@live.vu.edu.au; or Principal Researcher: Dr. Michelle Fong; phone +61 3 9919 4507; email: michelle.fong@vu.edu.au
Your participation and precious time is very much appreciated. Thank you

Zaki Mubarak
DBA Candidate
If you have any queries or complaints about the way you have been treated, you may contact the Ethics & Biosafety Coordinator, Victoria University Human Research Ethics Committee, Victoria University, PO Box 14428, Melbourne, VIC 8001 phone (03) 99194148

INFORMED CONSENT FOR PARTICIPANT

Information for participants
We would like to invite you to be a part of a study entitled "The influence of religiosity on ethical decision making: A study on Indonesian accounting students".
Full details of the project and your involvement are provided in the accompanying sheet titled" Information to Survey Participants Involved in Research".

Certification by subject
I certify that I am at least 18 years old and that I am voluntary giving my consent to participate in the study entitled "The influence of religiosity on ethical decision making: Study on Indonesian accounting students" being conducted at Victoria University by Mr. Zaki Mubarak.

I certify that the objective of the study, together with any risks and safeguards associated with the procedures listed hereunder to be carried out in the research, have been fully explained to me and that I freely consent to participation involving the below-mentioned procedure: a survey.

I certify that I have had the opportunity to have any questions answered and that I understand that I can withdraw from this study at any time and that this withdrawal will not jeopardise me in any way.

I have been informed that the information I will provide will be kept confidential and raw data collected will be kept in a safe place and will only be viewed and accessed by the researcher and research supervisor. I also have been informed that all material presented in any relevant publications of this study will be anonymous.

I have read and understood the consent form and desire of my own free will to participate in this study.

- ○ Yes
- ○ No

Is this the first time you participate in this survey?

- ○ Yes
- ○ No

Section 1: Case scenarios

In this part, three scenarios about ethical issues in business are presented. Using the scale between 1 and 7 under each scenario, please indicate your answer for each one.

1.1) Case 1

A promising start-up company applies for a loan at a bank. THE CREDIT MANAGER of the bank is a friend and frequently goes golfing with the company's owner. This new company's short credit history does not meet the bank's normal lending criteria.

Action: THE CREDIT MANAGER recommends approving the loan.

(i) Record your judgement of the ethicality of this scenario using the scale below:

	1	2	3	4	5	6	7	
Fair	○	○	○	○	○	○	○	Unfair
Just	○	○	○	○	○	○	○	Unjust
Morally right	○	○	○	○	○	○	○	Not morally right
Acceptable to my family	○	○	○	○	○	○	○	Unacceptable to my family
Culturally acceptable	○	○	○	○	○	○	○	Culturally unacceptable
Traditionally acceptable	○	○	○	○	○	○	○	Traditionally unacceptable
Does not violate an unspoken promise	○	○	○	○	○	○	○	Violates an unspoken promise
Does not violate an unwritten contract	○	○	○	○	○	○	○	Violates an unwritten contract.

(ii) The action described in Case 1 above is:

	1	2	3	4	5	6	7	
Ethical	○	○	○	○	○	○	○	Unethical

(iii) Based on the story in Case 1 above, what is your opinion of the following statements?

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
The situation above involves an ethical problem.	○	○	○	○	○	○	○
The situation above contains an ethical issue.	○	○	○	○	○	○	○
This story contains ethical implications.	○	○	○	○	○	○	○
This story has an ethical content.	○	○	○	○	○	○	○
I consider the action in this story as an unethical behaviour.	○	○	○	○	○	○	○

(iv) If I had the opportunity, I would perform the behavior of the credit manager described in the story in Case 1 above.

	1	2	3	4	5	6	7	
Likely	○	○	○	○	○	○	○	Unlikely

(v) If I were actually in this situation, I would most likely undertake the same action as the credit manager.

	1	2	3	4	5	6	7	
Likely	○	○	○	○	○	○	○	Unlikely

(vi) I would be likely to take the same action as the credit manager in this situation.

	1	2	3	4	5	6	7	
Likely	○	○	○	○	○	○	○	Unlikely

(vii) I would act in the same manner as the credit manager in the story in Case 1 above.

	1	2	3	4	5	6	7	
Likely	○	○	○	○	○	○	○	Unlikely

(viii) The probability that I would undertake the same action as the credit manager in the story in Case 1 above is:

	1	2	3	4	5	6	7	
High	○	○	○	○	○	○	○	Low

(ii) The action described in Case 1 above is:

	1	2	3	4	5	6	7	
Ethical	○	○	○	○	○	○	○	Unethical

(iii) Based on the story in Case 1 above, what is your opinion of the following statements?

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
The situation above involves an ethical problem.	○	○	○	○	○	○	○
The situation above contains an ethical issue.	○	○	○	○	○	○	○
This story contains ethical implications.	○	○	○	○	○	○	○
This story has an ethical content.	○	○	○	○	○	○	○
I consider the action in this story as an unethical behaviour.	○	○	○	○	○	○	○

(iv) If I had the opportunity, I would perform the behavior of the credit manager described in the story in Case 1 above.

	1	2	3	4	5	6	7	
Likely	○	○	○	○	○	○	○	Unlikely

(v) If I were actually in this situation, I would most likely undertake the same action as the credit manager.

	1	2	3	4	5	6	7	
Likely	○	○	○	○	○	○	○	Unlikely

(vi) I would be likely to take the same action as the credit manager in this situation.

	1	2	3	4	5	6	7	
Likely	○	○	○	○	○	○	○	Unlikely

(vii) I would act in the same manner as the credit manager in the story in Case 1 above.

	1	2	3	4	5	6	7	
Likely	○	○	○	○	○	○	○	Unlikely

(ix) The probability that my peers would undertake the same action as the credit manager in the story in Case 1 above is:

	1	2	3	4	5	6	7	
High	○	○	○	○	○	○	○	Low

1.2) Case 2

A LOCAL MANAGER of a company eager to do more business abroad has been requested to make an undisclosed cash payment to a local distributor in a foreign country. The payment is requested as a "goodwill gesture" that will allow the local company to introduce its products in that foreign country. This practice is considered normal business procedure in that country, and no laws prohibit such a payment there.

Action: THE LOCAL MANAGER verbally authorises the payment.

(i) Record your judgement of the ethicality of this scenario using the scale below:

	1	2	3	4	5	6	7	
Fair	○	○	○	○	○	○	○	Unfair
Just	○	○	○	○	○	○	○	Unjust
Morally right	○	○	○	○	○	○	○	Not morally right
Acceptable to my family	○	○	○	○	○	○	○	Unacceptable to my family
Culturally acceptable	○	○	○	○	○	○	○	Culturally unacceptable
Traditionally acceptable	○	○	○	○	○	○	○	Traditionally unacceptable
Does not violate an unspoken promise	○	○	○	○	○	○	○	Violates an unspoken promise
Does not violate an unwritten contract	○	○	○	○	○	○	○	Violates an unwritten contract.

(ii) The action described in Case 2 above is:

	1	2	3	4	5	6	7	
Ethical	○	○	○	○	○	○	○	Unethical

(iii) Based on the story in Case 2 above, what is your opinion of the following statements?

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
The situation above involves an ethical problem.	○	○	○	○	○	○	○
The situation above contains an ethical issue.	○	○	○	○	○	○	○
This story contains ethical implications.	○	○	○	○	○	○	○
This story has an ethical content.	○	○	○	○	○	○	○
I consider the action in this story as an unethical behaviour.	○	○	○	○	○	○	○

(iv) If I had the opportunity, I would perform the behavior of the local manager described in the story in Case 2 above.

	1	2	3	4	5	6	7	
Likely	○	○	○	○	○	○	○	Unlikely

(v) If I were actually in this situation, I would most likely undertake the same action as the local manager.

	1	2	3	4	5	6	7	
Likely	○	○	○	○	○	○	○	Unlikely

(vi) I would be likely to take the same action as the local manager in this situation.

	1	2	3	4	5	6	7	
Likely	○	○	○	○	○	○	○	Unlikely

(vii) I would act in the same manner as the local manager in the story in Case 2 above.

	1	2	3	4	5	6	7	
Likely	○	○	○	○	○	○	○	Unlikely

(viii) The probability that I would undertake the same action as the local manager in the story in Case 2 above is:

	1	2	3	4	5	6	7	
High	○	○	○	○	○	○	○	Low

(ix) The probability that my peers would undertake the same action as the local manager in the story in Case 2 above is:

	1	2	3	4	5	6	7	
High	○	○	○	○	○	○	○	Low

1.3) Case 3

The CEO of a company requests that THE CONTROLLER reduces the estimate for bad debts in order to increase reported income, arguing that this is a common practice in the industry when times are hard. Historically, the company made very conservative allowances for doubtful accounts, even in bad years. The CEO's request would make it one of the least conservative in the industry.

Action: THE CONTROLLER makes the adjustment.

(i) Record your judgement of the ethicality of this scenario using the scale below:

	1	2	3	4	5	6	7	
Fair	○	○	○	○	○	○	○	Unfair
Just	○	○	○	○	○	○	○	Unjust
Morally right	○	○	○	○	○	○	○	Not morally right
Acceptable to my family	○	○	○	○	○	○	○	Unacceptable to my family
Culturally acceptable	○	○	○	○	○	○	○	Culturally unacceptable
Traditionally acceptable	○	○	○	○	○	○	○	Traditionally unacceptable
Does not violate an unspoken promise	○	○	○	○	○	○	○	Violates an unspoken promise
Does not violate an unwritten contract	○	○	○	○	○	○	○	Violates an unwritten contract.

(ii) The action described in Case 3 above is:

	1	2	3	4	5	6	7	
Ethical	○	○	○	○	○	○	○	Unethical

(iii) Based on the story in Case 3 above, what is your opinion of the following statements?

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
The situation above involves an ethical problem.	○	○	○	○	○	○	○
The situation above contains an ethical issue.	○	○	○	○	○	○	○
This story contains ethical implications.	○	○	○	○	○	○	○
This story has an ethical content.	○	○	○	○	○	○	○
I consider the action in this story as an unethical behaviour.	○	○	○	○	○	○	○

(iv) If I had the opportunity, I would perform the behaviour of the controller described in the story in Case 3 above.

	1	2	3	4	5	6	7	
Likely	○	○	○	○	○	○	○	Unlikely

(v) If I were actually in this situation, I would most likely undertake the same action as the controller.

	1	2	3	4	5	6	7	
Likely	○	○	○	○	○	○	○	Unlikely

(vi) I would be likely to take the same action as the controller in this situation.

	1	2	3	4	5	6	7	
Likely	○	○	○	○	○	○	○	Unlikely

(vii) I would act in the same manner as the controller in the story in Case 3 above.

	1	2	3	4	5	6	7	
Likely	○	○	○	○	○	○	○	Unlikely

(viii) The probability that I would undertake the same action as the controller in the story in Case 3 above is:

	1	2	3	4	5	6	7	
High	○	○	○	○	○	○	○	Low

(ix) The probability that my peers would undertake the same action as the controller in the story in Case 3 above is:

	1	2	3	4	5	6	7	
High	○	○	○	○	○	○	○	Low

Section 2: Religiosity

2.1) Intrinsic Religiosity

Please read each statement below carefully and please choose the response which most closely corresponds to the way you feel.

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
I enjoy reading about my religion.	○	○	○	○	○	○	○
It does not matter much what I believe in so long as I am good.	○	○	○	○	○	○	○
It is important to me to spend time in private thought and prayer.	○	○	○	○	○	○	○
I have often had a strong sense of God's presence.	○	○	○	○	○	○	○
I try hard to live all my life according to my religious beliefs.	○	○	○	○	○	○	○
Although I am religious, I do not let it affect my daily life.	○	○	○	○	○	○	○
My whole approach to life is based on my religion.	○	○	○	○	○	○	○
Although I believe in my religion, many other things are more important in life.	○	○	○	○	○	○	○

2. 2) Extrinsic religiosity

Please read each statement below carefully and please choose the response which most closely corresponds to the way you feel.

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
I go to religious services because it helps me to make friends.	○	○	○	○	○	○	○
I pray mainly to gain relief and protection.	○	○	○	○	○	○	○
What religion offers me most is comfort in times of trouble and sorrow.	○	○	○	○	○	○	○
Prayer is for peace and happiness.	○	○	○	○	○	○	○
I go to religious services mostly to spend time with my friends	○	○	○	○	○	○	○
I go to religious services because I enjoy seeing people I know there.	○	○	○	○	○	○	○
I go to religious services to broaden my business networks.	○	○	○	○	○	○	○

2.3) Religiosity and study

Please read each statement below carefully and please choose the response which most closely corresponds to the way you feel about your study at your current university.

	1	2	3	4	5	6	7
	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
God played a role in the development of my university study.	○	○	○	○	○	○	○
God is present in my university study.	○	○	○	○	○	○	○
My university study is a reflection of God's will.	○	○	○	○	○	○	○
My university study is an expression of my religiousness.	○	○	○	○	○	○	○
My university study is consistent with my religious indentity.	○	○	○	○	○	○	○
I experience God through my university study.	○	○	○	○	○	○	○
My university study reflects my image of what God wants for me.	○	○	○	○	○	○	○
My university study is influenced by God's action in my life	○	○	○	○	○	○	○
My university study represents the holy work of God.	○	○	○	○	○	○	○
My university study represents God's presence in my life.	○	○	○	○	○	○	○
My actions surrounding my university study follow the holy scriptures of my religion and what it teaches.	○	○	○	○	○	○	○
My actions surrounding my university study follow the teachings of my religion.	○	○	○	○	○	○	○

Section 3: Locus of control

3.1) Internal Locus of control

Please read each statement below carefully and please choose the response which most closely corresponds to the way you feel.

	1	2	3	4	5	6	7
	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
People's misfortunes result from the mistakes they make.	○	○	○	○	○	○	○
One of the major reasons why we have wars is because people don't take enough interest in politics.	○	○	○	○	○	○	○
In the long run, people get the respect they deserve in this world.	○	○	○	○	○	○	○
The idea that teachers are unfair to students is nonsense.	○	○	○	○	○	○	○
Without the right breaks, one cannot be an effective leader.	○	○	○	○	○	○	○
People who can't get others to like them don't understand how to get along with others.	○	○	○	○	○	○	○
Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.	○	○	○	○	○	○	○
In the case of the well prepared student, there is rarely, if ever, such a thing as an unfair test.	○	○	○	○	○	○	○
Becoming a success is a matter of hard work; luck has little or nothing to do with it.	○	○	○	○	○	○	○
The average citizen can have an influence in government decisions.	○	○	○	○	○	○	○
When I make plans, I am almost certain that I can make them work.	○	○	○	○	○	○	○
In my case, getting what I want has little or nothing to do with luck.	○	○	○	○	○	○	○
What happens to me is my own doing.	○	○	○	○	○	○	○

3.2) External Locus of control

Please read each statement below carefully and please choose the response which most closely corresponds to the way you feel.

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
Many of the unhappy things in people's lives are partly due to bad luck.	○	○	○	○	○	○	○
There will always be wars, no matter how hard people try to prevent them.	○	○	○	○	○	○	○
Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.	○	○	○	○	○	○	○
Most students don't realize the extent to which their grades are influenced by accidental happenings.	○	○	○	○	○	○	○
Capable people who fail to became leaders have not taken advantage of their opportunities.	○	○	○	○	○	○	○
No matter how hard you try, some people just don't like you.	○	○	○	○	○	○	○
I have often found that what is going to happen will happen.	○	○	○	○	○	○	○
Many times exam questions tend to be so unrelated to course work that studying is really useless.	○	○	○	○	○	○	○
Getting a good job depends mainly on being in the right place at the right time.	○	○	○	○	○	○	○
This world is run by the few people in power, and there is not much the little guy can do about it.	○	○	○	○	○	○	○
It is not always wise to plan too far ahead because many things turn out to be a matter of luck anyway.	○	○	○	○	○	○	○
Many times we might just as well decide what to do by flipping a coin.	○	○	○	○	○	○	○
Sometimes I feel that I don't have enough control over the direction my life is taking.	○	○	○	○	○	○	○

Section 4: Peers and Family influence

4.1) Peers influence

Please read each statement below carefully and please choose the response which most closely corresponds to the way you feel.

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
I often consult my friends for help to choose the best available alternatives from my decision.	○	○	○	○	○	○	○
To make sure I make the right decision, I often observe what my friends are deciding.	○	○	○	○	○	○	○
If I have a little experience with an ethical problem, I often ask my friends about the problem.	○	○	○	○	○	○	○
I frequently gather information from my friends about choices before I make a decision.	○	○	○	○	○	○	○
If I want to make a decision like my friends, I often try to make the same decision that they make.	○	○	○	○	○	○	○
It is important that my friends like the decision I make.	○	○	○	○	○	○	○
I rarely make a decision until I am sure my friends approve it.	○	○	○	○	○	○	○

I often identify with my friends by making the same decision as they make.	○	○	○	○	○	○	○
When making a decision, I make one that I think my friends will approve of.	○	○	○	○	○	○	○
I like to know what/ which decision make good impressions on my friends.	○	○	○	○	○	○	○

4.2) Family influence
Please read each statement below carefully and please choose the response which most closely corresponds to the way you feel.

	1 Strongly disagree	2 Disagree	3 Somewhat disagree	4 Neither agree nor disagree	5 Somewhat agree	6 Agree	7 Strongly agree
I often consult my family members for help to choose the best available alternatives from my decision.	○	○	○	○	○	○	○
To make sure I make the right decision, I often observe what my family members are deciding.	○	○	○	○	○	○	○
If I have a little experience with an ethical problem, I often ask my family members about the problem.	○	○	○	○	○	○	○
I frequently gather information from my family members about choices before I make a decision.	○	○	○	○	○	○	○
If I want to make a decision as my family members, I often try to make the same decision as they make.	○	○	○	○	○	○	○
It is important that my family members like the decision I make.	○	○	○	○	○	○	○
I rarely make a decision until I am sure my family members approve it.	○	○	○	○	○	○	○
I often identify with my family members by making the same decision as they make.	○	○	○	○	○	○	○
When making a decision, I make one that I think my family members will approve of.	○	○	○	○	○	○	○
I like to know what/ which decision make good impressions on my family members.	○	○	○	○	○	○	○

Section 5: Demographic Profiles

5.1) Gender

- ○ Male
- ○ Female

5.2) Age group

- ○ Less than 17 year old
- ○ 17 to less than 21 year old
- ○ 21-25 year old
- ○ Older than 25 years

5.3) Educational background

(i) What is the name of your university that you are currently attending?

(ii) What is your study major?

- ○ Accounting
- ○ Islamic Accounting
- ○ Other (please specify)

(iii) At which year you are currently studying at this university?

- ○ Year 1
- ○ Year 2
- ○ Year 3
- ○ Year 4

(iv) Are you undertaking or have undertaken a business ethics course at this university?

- ○ Yes
- ○ No

Appendix A2 Questionnaire survey in Indonesian

PENJELASAN BAGI RESPONDEN PENELITIAN

Permohonan keikutsertaan
Anda dimohon untuk ikut serta dalam penelitian yang berjudul *Pengaruh Religiusitas terhadap Pengambilan Keputusan Etis: Kajian pada Mahasiswa Akuntansi di Indonesia*. Penelitian ini dilakukan oleh Bp Zaki Mubarak, staf pengajar IAIN Antasari Banjarmasin yang saat ini berstatus sebagai mahasiswa program DBA (Doctor of Business Administration) College of Business, Victoria University Melbourne Australia, di bawah bimbingan Dr. Michelle Fong dari College of Business, Victoria University Melbourne.

Penjelasan tentang penelitian
Penelitian ini bertujuan untuk mengetahui sejauh mana pengaruh religiusitas dan variable-variabel lainnya terhadap pengambilan keputusan etis. Penelitian ini menggunakan metode kuantitatif dimana data yang digunakan diperoleh dari survei terhadap mahasiswa S1 akuntansi yang berasal dari berbagai perguruan tinggi di Indonesia.

Anda akan diminta untuk melakukan apa?
Sebagai mahasiswa akuntansi, pandangan anda akan sangat bernilai bagi penelitian ini. Keikutsertaan anda sebagai responden akan menjadi sumbangsih dalam pengembangan pendidikan akuntansi untuk melahirkan akuntan yang taat etika. Hasil penelitian ini akan diolah dan disampaikan pada kepada para pemangku kepentingan di bidang pendidikan akuntansi sebagai bahan pertimbangan dalam membangun sistem pendidikan akuntansi yang lebih baik.

Bagaimana informasi yang Anda berikan akan digunakan?
Informasi yang anda berikan sebagai responden akan dianalisis dan digunakan untuk menyelesaikan disertasi doktor. Data mentah yang dikumpulkan dari seluruh responden akan disimpan di suatu tempat yang aman dan hanya akan bisa ditampilkan dan diakses oleh peneliti dan pembimbing penelitian. Informasi yang anda berikan akan dijaga kerahasiaannya dari awal hingga akhir penelitian. Informasi tersebut juga kemungkinan akan digunakan sebagai bahan publikasi ilmiah namun dalam hal ini responden tidak akan disebutkan namanya.

Apa risiko dari keikutsertaan Anda dalam penelitian ini?
Tidak ada risiko atau dampak buruk yang diakibatkan dari keikutsertaan dalam penelitian ini. Keikutsertaan anda dalam survei dengan kuesioner ini bersifat suka rela. Jika anda berkeinginan untuk tidak ikut serta atau tidak menjawab pertanyaan tertentu, anda bisa melakukannya, dan ini tidak akan berpengaruh terhadap Anda, baik secara langsung maupun tidak langsung.

Siapa yang melakukan penelitian ini?
Penelitiani ini dilaksanakan melalui College of Business, Victoria University, Melbourne, Australia. Susunan peneliti adalah sebagai berikut:
Peneliti Utama : Dr. Michelle Fong
Mahasiswa Peneliti : Bp. Zaki Mubarak

Segala pertanyaan mengenai keikutsertaan anda dalam penelitian ini bisa ditujukan kepada Mahasiswa Peneliti: Bp. Zaki Mubarak dengan nomor telepon +61 416 680 234 atau alamat email: zaki.mubarak@live.vu.edu.au; atau kepada Peneliti Utama: Dr. Michelle Fong dengan nomor telepon +61 3 9919 4507 atau alamat email: michelle.fong@vu.edu.au. Keikutsertaan dan waktu yang anda luangkan pada penelitian ini sangat kami hargai. Terima kasih.

Zaki Mubarak
Kandidat DBA
Jika ada pertanyaan atau keluhan mengenai tata cara penelitian ini, anda bisa menghubungi the Ethics & Biosafety Coordinator, Victoria University Human Research Ethics Committee, Victoria University, PO Box 14428, Melbourne, VIC 8001 phone (03) 99194148

PERSETUJUAN RESPONDEN PENELITIAN

Penjelasan bagi responden
Kami meminta anda untuk ikut serta dalam penelitian berjudul *Pengaruh Religiusitas pada Pengambilan Keputusan Etis: Kajian pada Mahasiswa Akuntansi Indonesia*. Keterangan lengkap mengenai penelitian dan keterlibatan anda dapat dilihat pada lembar yang berjudul *Informasi untuk Responden Penelitian*.

Pengesahan oleh subjek
Saya menyatakan bahwa saya sudah berusia 18 tahun atau lebih dan saya secara suka rela memberikan persetujuan untuk ikut serta dalam penelitian yang berjudul *Pengaruh Religiusitas terhadap Pengambilan Keputusan Etis: Kajian pada Mahasiswa Akuntansi Indonesia*. yang dilaksanakan di Victoria University oleh Bp. Zaki Mubarak.

Saya menyatakan bahwa tujuan dari penelitian ini, berikut segala risiko dan keamanan yang berkaitan dengan prosedur yang harus ditempuh dalam penelitian ini, telah secara jelas diterangkan pada saya dan saya secara sadar menyetujui untuk ikut serta terlibat dalam prosedur survei.

Saya menyatakan bahwa saya berhak untuk melakukan tanya-jawab dan saya memahami bahwa saya bisa membatalkan keikutsertaan saya dalam penelitian ini setiap saat tanpa menimbulkan akibat apapun.

Saya telah memahami bahwa informasi yang saya berikan akan disimpan secara rahasia dan data mentah yang dikumpulkan akan disimpan pada suatu tempat yang aman dan hanya bisa ditampilkan dan diakses oleh peneliti dan pembimbing penelitian. Saya juga telah memahami bahwa semua bahan yang disajikan dalam publikasi yang berasal dari penelitian ini tidak akan menyebutkan nama.

Saya telah membaca dan memahami formulir persetujuan mengenai keinginan dan kehendak saya untuk ikut serta dalam penelitian ini.

- ❍ Ya
- ❍ Tidak

Q1. Apakah ini pertama kalinya anda ikut serta dalam penelitian ini?

❍ Ya
❍ Tidak

Bagian 1: Skenario Kasus

Pada bagian ini, disajikan tiga skenario kasus yang berkaitan dengan permasalahan etika di dunia bisnis. Berilah nilai dengan memilih angka dari 1 sampai 7 di bawah setiap skenario kasus untuk menjawab masing-masing soal.

1.1. Kasus 1

Sebuah perusahaan *start-up* (baru berdiri) yang memiliki prospek yang baik mengajukan pinjaman ke sebuah bank. **Manajer Kredit** bank tersebut berteman dan sering bermain golf bersama pemilik perusahaan. Riwayat singkat kredit perusahaan baru ini secara umum tidak memenuhi persyaratan peminjaman bank.

Tindakan: **Manajer Kredit** merekomendasikan persetujuan pemberian pinjaman.

Q2. Berikan penilaian (*judgment*) anda terhadap tingkat etika dari kejadian di atas dengan menggunakan skala berikut:

		1	2	3	4	5	6	7	
Q2a	Wajar	❍	❍	❍	❍	❍	❍	❍	Tidak wajar
Q2b	Adil	❍	❍	❍	❍	❍	❍	❍	Tidak adil
Q2c	Secara moral benar	❍	❍	❍	❍	❍	❍	❍	Secara moral tidak benar
Q2d	Dapat diterima di keluarga saya	❍	❍	❍	❍	❍	❍	❍	Tidak dapat diterima di keluarga saya
Q2e	Dapat diterima secara budaya	❍	❍	❍	❍	❍	❍	❍	Tidak dapat diterima secara budaya
Q2f	Secara tradisional dapat diterima.	❍	❍	❍	❍	❍	❍	❍	Secara tradisional tidak dapat diterima
Q2g	Tidak melanggar janji yang tak diucapkan	❍	❍	❍	❍	❍	❍	❍	Melanggar janji yang tak diucapkan
Q2h	Tidak melanggar perjanjian tak tertulis	❍	❍	❍	❍	❍	❍	❍	Melanggar perjanjian tak tertulis

Q3.Tindakan **Manajer Kredit** sebagaimana digambarkan pada Kasus 1 di atas termasuk:

	1	2	3	4	5	6	7	
Etis	❍	❍	❍	❍	❍	❍	❍	Tidak etis

Q4. Berdasarkan cerita tentang **Manajer Kredit** pada Kasus 1 di atas, bagaimana pendapat anda tentang pernyataan- pernyataan berikut ini?

		1 Sangat tidak setuju	2 Tidak setuju	3 Kurang setuju	4 Netral	5 Agak setuju	6 Setuju	7 Sangat setuju
Q4a	Situasi di atas melibatkan masalah etika.	❍	❍	❍	❍	❍	❍	❍
Q4b	Situasi di atas mengandung isu etika.	❍	❍	❍	❍	❍	❍	❍
Q4c	Cerita di atas berdampak secara etika.	❍	❍	❍	❍	❍	❍	❍
Q4d	Cerita di atas memiliki muatan etika.	❍	❍	❍	❍	❍	❍	❍
Q4e	Saya menganggap tindakan di dalam cerita di atas sebagai perilaku yang tidak etis.	❍	❍	❍	❍	❍	❍	❍

Q5. Jika saya memiliki kesempatan, saya akan berperilaku sebagaimana **Manajer Kredit** sebagaimana digambarkan dalam cerita pada Kasus 1 di atas.

	1	2	3	4	5	6	7	
Mungkin	❍	❍	❍	❍	❍	❍	❍	Tidak Mungkin

Q6. Jika saya benar-benar berada dalam situasi seperti di atas, saya kemungkinan besar akan melakukan tindakan yang sama seperti **Manajer Kredit** tersebut.

	1	2	3	4	5	6	7	
Mungkin	❍	❍	❍	❍	❍	❍	❍	Tidak mungkin

Q7. Saya kemungkinan akan mengambil tindakan yang sama dengan **Manajer Kredit** dalam situasi tersebut.

	1	2	3	4	5	6	7	
Mungkin	❍	❍	❍	❍	❍	❍	❍	Tidak mungkin

Q8. Saya akan bertindak dengan cara yang sama sebagaimana **Manajer Kredit** dalam cerita pada Kasus 1 di atas.

	1	2	3	4	5	6	7	
Mungkin	❍	❍	❍	❍	❍	❍	❍	Tidak mungkin

Q9. Kemungkinan saya akan mengambil tindakan yang sama dengan **Manajer Kredit** dalam cerita pada Kasus 1 di atas adalah:

	1	2	3	4	5	6	7	
Tinggi	❍	❍	❍	❍	❍	❍	❍	Rendah

Q10. Kemungkinan teman saya akan mengambil tindakan yang sama dengan **Manajer Kredit** dalam cerita pada Kasus 1 di atas adalah:

	1	2	3	4	5	6	7	
Tinggi	❍	❍	❍	❍	❍	❍	❍	Rendah

1.2) Kasus 2

Seorang **Manajer Lokal** dari sebuah perusahaan yang ingin mengembangkan bisnis di luar negeri telah diminta untuk melakukan pembayaran tunai secara rahasia (*undisclosed cash payment*) pada salah satu distributor lokal di suatu negara. Pembayaran tersebut diminta sebagai 'pertanda niat baik' yang akan memungkinkan perusahaan lokal tersebut untuk memperkenalkan produk-produknya di negara tersebut. Kejadian semacam ini dianggap sebagai suatu prosedur bisnis yang wajar di negara tersebut dan tidak ada aturan hukum yang melarang cara-cara pembayaran seperti itu.

Tindakan: **Manajer Lokal** secara lisan menyetujui pembayaran itu.

Q11. Berikan penilaian (*judgment*) anda terhadap tingkat etika dari kejadian di atas dengan menggunakan skala berikut:

		1	2	3	4	5	6	7	
Q11a	Wajar	❍	❍	❍	❍	❍	❍	❍	Tidak wajar
Q11b	Adil	❍	❍	❍	❍	❍	❍	❍	Tidak adil
Q11c	Secara moral benar	❍	❍	❍	❍	❍	❍	❍	Secara moral tidak benar
Q12d	Dapat diterima di keluarga saya	❍	❍	❍	❍	❍	❍	❍	Tidak dapat diterima di keluarga saya
Q12e	Dapat diterima secara budaya	❍	❍	❍	❍	❍	❍	❍	Tidak dapat diterima secara budaya
Q12f	Secara tradisional dapat diterima	❍	❍	❍	❍	❍	❍	❍	Secara tradisional tidak dapat diterima
Q12g	Tidak melanggar janji yang tak diucapkan	❍	❍	❍	❍	❍	❍	❍	Melanggar janji yang tak diucapkan
Q12h	Tidak melanggar perjanjian tak tertulis	❍	❍	❍	❍	❍	❍	❍	Melanggar perjanjian tak tertulis

Q13. Tindakan **Manajer Lokal** yang digambarkan pada Kasus 2 di atas termasuk:

	1	2	3	4	5	6	7	
Etis	❍	❍	❍	❍	❍	❍	❍	Tidak etis

Q14. Berdasarkan cerita tentang **Manajer Lokal** pada Kasus 2 di atas, bagaimanakah pendapat anda mengenai pernyataan-pernyataan berikut ini?

		1 Sangat tidak setuju	2 Tidak setuju	3 Kurang setuju	4 Netral	5 Agak setuju	6 Setuju	7 Sangat setuju
Q14a	Situasi di atas melibatkan masalah etika.	❍	❍	❍	❍	❍	❍	❍
Q14b	Situasi di atas mengandung isu etika.	❍	❍	❍	❍	❍	❍	❍
Q14c	Cerita di atas berdampak secara etika.	❍	❍	❍	❍	❍	❍	❍
Q14d	Cerita di atas memiliki muatan etika.	❍	❍	❍	❍	❍	❍	❍
Q14e	Saya menganggap tindakan di dalam cerita di atas sebagai perilaku yang tidak etis.	❍	❍	❍	❍	❍	❍	❍

Q15. Jika saya memiliki kesempatan, saya akan berperilaku sebagaimana **Manajer Lokal** yang digambarkan dalam cerita di Kasus 2 di atas.

	1	2	3	4	5	6	7	
Mungkin	❍	❍	❍	❍	❍	❍	❍	Tidak Mungkin

Q16. Jika saya benar-benar berada dalam situasi seperti di atas, saya kemungkinan besar akan melakukan tindakan yang sama seperti **Manajer Lokal** tersebut.

	1	2	3	4	5	6	7	
Mungkin	❍	❍	❍	❍	❍	❍	❍	Tidak Mungkin

Q17. Saya kemungkinan akan mengambil tindakan yang sama dengan **Manajer Lokal** dalam situasi tersebut.

	1	2	3	4	5	6	7	
Mungkin	❍	❍	❍	❍	❍	❍	❍	Tidak Mungkin

Q18. Saya akan bertindak dengan cara yang sama sebagaimana **Manajer Lokal** dalam cerita pada Kasus 2 di atas.

	1	2	3	4	5	6	7	
Mungkin	❍	❍	❍	❍	❍	❍	❍	Tidak Mungkin

Q19. Kemungkinan saya akan mengambil tindakan yang sama dengan **Manajer Lokal** dalam cerita pada Kasus 2 di atas adalah:

	1	2	3	4	5	6	7	
Tinggi	❍	❍	❍	❍	❍	❍	❍	Rendah

Q20. Kemungkinan teman saya akan mengambil tindakan yang sama dengan **Manajer Lokal** dalam cerita pada Kasus 2 di atas adalah:

	1	2	3	4	5	6	7	
Tinggi	❍	❍	❍	❍	❍	❍	❍	Rendah

1.3) Kasus 3

Direktur Utama suatu perusahaan meminta **Controller** menurunkan taksiran hutang tak tertagih agar dapat meningkatkan laba yang dilaporkan dengan alasan hal ini adalah tindakan yang umum dalam industri pada situasi yang sulit. Dalam sejarahnya, perusahaan tersebut selalu bersikap sangat konservatif (hati-hati) dalam mengambil keputusan berkaitan dengan rekening-rekening yang meragukan, bahkan di masa-masa yang sulit sekalipun. Permintaan **Direktur Utama** ini akan membuat perusahaan tersebut menjadi perusahaan yang paling tidak konservatif dalam industri terkait.

Tindakan: **Controller** membuat penyesuaian (*adjustment*) untuk memenuhi permintaan **Direktur Utama**.

Q21. Berikan penilaian (*judgment*) anda terhadap tingkat etika kejadian di atas dengan menggunakan skala berikut:

		1	2	3	4	5	6	7	
Q21a	Wajar	❍	❍	❍	❍	❍	❍	❍	Tidak wajar
Q21b	Adil	❍	❍	❍	❍	❍	❍	❍	Tidak adil
Q21c	Secara moral benar	❍	❍	❍	❍	❍	❍	❍	Secara moral tidak benar
Q21d	Dapat diterima di keluarga saya	❍	❍	❍	❍	❍	❍	❍	Tidak dapat diterima di keluarga saya
Q21e	Dapat diterima secara budaya	❍	❍	❍	❍	❍	❍	❍	Tidak dapat diterima secara budaya
Q21f	Secara tradisional dapat diterima	❍	❍	❍	❍	❍	❍	❍	Secara tradisional tidak dapat diterima
Q21g	Tidak melanggar janji yang tak diucapkan	❍	❍	❍	❍	❍	❍	❍	Melanggar janji yang tak diucapkan
Q21h	Tidak melanggar perjanjian tak tertulis	❍	❍	❍	❍	❍	❍	❍	Melanggar perjanjian tak tertulis

Q22. Tindakan **Controller** yang digambarkan pada Kasus 3 di atas termasuk:

	1	2	3	4	5	6	7	
Etis	❍	❍	❍	❍	❍	❍	❍	Tidak etis

Q23. Berdasarkan cerita tentang **Controller** pada Kasus 3 di atas, bagaimanakah pendapat anda mengenai pernyataan-pernyataan berikut ini?

		1	2	3	4	5	6	7
		Sangat tidak setuju	Tidak setuju	Kurang setuju	Netral	Agak setuju	Setuju	Sangat setuju
Q23a	Situasi di atas melibatkan masalah etika.	❍	❍	❍	❍	❍	❍	❍
Q23b	Situasi di atas mengandung isu etika.	❍	❍	❍	❍	❍	❍	❍
Q23c	Cerita di atas berdampak secara etika.	❍	❍	❍	❍	❍	❍	❍
Q23d	Cerita di atas memiliki muatan etika.	❍	❍	❍	❍	❍	❍	❍
Q23e	Saya menganggap tindakan di dalam cerita di atas sebagai perilaku yang tidak etis.	❍	❍	❍	❍	❍	❍	❍

Q24. Jika saya memiliki kesempatan, saya akan berperilaku sebagaimana **Controller** yang digambarkan dalam cerita di Kasus 3 di atas.

	1	2	3	4	5	6	7	
Mungkin	❍	❍	❍	❍	❍	❍	❍	Tidak Mungkin

Q25. Jika saya benar-benar berada dalam situasi seperti di atas, saya kemungkinan besar akan melakukan tindakan yang sama seperti **Controller** tersebut.

	1	2	3	4	5	6	7	
Mungkin	❍	❍	❍	❍	❍	❍	❍	Tidak Mungkin

Q26. Saya kemungkinan akan mengambil tindakan yang sama dengan **Controller** dalam situasi tersebut.

	1	2	3	4	5	6	7	
Mungkin	❍	❍	❍	❍	❍	❍	❍	Tidak mungkin

Q27. Saya akan bertindak dengan cara yang sama sebagaimana **Controller** dalam cerita di Kasus 3 di atas.

	1	2	3	4	5	6	7	
Mungkin	❍	❍	❍	❍	❍	❍	❍	Tidak mungkin

Q28.Kemungkinan saya akan mengambil tindakan yang sama dengan **Controller** dalam cerita pada Kasus 3 di atas adalah:

	1	2	3	4	5	6	7	
Tinggi	❍	❍	❍	❍	❍	❍	❍	Rendah

Q29. Kemungkinan teman saya akan mengambil tindakan yang sama dengan **Controller** dalam cerita pada Kasus 3 di atas adalah:

	1	2	3	4	5	6	7	
Tinggi	❍	❍	❍	❍	❍	❍	❍	Rendah

Bagian 2: Religiusitas

2.1) Religiusitas intrinsik

Q30. Mohon dibaca setiap pernyataan di bawah ini dengan cermat dan mohon dipilih jawaban yang paling sesuai dengan pendapat anda.

		1	2	3	4	5	6	7
		Sangat tidak setuju	Tidak setuju	Kurang setuju	Netral	Agak setuju	Setuju	Sangat setuju
Q30a	Saya suka membaca bacaan mengenai agama saya.	❍	❍	❍	❍	❍	❍	❍
Q30b	Tidak begitu menjadi masalah mengenai apa yang saya percayai selama saya baik.	❍	❍	❍	❍	❍	❍	❍
Q30c	Meluangkan waktu untuk berdoa dan merenung adalah sesuatu yang penting bagi saya.	❍	❍	❍	❍	❍	❍	❍
Q30d	Saya seringkali benar-benar merasakan kehadiran Tuhan.	❍	❍	❍	❍	❍	❍	❍
Q30e	Saya berusaha keras menjalani hidup sesuai tuntunan agama.	❍	❍	❍	❍	❍	❍	❍
Q30f	Meskipun saya agamis (religius), saya tidak membiarkan hal ini mempengaruhi kehidupan sehari-hari saya.	❍	❍	❍	❍	❍	❍	❍
Q30g	Secara keseluruhan pendekatan yang saya lakukan dalam menjalani kehidupan ini berdasarkan pada agama.	❍	❍	❍	❍	❍	❍	❍
Q30h	Meskipun saya mempercayai ajaran-ajaran agama saya, masih banyak hal lain yang lebih penting dalam kehidupan ini.	❍	❍	❍	❍	❍	❍	❍

2. 2) Religiusitas ekstrinsik

Q31. Mohon dibaca setiap pernyataan di bawah dengan cermat dan mohon dipilih jawaban yang paling sesuai dengan pendapat anda.

		1	2	3	4	5	6	7
		Sangat tidak setuju	Tidak setuju	Kurang setuju	Netral	Agak setuju	Setuju	Sangat setuju
Q31a	Saya suka menghadiri kegiatan keagamaan karena saya bisa mendapatkan banyak teman di sana.	❍	❍	❍	❍	❍	❍	❍
Q31b	Tujuan utama saya berdo'a adalah untuk mendapatkan penyelesaian masalah dan perlindungan.	❍	❍	❍	❍	❍	❍	❍
Q31c	Manfaat agama bagi saya terutama adalah memberikan kenyamanan ketika saya berada dalam kesulitan dan kesusahan.	❍	❍	❍	❍	❍	❍	❍
Q31d	Tujuan berdoa/beribadah adalah untuk kedamaian dan kebahagiaan.	❍	❍	❍	❍	❍	❍	❍
Q31e	Saya menghadiri kegiatan keagamaan terutama untuk melewatkan waktu bersama teman.	❍	❍	❍	❍	❍	❍	❍
Q31f	Saya mendatangi kegiatan keagamaan karena saya senang bertemu dengan orang-orang yang saya kenal disana.	❍	❍	❍	❍	❍	❍	❍
Q31g	Saya menghadiri kegiatan keagamaan untuk memperluas jaringan bisnis saya.	❍	❍	❍	❍	❍	❍	❍

2. 3) Religiusitas dan pembelajaran

Q32. Mohon dibaca setiap pernyataan di bawah ini dengan cermat dan mohon dipilih jawaban yang paling sesuai dengan pendapat anda.

		1	2	3	4	5	6	7
		Sangat tidak setuju	Tidak setuju	Kurang setuju	Netral	Agak setuju	Setuju	Sangat setuju
Q32a	Tuhan berperan dalam kemajuan studi saya di perguruan tinggi.	❍	❍	❍	❍	❍	❍	❍
Q32b	Tuhan selalu hadir dalam studi saya di perguruan tinggi.	❍	❍	❍	❍	❍	❍	❍
Q32c	Studi saya di perguruan tinggi adalah cerminan kehendak Tuhan.	❍	❍	❍	❍	❍	❍	❍
Q32d	Studi saya di perguruan tinggi adalah perwujudan dari religiusitas saya.	❍	❍	❍	❍	❍	❍	❍
Q32e	Studi saya di perguruan tinggi sesuai dengan identitas keagamaan saya.	❍	❍	❍	❍	❍	❍	❍
Q32f	Saya mengenal dan memahami Tuhan dari studi saya di perguruan tinggi.	❍	❍	❍	❍	❍	❍	❍
Q32g	Studi saya di perguruan tinggi mencerminkan pandangan saya mengenai bagaimana kehendak Tuhan terhadap saya.	❍	❍	❍	❍	❍	❍	❍
Q32h	Studi saya di perguruan tinggi dipengaruhi oleh perbuatan Tuhan dalam hidup saya.	❍	❍	❍	❍	❍	❍	❍
Q32i	Studi saya di perguruan tinggi merepresentasikan kerja suci Tuhan.	❍	❍	❍	❍	❍	❍	❍
Q32j	Studi saya di perguruan tinggi merepresentasikan kehadiran Tuhan dalam hidup saya.	❍	❍	❍	❍	❍	❍	❍
Q32k	Tindakan saya dalam ruang lingkup belajar di perguruan tinggi sesuai aturan-aturan dalam kitab suci agama saya dan ajaran-ajarannya.	❍	❍	❍	❍	❍	❍	❍
Q32l	Tindakan saya dalam ruang lingkup belajar di perguruan tinggi sesuai dengan ajaran-ajaran agama saya.	❍	❍	❍	❍	❍	❍	❍

Bagian 3: Pusat kendali (Locus of Control)

3.1) Pusat kendali internal

Q33. Mohon dibaca setiap pernyataan di bawah dengan cermat dan mohon dipilih jawaban yang paling paling sesuai dengan pendapat anda.

		1	2	3	4	5	6	7
		Sangat tidak setuju	Tidak setuju	Agak tidak setuju	Netral	Agak setuju	Setuju	Sangat setuju
Q33a	Ketidakberuntungan yang dialami seseorang adalah akibat dari kesalahan mereka sendiri.	❍	❍	❍	❍	❍	❍	❍
Q33b	Salah satu alasan utama mengapa perang terjadi adalah karena orang-orang tidak begitu tertarik dengan politik.	❍	❍	❍	❍	❍	❍	❍
Q33c	Dalam jangka panjang, orang-orang akan dihargai sesuai dengan apa yang layak mereka dapatkan di dunia ini.	❍	❍	❍	❍	❍	❍	❍
Q33d	Pandangan bahwa dosen berlaku tidak adil terhadap mahasiswa adalah omong kosong.	❍	❍	❍	❍	❍	❍	❍
Q33e	Tanpa kemampuan mengendalikan, seseorang tidak dapat menjadi pemimpin yang baik.	❍	❍	❍	❍	❍	❍	❍
Q33f	Orang yang tidak mampu menarik orang lain untuk menyukainya, tidak mengerti bagaimana cara hidup bersama dengan orang lain.	❍	❍	❍	❍	❍	❍	❍
Q33g	Percaya pada nasib tidak berlaku bagi saya dalam membuat keputusan untuk mengambil tindakan tertentu.	❍	❍	❍	❍	❍	❍	❍
Q33h	Pada mahasiswa yang sudah mempersiapkan diri dengan baik, jarang sekali berlangsung ujian yang tidak adil.	❍	❍	❍	❍	❍	❍	❍
Q33i	Menjadi sukses adalah masalah kerja keras, faktor keberuntungan hanya sedikit atau bahkan tidak ada kaitannya sama sekali dengannya.	❍	❍	❍	❍	❍	❍	❍
Q33j	Pada umumnya setiap warga negara bisa mempengaruhi pemerintah dalam mengambil keputusan.	❍	❍	❍	❍	❍	❍	❍
Q33k	Jika saya merencanakan sesuatu, saya hampir selalu merasa yakin akan dapat menjalankannya.	❍	❍	❍	❍	❍	❍	❍
Q33l	Bagi saya, keberhasilan mendapatkan apa yang saya inginkan, hanya sedikit atau bahkan tidak ada kaitannya sama sekali dengan faktor keberuntungan.	❍	❍	❍	❍	❍	❍	❍
Q33m	Apa yang terjadi pada diri saya adalah akibat dari perbuatan saya sendiri.	❍	❍	❍	❍	❍	❍	❍

3.2) Pusat kendali eksternal

Q34. Mohon baca setiap pernyataan di bawah dengan cermat dan mohon pilih jawaban yang paling sesuai dengan pendapat anda.

		1	2	3	4	5	6	7
		Sangat tidak setuju	Tidak setuju	Agak tidak setuju	Netral	Agak setuju	Setuju	Sangat setuju
Q34a	Dari banyak kejadian tak menyenangkan dalam kehidupan manusia, sebagian di antaranya disebabkan oleh nasib buruk.	❍	❍	❍	❍	❍	❍	❍
Q34b	Perang akan selalu terjadi, tak peduli seberapa kuat upaya orang-orang untuk mencegahnya.	❍	❍	❍	❍	❍	❍	❍
Q34c	Sayangnya, usaha seseorang seringkali diabaikan begitu saja, tak peduli seberapa keras dia berusaha.	❍	❍	❍	❍	❍	❍	❍
Q34d	Sebagian besar mahasiswa tidak menyadari seberapa besar nilai mereka dipengaruhi kejadian-kejadian yang tak disengaja.	❍	❍	❍	❍	❍	❍	❍
Q34e	Orang yang memiliki kemampuan namun gagal menjadi pemimpin termasuk orang yang tidak memanfaatkan kesempatannya.	❍	❍	❍	❍	❍	❍	❍
Q34f	Tidak peduli seberapa kerasnya anda mencoba, tetap ada beberapa orang yang tidak menyukai anda.	❍	❍	❍	❍	❍	❍	❍
Q34g	Saya sering mengalami bahwa apa yang akan terjadi tetap akan terjadi.	❍	❍	❍	❍	❍	❍	❍
Q34h	Seringkali pertanyaan-pertanyaan dalam ujian tidak ada hubungannya sama sekali dengan materi perkuliahan sehingga pembelajaran menjadi tidak berguna.	❍	❍	❍	❍	❍	❍	❍
Q34i	Untuk mendapatkan pekerjaan yang baik sangat tergantung pada waktu dan kesempatan yang tepat.	❍	❍	❍	❍	❍	❍	❍
Q34j	Dunia ini dikendalikan oleh sedikit orang yang memiliki kekuasan, dan tidak banyak yang bisa dilakukan oleh orang kecil dalam hal ini.	❍	❍	❍	❍	❍	❍	❍
Q34k	Merencanakan sesuatu jauh-jauh hari tidak selalu bijaksana karena banyak hal yang sifatnya keberuntungan semata.	❍	❍	❍	❍	❍	❍	❍
Q34l	Seringkali kita bisa memutuskan apa yang harus kita lakukan hanya dengan melempar koin.	❍	❍	❍	❍	❍	❍	❍
Q34m	Kadangkala saya merasa tidak begitu bisa mengendalikan arah kehidupan saya.	❍	❍	❍	❍	❍	❍	❍

Bagian 4: Pengaruh teman dan keluarga

4.1) Pengaruh teman (Peer influence)

Q35. Mohon dibaca setiap pernyataan di bawah dengan cermat dan mohon dipilih jawaban yang paling sesuai dengan pendapat anda.

		1	2	3	4	5	6	7
		Sangat tidak setuju	Tidak setuju	Kurang setuju	Netral	Agak setuju	Setuju	Sangat setuju
Q35a	Saya sering meminta pendapat teman-teman untuk ikut memilih dari berbagai alternatif terbaik yang berasal dari keputusan saya.	❍	❍	❍	❍	❍	❍	❍
Q35b	Untuk memastikan saya telah mengambil keputusan yang tepat, saya seringkali mengamati apa yang diputuskan teman saya	❍	❍	❍	❍	❍	❍	❍
Q35c	Jika saya hanya punya sedikit pengalaman berkaitan dengan masalah etika, saya sering bertanya kepada teman-teman tentang masalah tersebut	❍	❍	❍	❍	❍	❍	❍
Q35d	Saya seringkali mengumpulkan informasi dari teman-teman tentang pilihan-pilihan sebelum saya membuat keputusan	❍	❍	❍	❍	❍	❍	❍
Q35e	Jika saya ingin mengambil keputusan seperti teman-teman saya, saya seringkali mencoba untuk mengambil keputusan yang sama seperti yang sudah mereka buat.	❍	❍	❍	❍	❍	❍	❍
Q35f	Penting bahwa teman saya menyukai keputusan yang telah saya ambil.	❍	❍	❍	❍	❍	❍	❍
Q35g	Saya jarang mengambil keputusan sebelum saya yakin bahwa teman-teman saya setuju.	❍	❍	❍	❍	❍	❍	❍
Q35h	Saya sering mengidentifikasikan diri dengan teman-teman dengan membuat keputusan yang sama dengan yang mereka buat.	❍	❍	❍	❍	❍	❍	❍
Q35i	Dalam mengambil keputusan, saya akan memilih yang menurut saya teman-teman akan menyetujuinya.	❍	❍	❍	❍	❍	❍	❍
Q35j	Saya selalu ingin tahu keputusan apa/mana yang membuat teman-teman saya terkesan.	❍	❍	❍	❍	❍	❍	❍

4.1) Pengaruh keluarga (Family influence)

Q36. Mohon baca setiap pernyataan di bawah dengan cermat dan mohon pilih jawaban yang paling mendekati apa yang anda rasakan.

		1	2	3	4	5	6	7
		Sangat tidak setuju	Tidak setuju	Kurang setuju	Netral	Agak setuju	Setuju	Sangat setuju
Q36a	Saya sering meminta pendapat anggota keluarga saya untuk ikut memilih dari berbagai alternatif terbaik yang berasal dari keputusan saya.	❍	❍	❍	❍	❍	❍	❍
Q36b	Untuk memastikan saya telah mengambil keputusan yang benar, saya seringkali mengamati apa yang diputuskan oleh anggota keluarga saya.	❍	❍	❍	❍	❍	❍	❍
Q36c	Jika saya kurang memahami masalah etika, saya sering bertanya kepada anggota keluarga saya tentang masalah tersebut.	❍	❍	❍	❍	❍	❍	❍
Q36d	Saya seringkali mengumpulkan informasi dari anggota keluarga saya tentang berbagai pilihan sebelum saya mengambil keputusan.	❍	❍	❍	❍	❍	❍	❍
Q36e	Jika saya hendak mengambil keputusan seperti anggota keluarga saya, saya sering mencoba untuk mengambil keputusan yang sama seperti yang mereka buat.	❍	❍	❍	❍	❍	❍	❍
Q36f	Penting bahwa anggota keluarga saya menyukai keputusan yang saya buat.	❍	❍	❍	❍	❍	❍	❍
Q36g	Saya jarang membuat keputusan sebelum saya merasa yakin bahwa anggota keluarga saya menyetujuinya.	❍	❍	❍	❍	❍	❍	❍
Q36h	Saya sering mengidentifikasikan diri dengan anggota keluarga saya dengan mengambil keputusan yang sama dengan yang mereka buat.	❍	❍	❍	❍	❍	❍	❍
Q36i	Ketika mengambil keputusan, saya akan memilih yang menurut saya akan disetujui oleh anggota keluarga saya	❍	❍	❍	❍	❍	❍	❍
Q36j	Saya selalu ingin tahu keputusan apa/mana yang akan membuat anggota keluarga saya terkesan.	❍	❍	❍	❍	❍	❍	❍

Bagian 5: Profil Demografi

Jawablah pertanyaan-pertanyaan berikut ini!

Q38. Anda adalah seorang?

- ❍ Pria
- ❍ Wanita

Q39. Berapa usia anda saat ini?

- ❍ Kurang dari 17 tahun.
- ❍ Antara 17 tahun sampai dengan kurang dari 21 tahun.
- ❍ 21 tahun sampai 25 tahun.
- ❍ lebih dari 25 tahun.

Q40. Apakah anda memiliki pengalaman kerja?

- ❍ Ya
- ❍ Tidak

Q41. Apa nama perguruan tinggi dimana anda kuliah sekarang ini? _____

Q42. Apa jurusan yang anda ambil?

- ❍ Akuntansi
- ❍ Akuntansi Islam/ Syariah
- ❍ Lainnya (mohon sebutkan) _____

Q43. Berada pada semester keberapakah kuliah anda saat ini?

- ❍ Semester 3
- ❍ Semester 5
- ❍ Semester 7
- ❍ Lainnya (mohon sebutkan) _____

Q45. Apakah anda sudah mengambil mata kuliah Etika Bisnis di perguruan tinggi tempat anda belajar?

- ❍ Ya
- ❍ Tidak

Atas partisipasinya kami ucapkan banyak terima kasih.

Appendix B Codebook for survey

Full variable name	**SPSS variable name**	**Coding instructions**
Identification number	ID	Number assigned to each questionnaire
Ethical recognition in the case of a credit manager	RecogCrMan1 to RecogCrMan5	1 = strongly disagree 2 = disagree 3 = somewhat disagree 4 = neither agree nor disagree 5 = somewhat agree 6 = agree 7 = strongly agree
Ethical judgement in the case of a credit manager	JudgeCrMan1 to JudgeCrMan8	1 JudgeCrMan1: Fair =1 ⟷ Unfair = 7 JudgeCrMan2: Just =1 ⟷ Unjust = 7 JudgeCrMan3: Morally right =1 ⟷ Not morally right = 7 JudgeCrMan4: Acceptable to my family = 1 ⟷ Unacceptable to my family = 7 JudgeCrMan5: Culturally acceptable = 1 ⟷ Culturally unacceptable = 7 JudgeCrMan6: Traditionally acceptable = 1 ⟷ Traditionally unacceptable = 7 JudgeCrMan7: Does not violate an unspoken promise = 1 ⟷ Violates an unspoken promise = 7 JudgeCrMan8: Does not violate an unwritten contract = 1 ⟷ Violates an unwritten contract = 7

Intrinsic religiosity in the case of a credit manager	IntentCrMan1 to Intent CrMan5	Likely = 1 ⟷ Unlikely = 7
Ethical recognition in the case of a local manager	RecogLocMan1 to RecogLocMan5	1 = strongly disagree 2 = disagree 3 = somewhat disagree 4 = neither agree nor disagree 5 = somewhat agree 6 = agree 7 = strongly agree
Ethical judgement in the case of a local manager	JudgeLocMan1 to JudgeLocMan8	JudgeLocMan1: Fair =1 ⟷ Unfair = 7 JudgeLocMan2: Just =1 ⟷ Unjust = 7 JudgeLocMan3: Morally right =1 ⟷ Not morally right = 7 JudgeLocMan4: Acceptable to my family = 1 ⟷ Unacceptable to my family = 7 JudgeLocMan5: Culturally acceptable = 1 ⟷ Culturally unacceptable = 7 JudgeLocMan6: Traditionally acceptable = 1 ⟷ Traditionally unacceptable = 7 JudgeLocMan7: Does not violate an unspoken promise = 1 ⟷ Violates an unspoken promise = 7 JudgeLocMan8: Does not violate an unwritten contract = 1 ⟷ Violates an unwritten contract = 7

Intrinsic religiosity in the case of a local manager	IntentLocMan1 to IntentLocMan5	Likely = 1 ⟷ Unlikely = 7
Ethical recognition in the case of a controller	RecogControl1 to RecogControl5	1 = strongly disagree 2 = disagree 3 = somewhat disagree 4 = neither agree nor disagree 5 = somewhat agree 6 = agree 7 = strongly agree
Ethical judgement in the case of a controller	JudgeControl1 to JudgeControl8	JudgeControl1: Fair =1 ⟷ Unfair = 7 JudgeControl2: Just =1 ⟷ Unjust = 7 JudgeControl3: Morally right =1 ⟷ Not morally right = 7 JudgeControl4: Acceptable to my family = 1 ⟷ Unacceptable to my family = 7 JudgeControl5: Culturally acceptable = 1 ⟷ Culturally unacceptable = 7 JudgeControl6: Traditionally acceptable = 1 ⟷ Traditionally unacceptable = 7 JudgeControl7: Does not violate an unspoken promise = 1 ⟷ Violates an unspoken promise = 7 JudgeControl8: Does not violate an unwritten contract = 1 ⟷ Violates an unwritten contract = 7

Intrinsic religiosity in the case of a controller	IntentControl1 to IntentControl5	Likely = 1 ◄——► Unlikely = 7
Intrinsic religiosity	InRelig1 to InRelig8	1 = strongly disagree 2 = disagree 3 = somewhat disagree 4 = neither agree nor disagree 5 = somewhat agree 6 = agree 7 = strongly agree
Extrinsic religiosity	ExRelig1 to ExRelig7	1 = strongly disagree 2 = disagree 3 = somewhat disagree 4 = neither agree nor disagree 5 = somewhat agree 6 = agree 7 = strongly agree
Religiosity and study	RelignStdy1 to RelignStdy7	1 = strongly disagree 2 = disagree 3 = somewhat disagree 4 = neither agree nor disagree 5 = somewhat agree 6 = agree 7 = strongly agree
Internal LOC	InLOC1 to InLOC2	1 = strongly disagree 2 = disagree 3 = somewhat disagree 4 = neither agree nor disagree 5 = somewhat agree 6 = agree 7 = strongly agree
External LOC	ExLOC1 to ExLOC2	1 = strongly disagree 2 = disagree 3 = somewhat disagree 4 = neither agree nor disagree 5 = somewhat agree 6 = agree 7 = strongly agree

Peer influence	PeerInf1 to Peerinf10	1 = strongly disagree 2 = disagree 3 = somewhat disagree 4 = neither agree nor disagree 5 = somewhat agree 6 = agree 7 = strongly agree
Family influence	FamilyInf1 to FamilyInf10	1 = strongly disagree 2 = disagree 3 = somewhat disagree 4 = neither agree nor disagree 5 = somewhat agree 6 = agree 7 = strongly agree
Region	Region	1 = Semarang 2 = Solo 3 = Yogyakarta 4 = Bogor
University Affiliation	University Affiliation	1 = Secular university 2 = Islamic university 3 = Islamic accounting
Year	Year	1 = Year 1 2 = Year 2 3 = Year 3 4 = Year 4
Gender	Gender	1 = Male 2 = Female
Age	Age	1 = 17 < 21 2 = 21 < 25 3 = > 25
Work Experience	Work Experience	1 = Yes 2 = No
Business Ethics	Business Ethics	1 = Yes 2 = No

Appendix C Assessment of normality

Assessment of normality

Variable	min	max	skew	c.r.	kurtosis	c.r.
InRelig3	3.000	7.000	-1.014	-10.894	.795	4.271
InRelig4	3.000	7.000	-1.008	-10.831	.851	4.574
InRelig5	3.000	7.000	-.813	-8.736	.395	2.123
ExRelig5	1.000	7.000	-.008	-.081	-.513	-2.758
ExRelig6	1.000	7.000	-.175	-1.883	-.458	-2.459
ExRelig7	1.000	7.000	.023	.245	-.336	-1.805
RelignStdy7	2.000	7.000	-.323	-3.467	-.708	-3.807
RelignStdy8	2.000	7.000	-.324	-3.478	-.814	-4.372
RelignStdy9	2.000	7.000	-.073	-.786	-.923	-4.958
RelignStdy10	2.000	7.000	-.259	-2.783	-.919	-4.937
InLOC6	1.000	7.000	-.355	-3.810	-.337	-1.811
InLOC7	1.000	7.000	-.302	-3.243	-.325	-1.746
InLOC8	2.000	7.000	-.473	-5.080	-.441	-2.370
InLOC9	1.000	7.000	-.453	-4.868	-.280	-1.503
InLOC10	1.000	7.000	-.393	-4.228	-.440	-2.362
ExLOC4	2.000	7.000	-.384	-4.125	.002	.011
ExLOC5	1.000	7.000	-.377	-4.054	-.520	-2.796
ExLOC6	2.000	7.000	-.603	-6.482	-.150	-.806
ExLOC8	1.000	7.000	.053	.573	-.571	-3.070
ExLOC9	2.000	7.000	-.308	-3.313	-.525	-2.822
PeerInf7	1.000	7.000	.015	.157	-.534	-2.871
PeerInf8	1.000	7.000	.039	.415	-.465	-2.500
PeerInf9	1.000	7.000	-.007	-.077	-.561	-3.016
FamilyInf7	2.000	7.000	-.259	-2.784	-.731	-3.928
FamilyInf8	2.000	7.000	-.163	-1.746	-.497	-2.673
FamilyInf9	2.000	7.000	-.439	-4.715	-.379	-2.035
Multivariate					53.579	18.482

Appendix D Supporting information for Chapter 4

Appendix D1 Critical Ratios for Differences between Parameters (Intrinsic Religiosity)

	par_1	par_2	par_3	par_4	par_5	par_6
par_1	.000					
par_2	**-.039**	.000				
par_3	-.393	-.354	.000			
par_4	-5.979	-7.553	-7.352	.000		
par_5	-7.265	-5.667	-6.935	.290	.000	
par_6	-8.115	-7.979	-6.105	-.281	-.578	.000

Appendix D2 Critical Ratios for Differences between Parameters (Extrinsic Religiosity)

	par_1	par_2	par_3	par_4	par_5	par_6
par_1	.000					
par_2	**.012**	.000				
par_3	-1.230	-1.246	.000			
par_4	-10.073	-13.151	-10.186	.000		
par_5	-13.903	-10.755	-11.001	-.500	.000	
par_6	-4.363	-4.433	-3.004	5.550	6.001	.000

Appendix D3 Critical Ratios for Differences between Parameters (Religiosity and Study)

	par_1	par_2	par_3	par_4	par_5	par_6
par_1	.000					
par_2	3.651	.000				
par_3	**-.329**	-4.123	.000			
par_4	-8.589	-13.457	-9.133	.000		
par_5	-17.381	-16.944	-17.808	-5.702	.000	
par_6	-11.016	-15.988	-10.305	-1.724	4.431	.000

Appendix D4 Critical Ratios for Differences between Parameters (Peer Influence)

	par_1	par_2	par_3	par_4	par_5	par_6
par_1	.000					
par_2	1.451	.000				
par_3	**.998**	-.417	.000			
par_4	-9.287	-12.337	-11.086	.000		
par_5	-14.554	-13.322	-15.371	-2.920	.000	
par_6	-10.370	-12.385	-9.765	-.119	2.702	.000

Appendix D5 Critical Ratios for Differences between Parameters (Family Influence)

	par_1	par_2	par_3	par_4	par_5	par_6
par_1	.000					
par_2	-.935	.000				
par_3	**-.030**	.909	.000			
par_4	-10.683	-11.677	-13.170	.000		
par_5	-10.661	-8.433	-10.743	1.677	.000	
par_6	-13.566	-12.148	-11.050	-.304	-1.991	.000

Appendix D6 Critical Ratios for Differences between Parameters (Ethical recognition in the case of a credit manager)

	par_1	par_2	par_3	par_4	par_5	par_6
par_1	.000					
par_2	**-.815**	.000				
par_3	-3.181	-2.413	.000			
par_4	-12.500	-14.997	-12.334	.000		
par_5	-16.505	-13.189	-13.513	-.711	.000	
par_6	-14.270	-13.987	-10.451	.923	1.763	.000

Appendix D7 Critical Ratios for Differences between Parameters (Ethical judgement in the case of a credit manager)

	par_1	par_2	par_3	par_4	par_5	par_6
par_1	.000					
par_2	3.622	.000				
par_3	**.920**	-2.781	.000			
par_4	1.213	-1.553	.702	.000		
par_5	-7.772	-7.785	-8.903	-6.047	.000	
par_6	-.363	-3.829	-.897	-1.674	4.632	.000

Appendix D8 Critical Ratios for Differences between Parameters (Ethical intention in the case of a credit manager)

	par_1	par_2	par_3	par_4	par_5	par_6
par_1	.000					
par_2	**.245**	.000				
par_3	-2.578	-3.030	.000			
par_4	-20.066	-22.525	-20.446	.000		
par_5	-24.744	-23.777	-24.149	-3.086	.000	
par_6	-22.471	-23.873	-20.659	-1.008	2.304	.000

Appendix D9 Critical Ratios for Differences between Parameters (Ethical recognition in the case of a local manager)

	par_1	par_2	par_3	par_4	par_5	par_6
par_1	.000					
par_2	**-.449**	.000				
par_3	-.606	-.171	.000			
par_4	-16.246	-18.396	-17.723	.000		
par_5	-19.660	-17.477	-19.220	-1.085	.000	
par_6	-17.993	-18.224	-15.890	.177	1.285	.000

Appendix D10 Critical Ratios for Differences between Parameters (Ethical judgement in the case of a local manager)

	par_1	par_2	par_3	par_4	par_5	par_6
par_1	.000					
par_2	3.622	.000				
par_3	**-.816**	-4.326	.000			
par_4	-5.800	-10.435	-5.564	.000		
par_5	-14.961	-13.540	-13.686	-5.049	.000	
par_6	-3.907	-7.234	-3.153	2.192	6.790	.000

Appendix D11 Critical Ratios for Differences between Parameters (Ethical intention in the case of a local manager)

	par_1	par_2	par_3	par_4	par_5	par_6
par_1	.000					
par_2	.837	.000				
par_3	-.297	-1.258	.000			
par_4	-22.626	-25.244	-23.777	.000		
par_5	-28.234	-28.785	-29.143	-5.828	.000	
par_6	-25.442	-27.807	-25.290	-2.818	3.313	.000

Appendix D12 Critical Ratios for Differences between Parameters (Ethical recognition in the case of a controller)

	par_1	par_2	par_3	par_4	par_5	par_6
par_1	.000					
par_2	**-1.536**	.000				
par_3	-3.306	-2.082	.000			
par_4	-19.338	-22.236	-18.652	.000		
par_5	-25.514	-23.504	-23.071	-3.526	.000	
par_6	-19.362	-20.308	-16.448	1.839	5.608	.000

Appendix D13 Critical Ratios for Differences between Parameters (Ethical judgement in the case of a controller)

	par_1	par_2	par_3	par_4	par_5	par_6
par_1	.000					
par_2	3.085	.000				
par_3	**.487**	-2.637	.000			
par_4	-9.079	-13.029	-10.187	.000		
par_5	-16.835	-16.373	-17.620	-4.930	.000	
par_6	-11.112	-14.806	-10.669	-1.237	3.833	.000

Appendix D14 Critical Ratios for Differences between Parameters (Ethical intention in the case of a controller)

	par_1	par_2	par_3	par_4	par_5	par_6
par_1	.000					
par_2	**.422**	.000				
par_3	-.782	-1.411	.000			
par_4	-23.311	-25.672	-24.587	.000		
par_5	-28.619	-29.322	-29.850	-6.067	.000	
par_6	-26.907	-29.178	-27.026	-4.135	2.290	.000