

# The Role of Business Ethics and Religiosity in Student Ethical Decision Making

Jurica Lucyanda<sup>1\*</sup>, Gunardi Endro<sup>2</sup>

1. Accounting Study Program, University of Bakrie

2. Management Study Program, University of Bakrie

\*corresponding author e-mail: [jurica.lucyanda@bakrie.ac.id](mailto:jurica.lucyanda@bakrie.ac.id)\*

---

## Article Info

### **Keywords:**

Business Ethics;  
Ethical Decision Making;  
Gender;  
Religiosity

## Abstract

This research aims to investigate the role of business ethics and religiosity in student ethical decision-making. The business ethics literature explains that ethical decision-making is influenced by internal factors of an individual nature and external factors of a situational nature. This research tried to fill the gap in the previous research that has been done. This study used two independent variables: business ethics and religiosity variables, and the independent variable is ethical decision-making. This study used experimental methods to test the hypotheses. Participants involved in this study are undergraduate economics and business students from a private university in Jakarta. The data analysis technique in this study used analysis of variance (ANOVA). The result found that business ethics courses and religiosity influence the students' ethical decision-making. Moreover, the results found that the interaction of gender and religiosity did not affect students' ethical decision-making. This research contributes to behavioral research and business ethics literature, especially in ethical decision-making.

---

## 1. Introduction

Ethical decision-making research is a concern for the researchers regarding ethics (Craft, 2013; Ford & Richardson, 1994; Loe et al., 2000; O'Fallon & Butterfield, 2005). They conducted literature studies in connection with 33 years of ethical judgment research or ethical decision-making, started by Ford and Richardson (1994) and Craft (2013) last performed. The literature review results explain that decision-making is influenced by individual factors and situational or organizational factors. The previous result shows that the individual and situational factors vary, so they need to be tested using different individual and situational factors. In addition, the previous research results show mixed results. This study tried to fill the gaps in previous research using individual and situational factors that are still not widely used and fill the limitations of literature related to the variety of individual and situational factors that are likely to influence ethical decision-making.

This study uses business ethics courses as situational factors and religiosity as individual factors that influence the student's ethical decision-making. The business ethics course is an essential factor in building the character and behavior of individuals. The business ethics courses make students understand how to behave and act ethically. These ethical attitudes and behaviors will be inherent in students to the work environment. Previous research has found an increase in

students' moral reasoning after attending business ethics courses (Loe & Weeks, 2012). So, it can be concluded that pedagogical methods can significantly improve student ethical attitudes.

This study uses religiosity as an individual factor, and this factor is important because everyone in Indonesia has faith as a direction in his life. Personal religiosity is a potential source of ethical norms and ultimately affects ethical evaluation and impacts ethical attitudes and behaviors (Clark & Dawson, 1996; Peterson et al., 2010; Walker et al., 2012).

This study investigates business ethics as situational factors and religiosity as individual factors in student ethical decision-making. We focus on examining the main effects and interactions effect. The main effect is the effect of business ethics course and religiosity variables on ethical decision-making and the interaction effect (gender and religiosity variables).

To explain the role of religiosity in ethical decision-making, we use symbolic interactions theory because it relates to the self-identity perspective. Symbolic interactionism theory explains that individuals build a sense of self-identity in large part as their role (Walker et al., 2012). For example, someone introduces himself as a parent or a married couple). To explain the role of gender in ethical decision-making, we use gender socialization theory (Dawson, 1995). This theory stated that gender identity is stable and unchanging, differences in values, interests, or interests and because there are differences in traits between females and males in the work environment are supposed to cause differences in perceptions, considerations, attitudes, and ethical behaviors.

The theoretical contribution of this research is to explain and provide an understanding of the moral role in ethical decision-making taking into account aspects of psychology and external aspects. The methodological contribution in this study was to use the experimental method, and previous studies have used the survey method. This research also contributes to ethical issues, especially for the university to improve students' ethical behavior by providing business ethics courses in the curriculum.

### ***Ethical Decision Making***

Cohen et al. (2001) explained that ethical decision-making is decision-making when there is an ethical conflict (dilemma). Knowing and being sensitive to ethical dilemmas in decision situations is essential to include good ethical decision-making (Rest, 1986). The ethical decision-making model widely used in ethical literature is the (Rest, 1986) and (Jones, 1991) model. This research uses the Rest (1986) ethical decision-making model. This research uses an ethical decision-making model developed by Rest (1986) because it has been widely and commonly used by previous research and easily generalized in the organizational environment (Jones, 1991).

Rest (1986) developed the ethical decision-making model that explains four stages of the ethical decision-making process: first, moral sensitivity; second, moral judgment; third, moral intention; and last, moral behavior. Moral sensitivity is the stage of a person realizing that an ethical problem exists, recognizing an ethical issue, and presenting an ethical dilemma so that there are potential consequences that could affect others due to such behavior. Moral judgment is when one assesses whether the actions of the person are morally right or wrong. This stage involves the assessment of the various actions. The moral intention is the stage when one chooses a particular action. Moral behavior is the stage at which an individual engages in moral behavior. Rest (1986) explains that ethical decision-making suggests that one must first think of decision-making as a moral frame (moral awareness) before deciding on a morally correct action (moral judgment).

Craft (2013); Ford and Richardson (1994); Loe et al. (2000); and O'Fallon and Butterfield (2005) conducted a literature review in connection with the research of moral judgment or ethical decisions for 33 years. The empirical literature review of ethical decision-making was first conducted by Ford and Richardson (1994). Ford and Richardson (1994) tested the availability of

empirical literature on ethical decision-making. The findings showed individual factors received the most attention in empirical research.

Loe et al. (2000) conducted empirical studies related to ethical decision-making in the 1992-1996 continued research conducted by Ford and Richardson (1994). Loe et al. (2000) found that individual factors that are gender, age, nationality, religion, education and work experience, locus of control, and cognitive moral development affect ethical decision-making. While the findings show that organizational factors are cultural and climate, code of conduct, rewards and sanctions, people are important, and opportunity affects ethical decision-making.

O'Fallon and Butterfield (2005) conducted empirical literature studies related to ethical decision-making from 1996-2003 using the Rest model (Rest, 1986) and the moral intensity (Jones, 1991). The results showed that the most widely used individual factors are gender, moral philosophy or value orientation, education/occupational factors, nationality, cognitive moral development, age, locus of control, Machiavellianism, religion, competition, attitudes, attitudes, and self-efficacy. Moreover, the findings showed that organizational factors are code of ethics, culture/ethical climate, industry type, organizational size, business competition, training, and subjective norm influencing ethical decision-making.

Craft (2013) conducted an ethical decision-making literature review in 2004-2011 continued the research done by O'Fallon and Butterfield (2005). Craft (2013) found 16 categories of individual factors consisting of personality, gender, nationality/cultural values, orientation values/philosophies, education, employment and experience, situations, age, peers/management, personal values, religion, emotions, cognitive moral development, behavior, awareness, and organizational commitment. Organizational factors consist of 14 variables: rewards and sanctions, ethical culture, ethical ode, subjective norm, organizational culture, competition, company size, procedures/policies, training, industry, organizational level, organizational performance, team, and moral intensity.

### ***Business Ethics Course and Ethical Decision-making***

In recent decades, business ethics research has received attention from professionals, academics, and the public sector, and this is because the Enron and Arthur Anderson cases are related to unethical behavior. After the case was caused in the world of academia began to consent with business ethics. Business ethics courses become compulsory courses taken by students. Considerations provide business ethics courses to early-level students because it is expected to guide their considerations, attitudes, and behaviors.

Kohlberg (1981), in cognitive moral development perspective, explains that a dynamic view of the process of moral development. Kohlberg's theory is devoted to individual cognitive development as a systematic explanation for moral or ethical decision-making. Kohlberg's theory explains six distinct stages of individual moral development on three linear and progressive levels (Kohlberg, 1969; 1975). The first level is pre-conventional; this level consists of the first stage of the punishment and obedience orientation; the second stage is the instrumental-relativist orientation. The second level is the conventional level; this level consists of the third stage is the interpersonal concordance or "god boy-nice girl" orientation; the fourth stage is the "law and order" orientation. The third level is the post-conventional level; this level consists of the fifth stage is the social-contract, legalistic orientation; and the sixth stage is universal-ethical principles orientation.

The first of two stages (obedience and punishment; individual interest) of the first level (pre-conventional) is avoiding punishment and achieving pleasure. Individuals in the first stage do not understand or care that other can have the same desires and desires other than their own, so they act with selfishness. In the second stage, the person realizes that he can distinguish his desires from the wishes of others and authority figures.

On the second (conventional) level, which includes the third and fourth stages (interpersonal; authority), individuals have motivations related to relationships and mutual

expectations. At this level, the primary motivation of individuals is to be accepted and socially approved by others and, in this context, to fulfill their hierarchically higher orders. Therefore, at this level, man defines interpersonal relationships through his position in society.

On the third (post-conventional) level, individuals develop autonomous moral conceptions, whereas individual moral judgments often refer to a set of universal principles (such as "justice" and "fairness"). This stage conforms to universal moral principles that everyone must follow, and moral superiority is characterized when reaching this stage. The normative moral superiority that rational humans must achieve due to cognitive reasoning is a universal sense of justice. Individuals at this stage see morality as a goal, not as a means.

The model implicitly explains that this model is a potential model for education to influence moral development. Kohlberg (1969; 1982) further explained that moral development is an approach that can be used to explain moral education. Moral curriculum in education, especially business education through business ethics courses, is a condition that stimulates moral development. So, it needs to be further tested whether the business ethics courses are practical.

Loe and Weeks (2012) found a moral improvement in students' moral reasoning after attending business ethics courses. It is concluded that pedagogical methods can significantly improve one's ethical attitudes. Research related to the influence of business ethics courses on ethical decision-making is still limited (Conroy & Emerson, 2004), so it is necessary to research the relationship of business ethics with ethical decision-making to overcome the limitations of the literature.

Conroy and Emerson (2004) tested the influence of religiosity and the provision of business ethics courses on students' ethical perceptions. Conroy and Emerson (2004) concluded that the provision of business ethics courses affects the ethical perception of students. Based on the explanation above, it is concluded that students who have attended business ethics courses are more likely to make ethical decisions than students who not yet take business ethics courses.

H1: Students that taken business ethics courses are more likely to make more ethical decision-making than students that have not taken business ethics courses.

### ***Religiosity and Ethical Decision-making***

De George (1986) explained that religion provides a reason for morality and becomes a point of reference for evaluating behavior. In psychology, research generally connects religion with various behaviors, affections, and cognitive (Weaver & Agle, 2002). Weaver and Agle (2002) explained that individual religiosity impacts attitudes and behaviors. It is not yet entirely clear in particular ethical behavior, so it becomes crucial to research further to make the relationship between religiosity and ethical behavior clearer. According to Clark and Dawson (1996), personal religiosity is a potential source of ethical norms and ultimately influences an ethical evaluation. Peterson et al. (2001) and Walker et al. (2012) explained that religiosity impacts ethical behavior. Conroy and Emerson (2004) reinforced this, which emphasizes.

Weaver and Agle (2002) explained that understanding the relationship between religiosity and ethical behavior can be achieved by understanding the social structure version of symbolic interactions theory because it relates to the self-identity perspective. Walker et al. (2012) explain that in symbolic interactionism, individuals build a sense of self-identity in large parts as their role (example: a person introduces themselves as a parent or a married couple). It is similar to when individuals introduce themselves as part of people who believe in a particular religion. In general, symbolic interactions theory implies that the relative position of the identity of a religious and irreligious role in a person's identity hierarchy will determine the influence they have in the process of ethical behavior.

Clark and Dawson (1996) tested religiosity relationships with ethical evaluation. To measure the religiosity dimensions, intrinsic and extrinsic religiosity is used. To measure the

ethical evaluation is a multidimensional Ethical Scale (MES). Intrinsic religiosity is religion as a design that gives meaning in the context of all understood life. In contrast, extrinsic religiosity is a religion of comfort and social convention, an instrumental approach to self-serving formed according to oneself (Donahue, 1985). The results found that religiosity affects ethical evaluation.

Peterson et al. (2001) examined the influence of nationality, gender, and religiosity on business-related ethics. Peterson et al. (2001) tested nationality using interstate samples. The study compared American students to non-American students. The results showed that religiosity correlated with business-related ethics. In more detail, the study concluded that American students with higher, moderate, non-religious religiosity had higher ethical scores than non-American students.

Conroy and Emerson (2004) tested the influence of religiosity and the provision of business ethics courses on students at two Universities in South America (one a private university affiliated with a religion, while the other a public university). The research method used a survey instrument consists of 25 vignettes. Conroy and Emerson (2004) found that religiosity is significantly related to ethical perception. Conroy and Emerson (2004) concluded that the provision of business ethics courses affects students' ethical perception.

Walker et al. (2012) examined the influence of religiosity on ethical considerations using intrinsic and extrinsic religious motivation orientation (RMO). Walker et al. (2012) stated that individuals with intrinsic RMO positively affect ethical behavior based on a symbolic interactionist perspective. The results showed that intrinsically motivated religiosity was less accepting of ethically dubious scenarios.

Anderson and Burchell (2019) examined the influence of spirituality and moral intensity on ethical decision-making. The results of Anderson and Burchell (2019) concluded that spirituality affects ethical decision-making. Based on symbolic interactions theory and self-identity theory, we predict that more religious students are made more ethical decisions than less religious students.

H2: More religious students are more likely to make ethical decisions than less religious students.

### ***Interaction Effects of Religiosity and Gender and Ethical Decision-making***

Nguyen and Biderman (2008) explained that gender is one of the variables widely used in research variables in the business ethics literature. Gender socialization theory (Dawson, 1995) explains that gender differences cause differences in decision-making or behavior, especially from an ethical perspective. This theory explains that the socialization process begins at birth because families treat newborns differently based on their gender (Mason & Mudrack, 1996). Chung and Monroe (2003) explained women are different from men related to the focus of ethical or moral issues.

Akaah (1989) stated that ethical assessment differences between female and male professional marketing personnel. The test results showed that women had higher ethical judgments than men. Peterson et al. (1991) found that women were more concerned with ethical issues and rated higher on ethical issues than men. The study was supported by Eynon et al. (1997) that women have higher moral reasoning scores than men. Glover et al. (2002) testing the influence of gender individual variables on ethical decision-making in the work environment. The results showed that gender is a strong predictor of ethical behavior. Loo (2003) reinforced these results, which concluded that women make more ethical decisions than men for all scenarios presented.

Chung and Monroe (2003) explored social desirability bias using gender and religiosity. The results concluded that social desirability bias is higher or lower when the situation is more unethical or less unethical. Women who were more religious recorded the highest bias scores

than women who were less religious and men who were not religious. Based on the results of previous research explained that gender plays a role in ethical decision-making. It is more concluded explicitly that women are more likely to make more ethical decisions than men. Dalton and Ortegren (2011) supported Chung and Monroe (2003), which found that women are more ethical than men.

Interactionist theory (Trevino, 1986) explains that the interaction or combination of individual and situational factors influences ethical decision-making or ethical behavior. Individual and situational factor interactions are relevant in ethical decision-making (Treviño et al., 2006). Aquino et al. (2009) explain the interaction of situational and individual factors strengthening behavior morally.

H3: More religious female students are more likely to make more ethical decisions than less religious male students.

## **2. Research Method**

### ***Experimental Design***

This study uses a web-based experiment design to test the causality of business ethics and religiosity in the ethical decision-making of Bakrie University business students. The experimental design in this study used two independent variables, a business ethics course and religiosity. Business ethics course uses two levels, have taken business ethics courses and have not taken business ethics courses. Religiosity uses two levels, high religiosity, and low religiosity. The covariate (demographic) variable used is gender.

The experimental material before experimentation is performed a pilot test. The purpose of this pilot test was to test whether participants could easily understand the instrument. The pilot test is conducted using traditional experimental that is using paper and pencil. The pilot test was conducted in a class attended by 20 students. The results of the pilot test concluded that the participants understood the experimental instrument. Based on the results of this pilot test, the next stage of experimental instrument development is using web-based or online-based experiments. We are using a web-based experiment to facilitate data collection, especially with the Covid 19 pandemic. This web-based experiment becomes a possible technique to be done. After the experimental instrument is designed web-based, a second phase pilot test is conducted to ensure the program has been made well and the program runs well without constraints. The results of the second phase of the pilot test involved 19 students. The results of the second stage pilot test show that the instrument is ready to be executed.

### ***Participants and Experimental Procedures***

Participants in this study is an accounting and management student from Bakrie University semester four and six. Accounting students have obtained business ethics courses at the beginning of the semester, and management students who have not obtained business ethics courses early in the semester. The selection of this research sample is based on convenience sampling, and because of the condition of pandemic covid 19, the selected students are currently studying. Second and eighth-semester students are not involved in the research because it is assumed that second-semester students still do not receive many courses, while the eighth semester is currently taking an internship. Participants were invited to participate in the experiment by installing brochures and social media (WhatsApp). Participants simulated experiments using the website by sending links for access to experimental materials. Participants were presented with five scenarios related to appliances, loans, bad debts, bonuses, and bribes. At each end of the scenario, participants were measured concerning ethical decision-making.

Participants follow several stages of experimental procedures and protocols. The experimental procedure starts from log in to the given website, filling out the inform concern,

conducting experiment simulations, making decisions, filling out an exit questionnaire consisting of participants' demographic data, and finally is debriefing. Participants were rewarded as an appreciation for their participation in this experimental activity. The data used in this study is complete data, which means participants follow experimental activities from start to finish and fill in the complete experimental instruments or materials. Participants involved in the study were 137 students based on incoming data, but only 134 data were completed, and three responses were ineligible.

### ***Variable Measurement***

Independent variables in this study consisted of business ethics courses and religiosity. Gender is a covariate variable that interacted with the main variables of religiosity to see the effects of interaction. The dependent variable is ethical decision-making. Business ethics courses use two levels, students have taken a business ethics course and have not taken a business ethics course. The business ethics course is measured on a nominal scale, 0 for students who have not taken business ethics courses and 1 for students who have taken business ethics courses. Religiosity is measured by two items question. Further, the two items are totaled to get a religiosity score. Religiosity is measured using instruments used by Chung and Monroe (2003). The reliability level of this instrument is relatively high, with Cronbach alpha at 0.911, which indicates a high level of internal consistency. Religiosity uses two levels, namely less religious (0) and more religious (1)—dummy values (0) and (1) use split medians.

Decision-making is measured by instruments developed by Cohen et al. (1998; 2001) and used by Chung and Monroe (2003). The instrument consists of scenarios involving ethical dilemmas related to the general situation of business ethics that are usually often encountered by business people. The instrument consists of five ethical issue scenarios related to appliance, loans, bad debt, bonuses, and bribes. At the end of each scenario, participants are asked to provide an opinion on the scenario presented. Participants were asked to answer three questions related to the sensitivity of ethical issues, ethical judgment, and, finally, ethical evaluation related to the participant's intentions. The first two questions in the scenario are the questions to activate ethical issues. Each question uses a 7-point Likert scale. Each scenario consists of three questions. First, "Based on that scenario do you feel the existence of "ethical issue": ethical (1) ..... Unethical (7)." Second, "Whether the actions depicted in such scenarios are ethical (1) ..... Unethical (7). Third, to measure students' ethical decision-making, participants were asked to respond to the following question: "Based on such actions, it is likely that I will take the same action is High (1) ..... Low (7).

## **3. Result and Discussions**

### ***Statistics Descriptive***

Participants involved in this study were 137 students of the accounting and management study program. The participants consisted of 94 female students and 43 male students. Three responses do not qualify as data, so data used for this study 134 responses. Table I describes statistics descriptive of participants' demographic data. Participants consisted of 40 males (29.9%) and 94 females (70.1%). Some gender samples showed that female students were more numerous than men. Participants involved in this study were 65 accounting study programs (48.5%) and management study programs of 69 people (51.5%) with an average age of 20,87 years.

**Table 1.** Demographic Data Description

		Total	%
Gender:	Male	40	29,9
	Female	94	70,1
Total		134	100,0
Study Program:	Management	69	51,5
	Accounting	65	48,5
Total		134	100,0
Business Ethics Courses:			
Not Yet Graduated		69	51,5
Graduated		65	48,5
Total		134	100,0
Religiosity:	Less Religious	70	52,2
	More Religious	64	47,8
Total		134	100,0
Semester:	Semester Four	72	53,7
	Semester Six	62	46,3
Total		134	100,0
Age:	18 - 20 Years	73	54,5
	20 - 23 Years	61	45,5
Total		134	100,0

Based on demographic data, participants explained that participants who have not yet graduated the business ethics course 69 people (51%), while participants have graduated business ethics courses 65 people (48.5%). Table 1 be explained that students who have not graduated and have graduated in business ethics courses have the same amount as courses (management and accounting). The data can be explained that business ethics courses in management study programs are offered in the sixth semester. Currently, some students of the management study program are taking business ethics courses. In contrast, accounting study programs, business ethics courses have been offered in the first semester. Participants taking business ethics course were in the fourth semester 72 people (53.7%), the Rest were students taking the sixth semester 62 people (46.3%).

Table 2 describes the average ethical decision-making consisting of five scenarios, appliance, loan, bad debts, bonus, and bribes. Table 2 shows that the average ethical decision-making appliance scenario (5.50) is higher than the average ethical decision-making of loans (5.18), bad debt (4.75), bonuses (4.58), and bribes (4.49). Based on the average, the ethical decision-making of equipment scenarios was rated more unethical (5.50) than the scenario of loans, bad debt, bonuses, and bribes. At the same time, the bribery scenario is considered the lowest average value (4.49). Based on the results of the t-test, the mean between the scenarios showed statistically significant results. Table II describes each scenario showing that p-value 0.00 ( $p < 0.005$ ).

**Table 2.** Mean, Standard Deviation, and Ethical Decision Making

Ethical Decision-Making Scenarios	Mean	Standard Deviation	Sig. (P-Value)
Appliance	5,50	1,149	0,000
Loan	5,18	1,061	0,000
Bad Debt	4,75	1,147	0,000
Bonus	4,58	1,152	0,000
Bribe	4,49	1,261	0,000

The ANOVA test was conducted to test hypothesis 1 (H1), hypothesis 2 (H2), and hypothesis 3 (H3). Table 3 shows the results of testing the main effect H1 and H2 and interaction effect H3 using ANOVA.

**Table 3.** Analysis of Variance (ANOVA)

**Panel A: Ethical Decision-Making of Appliance Scenario**

Independent Variables	Sum of Squares Type III	df	Mean Square	F	P-Value
Corrected model	37,527 <sup>a</sup>	7	5,361	4,896	0,000
Intercept	2839,652	1	2839,652	2593,225	0,000
Gender	7,929	1	7,929	7,241	0,008
Business Ethics Courses	5,884	1	5,884	5,374	0,022
Religiosity	13,503	1	13,503	12,332	0,001
Gender * Religiosity	4,795	1	4,795	4,379	0,038
Error	137,973	126	1,095		
Total	4229,000	134			
Corrected Total	175,500	133			

a. R Squared = 0,214 (Adjusted R Squared = 0,170)

**Panel B: Ethical Decision-Making of Loan Scenario**

Independent Variables	Sum of Squares Type III	df	Mean Square	F	P-Value
Corrected Model	52,388 <sup>a</sup>	7	7,484	9,690	0,000
Intercept	2483,210	1	2483,210	3215,226	0,000
Gender	10,647	1	10,647	13,785	0,000
Business Ethics Courses	12,504	1	12,504	16,190	0,000
Religiosity	11,863	1	11,863	15,360	0,000
Gender * Religiosity	0,235	1	0,235	0,304	0,582
Error	97,313	126	0,772		
Total	3744,000	134			

a. R Squared = 0,350 (Adjusted R Squared = 0,314)

**Panel C: Ethical Decision Making of Bad Debts Scenario**

Independent Variable	Sum of Squares Type III	df	Mean Square	F	P-Value
Corrected Model	56,707 <sup>a</sup>	7	8,101	8,638	0,000
Intercept	2030,011	1	2030,011	2164,587	0,000
Gender	21,508	1	21,508	22,934	0,000
Business Ethics Courses	6,529	1	6,529	6,962	0,009
Religiosity	15,348	1	15,348	16,366	0,000
Gender * Religiosity	1,972	1	1,972	2,103	0,150
Error	118,166	126	0,938		
Total	3203,000	134			
Corrected Total	174,873	133			

a. R Squared = 0,324 (Adjusted R Squared = 0,287)

**Panel D: Ethical Decision Making of Bonus Scenarios**

Independent Variable	Sum of Squares Type III	df	Mean Square	F	P-Value
Corrected Model	66,246 <sup>a</sup>	7	9,464	10,806	0,000
Intercept	1918,968	1	1918,968	2191,100	0,000
Gender	13,689	1	13,689	15,630	0,000
Business Ethics Courses	13,333	1	13,333	15,224	0,000
Religiosity	12,902	1	12,902	14,731	0,000
Gender * Religiosity	0,770	1	0,770	0,880	0,350

Error	110,351	126	0,876
Total	2990,000	134	

a. R Squared = 0,375 (Adjusted R Squared = 0,340)

---

**Panel E: Ethical Decision Making of Bribery Scenario**

Independent Variables	Sum of Squares Type III	df	Mean Square	F	P-Value
Corrected Model	58,181 <sup>a</sup>	7	8,312	6,831	0,000
Intercept	1888,798	1	1888,798	1552,318	0,000
Gender	7,926	1	7,926	6,514	0,012
Business Ethics Courses	14,144	1	14,144	11,625	0,001
Religiosity	16,162	1	16,162	13,283	0,000
Gender * Religiosity	0,193	1	0,193	0,159	0,691
Error	153,312	126	1,217		
Total	2916,000	134			
Corrected Total	211,493	133			

a. R Squared = 0,275 (Adjusted R Squared = 0,235)

---

H1 stated that students who have taken business ethics courses are more likely to make more ethical decisions than students who have not taken business ethics courses. Based on the results of hypothesis testing presented in Table 3 concluded that the main effect of business ethics courses is statistically significant. The main effect of business ethics courses is statistically significant for ethical decision making of appliance scenarios (F-value = 5,374; p-value = 0.022;  $p < 0.05$ ), loan scenario (F-value = 16,190; p-value = 0.000;  $p < 0.05$ ), bad debts scenario (F-value = 6,962; p-value = 0.009;  $p < 0.05$ ), bonus scenario (F-value = 5,374; p-value = 0.022;  $p < 0.05$ ), and the bribe scenario (F-value = 6,514; p-value = 0.012;  $p < 0.05$ ). These results concluded that H1 is supported, which explains there are differences in ethical decision making between students who have passed business ethics courses and students who have not graduated from business ethics courses.

These results provide empirical evidence that situational factors play a role in ethical decision-making. This result confirmed the cognitive moral development (CMD) perspective (Kohlberg, 1982). The CMD model implicitly explains that this model is a potential model for education to influence moral development. Moral development is an approach that can be used to explain moral education. Moral curriculum in education, especially business education through business ethics courses, is a condition that stimulates moral development. This result supports Loe and Weeks (2012), which explains an increase in students' moral reasoning after attending business ethics courses. Business ethics courses made the students better understand the concept of ethics and applied in their behavior. Getting a business course at the beginning of the semester, students understand the concept and implementation of business ethics to become a guide in ethical decision-making. The pedagogical methods can significantly improve a person's ethical attitudes. The development of curriculum and syllabus of business ethics courses become the central consent in the education to build students' ethical behavior.

H2 stated that more religious students are more likely to make more ethical decisions than less religious students. Based on the results of the hypothesis testing concluded that the main effect of religiosity is statistically significant. The main effect of religiosity is statistically significant for ethical decision making of appliance scenario (F-value = 12,332; p-value = 0.001;  $p < 0.05$ ), loan scenario (F-value = 15,360; p-value = 0.000;  $p < 0.05$ ), bad debts scenario (F-value = 16,366; p-value = 0.000;  $p < 0.05$ ), bonus scenario (F-value = 14,731; p-value = 0.000;  $p < 0.05$ ), and the bribes scenario (F-value = 14,625; p-value = 0.001;  $p < 0.05$ ). This result concluded that H2 supported, there are differences in ethical decision making between less religious students and more religious students.

These results provide empirical evidence that individual factors play a role in ethical decision-making. This result supported the symbolic interactions theory. Symbolic interactions

theory stated that the relative position of the identity of a religious and irreligious role in a person's identity hierarchy will determine the influence they have in the process of ethical behavior. Personal religiosity is a potential source of ethical norms that influence ethical evaluation (Clark & Dawson, 1996). The results support the statement of Peterson et al. (2010) and Walker et al. (2012), which explains that religiosity has an impact on ethical behavior. The stronger the religiosity of a person (individual), the more careful in behaving or maintaining behavior. This study supports the research of Clark and Dawson (1996); Conroy and Emerson (2004; Peterson et al. (2001; and Walker et al. (2012) which concluded that religiosity affects ethical considerations.

H3 stated that female students with more religiosity are more likely to make more ethical decisions than male students with less religiosity. Table 4 describes the mean and standard deviation from the interaction of religiosity and gender on ethical decision-making based on the appliance, loans, bad debts, bonus, and bribes scenarios. The interaction of gender and religiosity in the condition of female students who are more religious with male students who are less religious-based on appliance scenario shows a mean (standard deviation) of 5.89 (0.868) vs. 4.40 (1,353). The interaction of gender and religiosity with more religious female students with less religious male students based on loan scenarios showed a mean (standard deviation) of 5.77 (0.859) vs. 4.20(1,056). The interaction of gender and religiosity with more religious female students with less religious male students based on bad debts scenarios showed a mean (standard deviation) of 5.34 (0.914) vs. 3.55 (0.945). The interaction of gender and religiosity with more religious female students with less religious male students based on bonus scenario showed a mean score (standard deviation) of 5.36 (0.942) vs. 3.70 (0.979). The interaction of gender and religiosity with more religious female students with less religious male students based on bribes scenario showed a mean (standard deviation) of 5.20 (1.069) vs. 3.65 (1,040).

**Table 4.** Mean, Standard Deviation – Interaction effect of Religiosity and Gender in Ethical Decision Making

Scenarios	Religiosity	Gender		Total
		Male	Female	
Appliance	Less Religious	4,40	5,56	5,23
		(1,353)	(1,013)	(1,230)
	(n = 20)	(n = 50)	(n = 70)	
More Religious	5,60	5,89	5,80	
	(1,188)	(0,868)	(0,979)	
(n = 20)	(n = 44)	(n = 64)		
Total	5,00	5,71	5,50	
(1,396)	(0,957)	(1,149)		
(n = 40)	(n = 94)	(n = 134)		
Loan	Less Religious	4,20	5,12	4,86
		(1,056)	(0,940)	(1,081)
	(n = 20)	(n = 50)	(n = 70)	
More Religious	5,00	5,77	5,53	
	(0,973)	(0,859)	(0,959)	
(n = 20)	(n = 44)	(n = 64)		
Total	4,50	5,43	5,18	
(1,081)	(0,956)	(1,061)		
(n = 40)	(n = 94)	(n = 134)		
Bad Debts	Less Religious	3,55	4,82	4,46
		(0,945)	(1,082)	(1,188)
	(n = 20)	(n = 50)	(n = 70)	
More Religious	4,50	5,34	5,08	
	(1,000)	(0,914)	(1,013)	
(n = 20)	(n = 44)	(n = 64)		
Total	4,03	5,06	4,75	

Scenarios	Religiosity	Gender		Total
		Male	Female	
		(1,074) (n = 40)	(1,035) (n = 94)	(1,147) (n = 134)
Bonus	Less Religious	3,70 (0,979) (n = 20)	4,40 (1,010) (n = 50)	4,20 (1,044) (n = 70)
		4,20 (1,105) (n = 20)	5,36 (0,942) (n = 44)	5,00 (1,127) (n = 64)
	Total	3,95 (1,061) (n = 40)	4,85 (1,087) (n = 94)	4,58 (1,152) (n = 134)
	More Religious	3,65 (1,040) (n = 20)	4,28 (1,144) (n = 50)	4,10 (1,144) (n = 70)
		4,30 (1,418) (n = 20)	5,20 (1,069) (n = 44)	4,92 (1,251) (n = 64)
	Total	3,98 (1,271) (n = 40)	4,71 (1,197) (n = 94)	4,49 (1,261) (n = 134)
Bribe	Less Religious	3,65 (1,040) (n = 20)	4,28 (1,144) (n = 50)	4,10 (1,144) (n = 70)
		4,30 (1,418) (n = 20)	5,20 (1,069) (n = 44)	4,92 (1,251) (n = 64)
	Total	3,98 (1,271) (n = 40)	4,71 (1,197) (n = 94)	4,49 (1,261) (n = 134)
	More Religious	3,65 (1,040) (n = 20)	4,28 (1,144) (n = 50)	4,10 (1,144) (n = 70)
		4,30 (1,418) (n = 20)	5,20 (1,069) (n = 44)	4,92 (1,251) (n = 64)
	Total	3,98 (1,271) (n = 40)	4,71 (1,197) (n = 94)	4,49 (1,261) (n = 134)

Based on the results of the hypothesis testing concluded that the effects of interaction of gender and religiosity only for ethical decision making of appliance scenario is statistically significant. The effect of interaction of gender and religiosity is only statistically significant for ethical decision-making appliance scenario (F-value = 4,379; p-value = 0.038;  $p < 0.05$ ), while the effect of interaction of gender and religiosity for loan scenario (F-value = 0.304; p-value = 0.582;  $p > 0.05$ ), bad debts scenario (F-value = 0.150; p-value = 0.150;  $p > 0.05$ ), bonus scenario (F-value = 0.880; p-value = 0.350;  $p > 0.05$ ), and bribes scenario (F-value = 0.691; p-value = 0.691;  $p > 0.05$ ) is not statically significant (Table 3). This result generally concluded that H3 was not supported. It was concluded that there was no difference in ethical decision-making in the interaction of more religious female students with less religious male students.

The results of this study supported the interactionist model (Trevino, 1986), which explains that the interactions of individual and situational factors reinforce ethical decision-making. Based on Table 3, an interesting of this result is the interaction effect between gender and religiosity only significant for the ethical decision making of appliance scenario (that is the most unethical scenario, Table 2). Moreover, the interactions effects between gender and religiosity were observed for loan, bad debts, bonus, and bribes scenarios were insignificant. This result fail to supported the hypothesis because religiosity was dichotomized into two level – more religious and less religious.

#### 4. Conclusions

This research aims to test the influence of business ethics and religiosity on student ethical decision-making. The results of this study concluded that business ethics courses affect the student's ethical decision-making. Students who have taken business ethics courses are more likely to make more ethical decisions than students who have not yet taken business ethics courses. These results explain that pedagogical methods can significantly improve a person's ethical attitudes. The development of curriculum and syllabus of business ethics courses become the central consent in the education to build students' ethical behavior.

The results of this study concluded that religiosity affects ethical decision-making. More religious students are more likely to make more ethical decisions than less religious students. This study concluded that personal religiosity is a potential source of ethical norms that influence

ethical evaluation or ethical decision-making. This study also concluded that gender interaction with religiosity does not affect ethical decision-making. There is no difference in ethical decision-making between more religious female students and less religious male students. These results show that ethical decisions made by women of high religious levels are the same as those of men with low religious levels.

The implication of this study is to provide an understanding of the moral role in ethical decision-making, taking into account aspects of psychology and external aspects. Another implication of this study is a methodological implication, which was to use the experimental method, and previous studies have used the survey method. This research also implicates ethical issues, especially for the university to improve students' ethical behavior by providing business ethics courses in the curriculum.

This research had some limitations related to generalization. First, the limitations of this study are limited to religiosity measurement instruments that use only two question items. This study used religiosity measurements used by Chung and Monroe (2003). The second limitation is that this study in measuring ethical decision making is only in moral intentions only not to behavior, because of the sample used by students.

Suggestion for further research is using different measurements, i.e., Intrinsic-Extrinsic Religiousness instrument. The instrument is the backbone of empirical research in religious psychology that has been used for more than 40 years (Clark & Dawson, 1996). This instrument measures more valid because it measures individual intrinsic and extrinsic aspects of religion. For further research, it is necessary to look for other individual and organizational factors that may influence ethical decision-making, such as motivation, moral intentions, code of ethics, ethical culture, and personality. Further research needs to measure up to the stage of behavior or action, although this study is of a long research nature because it measures behavior.

## REFERENCES

- Akaah, I. P. (1989). Differences in research ethics judgments between male and female marketing professionals. *Journal of Business Ethics*, 8(5), 375–381.
- Anderson, S. E., & Burchell, J. (2019). The Effects of Spirituality and Moral Intensity on Ethical Business Decisions: A Cross-Sectional Study. *Journal of Business Ethics*, 168(1), 137–149.
- Aquino, K., Freeman, D., Reed, A., Felps, W., & Lim, V. (2009). Testing a Social-Cognitive Model of Moral Behavior: The Interactive Influence of Situations and Moral Identity Centrality. *Journal of Personality and Social Psychology*, 97, 123–141.
- Chung, J., & Monroe, G. S. (2003a). Exploring social Desirability Bias. *Journal of Business Ethics*, 44(4), 291–302.
- Chung, J., & Monroe, G. S. (2003b). Exploring Social Desirability Bias. *Journal of Business Ethics*, 44(4), 291–302.
- Clark, J. W., & Dawson, L. E. (1996). Personal Religiousness and Ethical Judgements: An Empirical Analysis. *Journal of Business Ethics*, 15(3), 359–372.
- Cohen, J., Pant, L. W., & Sharp, D. J. (1998). The effect of gender and academic discipline diversity on the ethical evaluations, ethical intentions and ethical orientation of potential public accounting recruits. *Accounting Horizons*, 12, 250–270.
- Cohen, J. R., Pant, L. W., & Sharp, D. J. (2001). An examination of differences in ethical decision-making between Canadian business students and accounting professionals. *Journal of Business Ethics*, 30(4), 319–336.
- Conroy, S. J., & Emerson, T. L. N. (2004). Business Ethics and Religion: Religiosity as a Predictor of Ethical Awareness Among Students. *Journal of Business Ethics*, 50(4), 383–396.
- Craft, J. L. (2013). A Review of the Empirical Ethical Decision-Making Literature: 2004-2011. *Journal of Business Ethics*, 117(2), 221–259.

- Dalton, D., & Ortegren, M. (2011). Gender Differences in Ethics Research: The Importance of Controlling for the Social Desirability Response Bias. *Journal of Business Ethics, 103*(1), 73–93.
- Dawson, L. M. (1995). Women and Men-Morality and Ethics. *Business Horizons, July-Augus*, 61–68.
- De George, R. T. (1986). Theological Ethics and Business Ethics. *Journal of Business Ethics, 5*(6), 421–432.
- Donahue, M. (1985). Intrinsic and Extrinsic Religiousness. Review and Meta-Analysis. *Journal of Personality and Social Psychology, 48*, 400–419.
- Eynon, G., Nancy Thorley, H., & Stevens, K. T. (1997). Factors that influence the moral reasoning abilities of accountants: Implications for universities and the profession. *Journal of Business Ethics, 16*(12/13), 1297–1309.
- Ford, R. C., & Richardson, W. D. (1994a). Ethical Decision Making: A Review of the Empirical Literature. *Journal of Business Ethics, 13*(3), 205–221.
- Ford, R. C., & Richardson, W. D. (1994b). Ethical Decision Making: A Review of the Empirical Literature. *Journal of Business Ethics, 13*(3), 205–221.
- Glover, S. H., Bumpus, M. A., Sharp, G. F., & Munchus, G. A. (2002). Gender differences in ethical decision making. *Women in Management Review, 17*(5), 217–227.
- Jones, T. M. (1991). Ethical Decision Making by Individuals in Organizations: An Issue-Contingent Model. *The Academy of Management Review, 16*(2), 366–395.
- Kohlberg, L. (1969). *Stage and sequence: The cognitive-developmental approach to socialization*.
- Kohlberg, Lawrence. (1975). The Cognitive-Developmental Approach to Moral Education. *The Phi Delta Kappan, 56*(10), 670–677.
- Kohlberg, Lawrence. (1981). *The Philosophy of Moral Development Moral Stages and the Idea of Justice*. Harper and Row.
- Kohlberg, Lawrence. (1982). Moral stages and moralization. A cognitive developmental approach. *Journal for the Study of Education and Development, 5*(18), 33–51.
- Loe, T. W., Ferrell, L., & Mansfield, P. (2000). A Review of empirical studies assessing ethical decision making in business. *Journal of Business Ethics, 25*(3), 185–204.
- Loe, T., & Weeks, W. (2012). An experimental investigation of efforts to improve sales students' moral reasoning. *Journal of Personal Selling & Sales Management, 20*, 243–251.
- Loo, R. (2003). Are women more ethical than men? Findings from three independent studies. *Women in Management Review, 18*(4), 169–181.
- Mason, E. S., & Mudrack, P. E. (1996). Gender and ethical orientation: A test of gender and occupational socialization theories. *Journal of Business Ethics, 15*(6), 599–604.
- Nguyen, N. T., & Biderman, M. D. (2008). Studying Ethical Judgments Intentions and Behavioral Structural Equations: Evidence from the Multidimensional Ethics Scale. *Journal of Business Ethics, 83*(4), 627–640.
- O'Fallon, M. J., & Butterfield, K. D. (2005). A Review of The Empirical. *Journal of Business Ethics, 59*(4), 375–413.
- Peterson, D. K., Rhoads, A., & Vaught, B. C. (2001). Belief in universal ethics: Gender differences, influence of referent others, and ethical beliefs of business professionals. *Business & Professional Ethics Journal, 20*(2), 47–62.
- Peterson, R. A., Albaum, G., Merunka, D., Munuera, J. L., & Smith, S. M. (2010). Effects of Nationality, Gender, and Religiosity on Business-Related Ethicality. *Journal of Business Ethics, 96*(4), 573–587.
- Peterson, R. A., Beltramini, R., & Kozmetsky, G. (1991). Concerns of college students regarding business ethics: A replication. *Journal of Business Ethics, 10*(10), 733–738.
- Rest, J. R. (1986). Ethical Decision Making and Action. In *Moral Development: Advances in Research and Theory* (pp. 59–86). Praeger.

- Trevino, L. K. (1986). Ethical Decision Making in Organizations: A Person-Situation Interactionist Model. *Academy of Management Review*, *11*(3), 601–617.
- Treviño, L. K., Weaver, G. R., & Reynolds, S. J. (2006). Behavioral Ethics in Organizations: A Review. *Journal of Management*, *32*(6), 951–990.
- Walker, A. G., Smither, J. W., & DeBode, J. (2012). The Effects of Religiosity on Ethical Judgments. *Journal of Business Ethics*, *106*(4), 437–452.
- Weaver, G. R., & Agle, B. R. (2002). Religiosity and Ethical Behavior in Organizations: A Symbolic Interactionist Perspective. *The Academy of Management Review*, *27*(1), 77–97.