

EMPIRICAL ANALYSIS OF ETHICS INTEGRATION AND ONLINE LEARNING IN AUDITING COURSE ON ETHICAL DECISION MAKING: FURTHER EVIDENCE FROM INDONESIA

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Abstract: -

Whether ethics should be taught and how it should be taught has been questioned by accounting professionals, researchers, and teachers. This experimental study attempts to answer the question and gives further evidence of the beneficial impact of teaching ethics. Participants are sixty students of professional accounting program in the first semester. Ethical decision making was measured using multidimensional ethical scale (MES) that has been used to measure attitudes related to justice, relativism, egoism, contractualism, and utility. MES also allows participants to provide explanation for their moral orientation in making decision. We also construct a ratio scale of participants' confidence to measure ethical decision making. The scales are from 10 to 100 percent to answer question whether they believe that decision made was an ethical decision. Using 2x2 factorial experimental design and analysis of variance, this study proved that interaction of ethics integration and learning method of online technology has positive impact on participants' moral orientation. On the contrary, participants' confidence level in making ethical decision is not related to ethics integration, but influenced by ethics integration and learning methods. These results indicate that ethics teaching can influence character and ability of participants' moral orientation, but when making ethical decision, their confidence level in making ethical decision depend on circumstances faced.

Keywords: - *ethics integration, online learning, multidimensional ethical scale, ethical decision making.*



INTRODUCTION

The question of whether ethics can be taught and how it should be taught become more widespread with the financial scandals involving accounting profession. Wyatt (2004) revealed that the scandal in accounting profession arise for several reasons, namely the changing role of auditor from audit function to consultative function, the policy of non-accounting graduates who can be a public accountant through the certification process, and the drive to generate a substantial income. These three reasons encourage greediness as the driving force of accounting organization. As a result, an organization's culture is slowly changing from a culture that emphasizes the provision of professional services to an organization that emphasis on big revenue and profit. Furthermore, Wyatt (2004) emphasized that in order to restore professionalism in public accounting, beside the need for improvement in organizational culture public accountant, is also important to teach accounting students to respect and do the accounting professionalism continuously. This study emphasizes the second case, the role of education and the practice to form a professional attitude in making ethical decisions.

This study aims to analyze and explain the process of ethical decision making and behavior through the integration of ethics in auditing course. Learning context of auditing is selected for several reasons. First, value, integrity, and the ability of auditors to understand the ethical dilemmas and ethical action are important to maintain continuity of accounting profession (Karacaer et al., 2009). It is recognized by the Indonesian government with the enactment of Law No. 5 of 2011. Second, users of financial statements (investors, creditors, government, and other stakeholders) rely on auditor's opinion in assessing the fairness of financial statements prepared by company. Third, the emphasis of learning ethics in audit accounting curriculum will produce a view of more focused audit ethics (Fleming, Romanus, and Lighter, 2009). Ferdian and Naim (2006) revealed that auditing is a course that cannot be memorized or understood only by learning the theory, it must be perceived through implementation.

To understand and get clear empirical evidence about ethical behavior or ethical decisions that arise because of ethical dilemmas and individual efforts to resolve the dilemma, this study was designed with experiments design. Experimental design does not only provide insights into the aspects of perception, but also be able to explain aspects of behavior (Gould, 2002: 12). Cook and Campbell (1979: 2) state that experiments testing generally test the causality. Shaughnessy, Zechmeister, and Zechmeister (2012: 175) state that the researchers conducted experiments to (1) test hypotheses about the causes of behavior and (2) decide whether the treatment or behavior change programs effectively. In this study, the causal relationships to be tested are the relationship between integration of ethics material and online technology of audit learning with individual behavior in ethical decision making. Auditing learning experiments are done in two ways, namely by integrating ethics in the material which is being taught and the media to deliver the ethics in auditing course. The content of ethics learning auditing course was focused on learning to build awareness of ethical decision making when faced with an ethical dilemma (Fleming et al., 2009; Patel and Millanta, 2011).

Researchs which involve integration of ethics in this study are important because in case of deviation behavior by accountants, the accounting profession's credibility will be threatened. Ethics code and ethics education are crucial for modern society, business world, and accounting profession. Global market demands the company to provide accurate and relevant financial report, has made the role scope of financial audit and independent auditors become wider. The value of auditor's work is determined by accounting profession expertise of technical ability and honesty itself (Early and Kelly, 2004). In terms of improving technical capabilities, many attempts have been made to improve it but the accountant education program that offers ethics matter is still rare (Misiewicz, 2007). Several things that caused it were (1) ethics are often considered as an automatic accountant ability and although ethics is taught, the discussion is limited to professional code of ethics and lack of relation with social life (Kerr and Smith, 1995; Swanson, 2005), (2) teaching staff may feel hesitant to teach ethics because they feel inadequate or they think that teaching ethics is same as implying that the student does not have ethical attitude (Gunz and McCutcheon Gunz, 1998; Misiewicz, 2007), (3) the implementation ethics material are integrated in existing accounting courses, depending on the seriousness of teachers to provide time (Gunz and McCutcheon, 1998; Haywood and Wygal, 2009).

American Institute of Certified Public Accountants (AICPA) road map of 2025 and Indonesian Accountants Institute (IAI) road map towards 2020 suggested that in order for Public Accountant to maintain and keep the development of business transactions; accounting education framework needs to be changed. Internet and development of online technologies help CPAs to acquire knowledge whenever and wherever needed. The evolution of technology can make education transferred in smaller portions gradually rather than studing it directly for several hours in classroom. Learning environment with online media is as effective as face-to-face classroom environment. Dunbar (2004) in qualitative research suggests that flexibility of technology is seen by student as important learning. Students choose online learning because they can determine their own pace and they can always go back in part to understand and rework. Research of technology uses as a means or methods of delivering learning materials initially sought to identify whether student learning can be enhanced by learning new media and then compared which one is better, technology-based instructional media or conventional learning (Bryant and Hunton, 2000). Despite of fact that technology in learning can improve learning performance of students, there are still many teachers are reluctant to use it (Klopper, Osterweil, Groff, and Haas, 2009).

The rest of this paper will be organized as follows: the second section of this paper is the literature review and the development of research hypotheses. The third section outlines the research methods and the forth section describes research results and discussions. Finally, conclusion and limitation are set forth in the last section.

Literature Review

Ethical action is the cornerstone of the auditing profession that must be upheld by a public accountant. Sudibyo (2001)

suggested that trust in the accounting profession could be built through the attitude of honest and independent professionalism. With the phenomenon of the loss of public confidence due to international or national financial scandal, the accountant's ability to process and make ethical decision is necessary. Saravanamuthu and Tinker (2008) stated that ethics education should make students able to find and achieve professional attitude by extending not only just a discussion of the practice of code of ethics but also the socio-political context of the situation. Ethics should also be integrated in the accounting curriculum and not taught in separate courses.

Ghaffari et al. (2008) in a survey of how ethics should be learning to do found that 81% of respondents (institutions surveyed) said that lessons need to put ethics in accounting education by integrating the teaching of ethics in existing courses. In addition, the survey also revealed that 31% of respondents do ethics learning integration was triggered by the financial scandals that occurred.

Shaftel and Shaftel (2007) examined the relationship between attitudes and behaviors of self-reported with the ability to learn, and test the effect of new learning models to changes in attitude and willingness to learn. The study was conducted by way of a survey of 363 students (pre and posttest) at the beginning and end of the semester. Students were asked to fill out questionnaires on what they have done and what they hope of learning. The results proved that the learning materials have positive influence on learning ability and attitudes toward learning.

O'Leary (2009) conducted a study on 155 students majoring in accounting with the ethical dilemma of using five scenarios in which students must choose one answer from the multiple-choice answer's alternatives. The study design was as follows: (1) conduct a survey at the beginning of the semester, (2) three different methods of teaching ethics, and (3) conduct the same survey 6 weeks after the first survey. The results prove that the mean scores differed significantly, indicating that learning ethics can enhance ethical decision-making. The results were not found to differ by Sweeney and Costello (2009).

In terms of the development of moral cognition, moral individuals will develop through various stages of development to reach maturity (Kohlberg, 1981). Brandon et al. (2007) by using the case of ethical considerations, proves that the level of risk faced influences the level of moral development in ethical action. Nevertheless, the different results found in the study of Abdolmohammadi et al. (2009). They proved that moral judgment scores were unchanged (not different) among the various accounting profession, but the score decreased. This finding makes learning ethics in accounting education seems necessary to be reexamined.

Based on these findings, this study did reexamine ethical materials in audit learning by providing ethics treatment in the learning of auditing. In this study, the integration of ethics in the teaching material auditing is focused on the integration of emotion to form the attitudes of professional accountants' ethical decision-making. The justification of the integration of emotions in learning auditing based on the results of research in psychology. They are proving a link between emotions and decision-making (Langley et al., 1995) and affective events theory (Weiss and Cropanzano, 1996). In addition, research on emotion, as part of the irrational perspective that can influence the behavior of individuals, has not been studied a lot (Bhattacharjee and Moreno, 2002; Curtis, 2006; Chung et al., 2008; Cianci and Bierstaker, 2009; Weisbrod, 2009)

Affective events theory (Weiss and Cropanzano, 1996) revealed that under certain conditions, emotion-focused provides better options in solving the problem. In ethical decision-making issues related to ethical dilemmas, Curtis (2006) conducted further research on the model of Graham about to report or to not report incidents of unethical conduct, explaining that individuals who have a negative sense of self and the company will tend to not report incidents of unethical conduct. Curtis (2006) proved that the negative emotions associated with low motivation of individuals to report unethical acts committed by his/her colleagues.

Bhattacharjee and Moreno (2002) focused on negative emotions and found that negative emotion influences ethical decision-making. Curtis (2006) found that negative emotions are associated positively with the intention of individuals to report unethical person to his superiors, but have not examined the influence of emotion on judgment and ethical decision-making. These two researchers only examined negative emotions in the formation of ethical behavior.

Based on these findings, Cianci and Bierstaker (2009) examined the association of both positive and negative emotions on ethical considerations by giving the task to provide an explanation for the fluctuation in gross profit and turnover ratio. The results indicated that auditors who are in a negative emotional state provide better explanations than auditors who are in a positive emotional state. Auditors in the negative emotion condition also made fewer ethical concerns than the auditor in a positive emotional state did. Negative emotions (negative mood) is characterized by feelings of threat, fear, and anger, while positive emotions (positive mood) is characterized by feelings of joy, happy, and satisfied. Overall, Cianci and Bierstaker (2009) concluded that negative emotions make someone give a better explanation, but make poor ethical considerations.

Weisbrod (2009) did experimental studies on the influence of affective and tolerance of ambiguity on ethical decision making in two contexts: personal and organizational settings. The study was conducted on accounting students and found that tolerance to ambiguity affects ethical decision-making, both at the personal and organizational settings. The results also showed an interaction between negative affect and tolerance to ambiguity.

Past researches have shown that the integration of ethics with an emphasis on emotions in the existing course influence ethical decision-making. Thus, the first hypothesis (hypothesis null and alternative) of this study is stated as follows:

H₀₁ : In facing ethical dilemmas, there is no difference of ethical decision-making for individuals who received audit-learning material with the integration of ethics and individuals who received audit-learning materials that do not integrate ethics.

H_{a1} : In facing ethical dilemmas, individuals who received audit-learning material with the integration of ethics will make ethical decisions that are different from individuals who received audit-learning materials that do not integrate

thics.

In addition to providing treatment to the learning material, the study also changes how the material is presented by using mobile (online) media learning. Justification for the use of mobile (online) media or digital media in the delivery of learning materials based on the socio-constructivist theory. This theory suggests that the mobile (online) technology to make information technology to help individuals learn in different ways-like or mimics learning directly (person to person), with the advantages of learning anywhere and anytime (Duffy and Jonassen, 1992; Swan, 2005; Willis and Cifuentes, 2005). Based on the explanation of socio-constructivist theory, the learning can be done with mobile (online) media-based learning.

Bryant and Hunton (2000) conducted a review of the educational research that uses technology as a tool to prove the effectiveness of the delivery of learning and learning technologies. They reported that use a lot of research in education theory and cognitive behavior. Some areas in the study of technology-based learning remains to be investigated in the future are harmonization of learning styles with instructional technology, assessment of learning outcomes of the media used, and a new web-based technologies. Collett et al. (2007) who conducted a study of class attendance (present in the classroom or online learning) proved that the performance of students present in the classroom and online learning can improve performance, but they cannot replace each other. Kidwell and Kent (2008) who investigated the behavior of students cheating long distance and traditional students, proved that the average college student (long distance or traditional) cheating at least once from 17 cheating behaviors. Their analysis proved that distance students cheating less often than traditional students do.

The decision-making process is considered depending on the issues faced during the decision-making, for it, Haines and Leonard (2007) conducted a study to test the process with five scenarios involving ethical dilemmas associated with the use of technology. Data was collected using questionnaires after the group discussion and the results prove that the process of ethical decision-making is dependent on a variety of scenarios. Therefore, the research on ethical decision-making process used a variety of methods to be able to capture and understand the process of ethical decision making by individuals. Weinstein (2005) by using technology to make database of cases include cases such as accounting or ethical dilemma scenarios (including ethical issues with setting audit) that can be integrated in accounting education. Edmonds and Edmonds (2008) investigated the benefits of SRS technologies (student response system) to improve student performance by comparing students who were taught with SRS technology and students who were taught without SRS technology. The results prove that the student who gets a lesson with SRS technologies have performed better than students who receive course materials without SRS technology. SRS technologies can improve low student performance without affecting students who already have a high performance.

Goyal et al. (2011) using a model of task-technology fit (TTF) for the usefulness of the internet being used by students to complete assignments and assess student performance. The results prove that the satisfaction with the technology and the use of Internet technology can explain the variation in student performance. Therefore, internet technology can improve student performance, Goyal et al. (2011) suggested that management or decision makers in universities and educational institutions need to find the best way how Internet technologies can be used effectively and efficiently. Holtzblatt and Tschakert (2011) noticed that in the past, many activities in accounting education were limited to classroom. Activities to invite guest lecturers or invite students to participate in field studies, for instance, require effort that involves many parties. Today, the development of information and communication technologies is able to facilitate these activities. Off-campus experts could visit the class; students can collaborate well with teachers or other students remotely, using ICT such as digital video technology. By using online video clips, video projects for student assignment, and online video recording, providing tremendous hope in accounting education. Holtzblatt and Tschakert (2011) suggested that online video technology could continue to be used in accounting education. They also suggested the need for research on digital technology in accounting education and urged accounting educators to use digital technologies in learning accounting.

Digital learning technologies can be used not only to represent context but also learning content (Brown et al., 1989). The theorists of situated learning, argues that learning is a function of activity, context and culture in which learning takes place, so it cannot be separated from the community support participation. Important concept in this theory is a statement of the legitimacy of the participants around him. That is, proficiency in the knowledge and skills that can be achieved gradually by the plunge in a community of practice. In the context of education, students (cognitive apprenticeship) in class are working on a problem with the help of friends or people who are more expert, such as the professor or instructor (knowledge building communities), where students collaborate and gradually learn from the self and from the community environment (Swan, 2005).

Instructional media support such as mobile learning using ICT technology can assist the learning process. One of the benefits of mobile (online) learning is the life-long learning which is in accordance with the Accounting Core Competency Framework (AICPA, 2004). The framework supports the concept of continuous learning that starts from the academic environment and continuing (life-long) through professional education and experience. Road map of the 2025 Certified Public Accountants (CPA, 2010) in the United States or IAI towards 2020 suggested that in order to maintain and keep track of business transactions, the accounting framework of education need to change. Internet and mobile (online) technology development help CPAs in order to gain knowledge whenever and wherever needed. The evolution of technology can make education transferred in smaller portions and gradually than to learn directly a few hours in the classroom.

The purpose of the development of mobile (online) learning is the process of life-long learning. Students can be more active in the learning process, as well as save time because when applied to the learning process, students do not need to

be present in the classroom only to collect duties; assignment or examination is sent through the mobile (online) application. In addition, compared to conventional or traditional learning, mobile (online) learning allows for more opportunities for collaboration on an ad hoc and informal interaction between the learners and will indirectly improve the quality of the learning process itself. Thus, mobile (online) learning is a learning model that enables the learner (student) to obtain teaching materials wherever and whenever through mobile (online) technology, removing geographical boundaries, providing a collaborative learning environment that can increase the flexibility and feeling free to students.

Several studies have shown that mobile (online) learning environment is as effective as face-to-face classroom learning environment. However, there are still many teachers reluctant to use it (Klopper et al., 2009). The results of qualitative research by Dunbar (2004) suggested that the flexibility of the technology (ICT) is seen as crucial to student learning. Students choose a mobile (online) learning because they can determine their own pace and they can always come back in part to understand and rework. The idea of using technology to communicate effectively is nothing new. Visual aids enhance a speaker's oral presentation. Textbooks are filled with photographs, artwork, and diagrams. Today educational technology is associated with state-of-the-art applications on personal computers. These applications are used in business software, educational software, and entertainment software (games). Multimedia PC applications enhance the classroom learning process.

Educational technology research is a subset of research regarding learning and information processing. A major determinant of what and how much individuals learn from their exposure to communications is a function of the intensity by which they process the presented information. The amount of cognitive capacity allocated to a specific processing task determines the extent of information processing intensity. The variation in the intensity with which information is processed is a major determinant of how much learning occurs (Bryant and Hunton, 2000).

In spite of the increasing attention given to ethics education and research, researchers continue to claim that ethics education in accounting is still not covered in a significant way in most institutions of higher learning (Swanson, 2005). With limited ethics coverage in the business and accounting curriculum, it is unlikely that accounting students and trainees will have sufficient training in ethics. The question of whether ethics can and should be taught has been extensively addressed in the literature with the literature turning towards developing ways to teach ethics effectively.

Based on the results of previous researches on the integration of ethics and ICT in learning, the second hypothesis (hypothesis null and alternative) can be stated as follows:

Ho2 : In facing ethical dilemmas, there is no effect of the level of ethics integration on individuals' ethical decision-making, whether the person receive auditing material using mode of delivery of face-to-face or online learning.

Ha2 : In facing ethical dilemmas, the effect of the level of ethics integration on individuals' ethical decision-making depend on whether the person receive auditing material using mode of delivery of face-to-face or online learning.

Research Method

Experiments in this study is designed to perform a manipulation of the learning material (non-integration of ethics - integration of ethics) and how the delivery of the learning (face-to-face - mobile or online). The experimental design was a 2x2 factorial design between subjects. Between subject because each participant will only receive a one-time treatment.

Table1. Experimental Design

Audit Learning	Mode of Delivery	
	<i>Face-to-face (FTF)</i>	<i>mobile-online</i>
Ethics Non-integration	Mean A	Mean C
Ethics Integration	Mean B	Mean D

This study examines the ethical decision-making process from the perspective of accounting students. Students are a resource in the business world and the student is the foundation of the establishment of ethics in the organization (D'Aquila et al., 2004). Experimental subjects in this study were 60 students of Professional Accountants Education Program.

The integration of ethics in held within three weeks that is also applied various ethical dilemmas scenarios. The planned integration of ethics covering as follows:

1. Integration of ethics in the first week. The purpose of learning is to provide insight to individuals (participants) on ethical decision-making process that consists of six tests. Cases of ethical dilemmas adapted from Hamilton III (2009) in the form of a fictitious cost cases (phantom expenses). In this case the experiment was changed in accordance with the ethical dilemmas faced by auditors and so the title is changed to be the Andini's dilemma.
2. Integration of ethics in the second week. The purpose of learning is to create a sense of empathy (altruism) and spirituality within the individual, so in the face of ethical dilemmas they will be able to process ethical decision-making. The case of ethical dilemmas in the form of scenarios, adapted from Heinz dilemma (Brinkmann, 2009; Doyle et al., 2009; Ekasari, 2012) is expected to generate individual beliefs in order to behave ethically. After understanding the case and determine the action to be performed, participants filled out questionnaires about spirituality to measure the extent to which participants use spiritual discernment to resolve a dilemma.
3. Integration of ethics in the third week. The purpose of learning is to identify the nature of altruism (willing to sacrifice selflessly to others) within the individual. In this experiment, participants were not given the case, but did a simulation game that is called the ultimatum game (adapted from Gintis et al., 2003). Additional material in this

game conducted to complement the form of case studies on the integration of ethics in the second week. Schumann et al. (2006) cites the Kuhn's opinion that in some intellectual case studies involving university students, often also involve emotional factors. This will reduce the tendency of students to remember the lessons they have earned. Kuhn believes that participation in the simulation sees the ethical dilemma as less hypothetical so that further enhance participants' involvement in decision-making. Therefore, in the simulation condition the participants will have a better understanding of the struggle between the effort to do the right thing with the pressure of the performance that will have an impact on themselves, the company, or the environment.

Before conducted the real experiment, the instrument is tested in a preliminary test. The purposes of the execution of preliminary test are as follows:

- To test the technical aspects of the research instruments, such as the language and sentence structure, the clarity of learning materials and case of ethical dilemma, the duration, and the number of cases.
- To test the substantive aspects of the research instruments, which includes general information, content and case study, and the assessment of ethical behavior.
- To identify the possibility of confounding factors that could cause actual bias on the experimental

Pilot Test Result:

Preliminary test involved 60 students of the Faculty of Economics and Business Accounting University's National Development "Veteran" East Java who have passed the Auditing courses. Students were divided into four groups, namely group A as a control group, group B as a group treated with ethics integration, group C who received treatment of online learning, and group D were treated with integration of ethics and online learning. Placement of participants in group A - D conducted randomly by lottery. Pilot study carried out for two weeks with four meetings. Preliminary test results are used to enhance research instrument. In the end of every meeting, students were asked to assess some aspects of research instruments and also conduct discussions with the students to know their opinion about research instruments. Table 2 presents the opinion of students on research instrument.

Table 2. Pilot Test Result

No	Aspect	Vote Percentage (%)			
		<25	25-50	51-75	>75
1	Ease of understanding the instructions the experimenter	3	5	23	29
2	Ease of Language	7	4	26	23
3	Ease of understanding the scenarios and case	-	7	22	31
4	Ease of understanding and answering questions	-	7	27	26
5	Similarity with real condition	5	3	28	24
6	Suitability length of scenario (compact and solid)	12	4	18	26
7	Number of scenario and cases which given is not boring	10	9	16	25
8	Duration of experiment is appropriate	10	9	16	25

Source: Processed Data

Preliminary test results showed that in general students assess research instruments has been good (an average of 37% gave ratings above 50% to 75% and 44% gave ratings above 75%). In general, there is no substantive improvement of preliminary test result. Some constructive feedback by students is language improvement so that scenarios and case easier to understand, some typos, more varied questions, and clarity of the multidimensional ethics scale as a measure of ethical orientation. After enhancing research instruments, the real experiment research can be done.

Experimental Procedures

This study analyzes the ethical decision-making process with the surrogate subjects of accounting students. Students are human resources in the business world and students are the basic foundation of ethics in the organization (D'Aquila, Bean, and Procaro-Foley, 2004). The substitute of public accountant in this study is a student of Professional Accountant Education Program (PAEP). Students of PAEP as advanced accounting students are deserved to be the subjects for accounting practitioners (Mortensen, Fisher, and Wines, 2012). The results of behavioral accounting research by Mortensen, et al. (2012) proves that based on experimental tasks involving ten accounting considerations, the consideration of advanced accounting students is not much different or equal to the consideration of accounting practitioners.

PAEP students who become participants in this research are students of PAEP Faculty of Economics and Business Brawijaya University, which consists of four classes. The PAEP students are grouped into four groups of A-D learning models (see Table 1). Group A is a group that received non-integration ethical auditing material by way of face-to-face delivery, group B is a group that received ethical integration auditing material by way of face-to-face delivery, group C is a group that received non-integration of ethics by way of online delivery, and group D is a group that gets the material of auditing ethical integration by means of online submission. The randomisation of the four classes into the treatment groups A through D is conducted to determine which groups receive the integration of ethical material using the lottery system. The experiments were conducted in two stages: the experimental stage of ethical integration learning in the auditing course and the experimental stage to test ethical decision making. Ethical integration learning

experiments are given only to groups B and D (see Table 1), while ethical decision-making experiments are given to all groups (A, B, C, and D). Before the experiment begins, the first week of lecture participants of PAEP Auditing class students are given explanation about the experimental research that will be done. At this time, participants are asked to fill out the willingness sheet into participants and a personal list that includes: name, email address, and HP number, and work. Participants in the first week were asked to fill out an ethical orientation questionnaire as an extraneous variable that influenced ethical decision making and manipulation checks. For groups of participants by means of online learning (groups C and D) is given an explanation of the procedures of online learning access on the web Learning Place (appendix 4). In general, Figure 1 presents an experimental procedure performed.

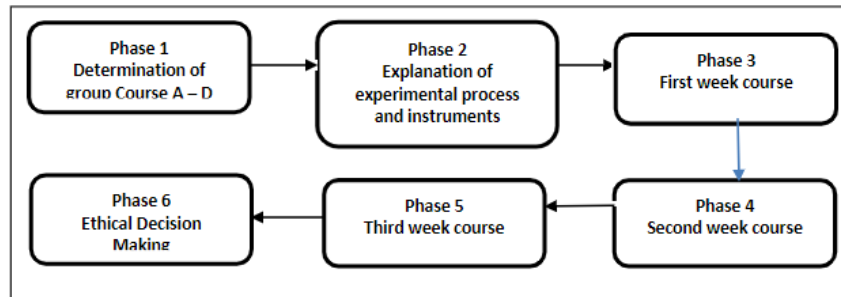


Figure 1. Experimental Procedures

Internal Validity

One of the characteristics of the experimental research is its internal validity is high and its external validity is low. Therefore, research with experimental design must strictly maintain its internal validity. Internal validity basically seeks to measure how much variation in the dependent variable is really attributable or caused by variation in independent variables (Ghozali, 2012: 19). In other words, internal validity can provide evidence of how valid causality causality occurs. Some of the things that are done to maintain or strengthen internal validity are:

1. An important instrument in this research is the ethical material that is integrated in the learning of auditing and the instrument for measuring ethical decision making. In order for the instrument used in the design of this experiment to be valid, the ethical material and instruments used are established after discussion with the auditing practitioner and the lecturer of the auditing course. Prior to use in real experiments, trials were conducted on ethical material and ethical decision-making instruments. Pilot test (pilot test) conducted on Accounting Faculty of Economics and Business students UPN Veteran East Java who has passed the course Auditing. With the implementation of pilot test, ethics material and ethical decision-making instruments are really able to form professional attitude of accountant. Critics and suggestions from pilot tests are used to improve ethical material and ethical decision-making instruments.
2. Manipulation checks are performed on subjects for each group of learning models at pilot test and actual experiments. Check manipulation done twice, ie in the first week and in the last week. Manipulation checks are performed to test the understanding of the treatment provided by giving five scenarios of ethical dilemmas. The five scenarios are used to test participants' knowledge about the conditions of ethical dilemmas. Check manipulation is done so that the data obtained is free from bias. Participants passed the check manipulation if it gets a score of at least 3 for all questions given.
3. Situational conditions in this experiment may vary or situational factors cannot be made constant because learning with online technology is not done in the classroom. If this learning is done in the classroom (whose condition is more controllable by the researcher), it will reduce the intent of using ICT online as a learning that can be done wherever and whenever. To maintain situational conditions that may affect the relationship between auditing learning and the professional ability of accountants in making ethical decisions, can be done in two ways, ie eliminating situational factors or make situational factors are random or random. Block randomization can balance the characteristics of the subject and the confounding potential that arises during an experiment and creates a group of similar size (Shaughnessy et al., 2012: 182). Because this study was conducted directly in four courses of Auditing already existing in PAEP, subject randomization into each treatment group cannot be done. Therefore, randomization was performed in determining four treatment groups. The randomization of the treatment group was conducted by lottery method and then tested individual characteristics to prove there was no difference of individual characteristics in each treatment group. Randomization and testing are expected to maintain the internal validity of the disturbance of situational conditions factors.
4. Maintenance of the same experimental conditions for each group that gets the integration of ethical material in auditing learning. All participants will receive the same ethical material in the form of a slide and the same explanation with the same length of time, the same instructions throughout the experiment, and accept the same case scenario and questionnaire decision-making at the end of the experiment. Maintenance of this constant experimental condition is carried out to ensure that the independent variables are the only systemically different factors among the experimental group.
5. Other (extraneous) variables that are often researched and influence ethical decision making are age, work experience, GPA, and ethical orientation (Ford and Richardson, 1994; Loe et al., 2000; Peterson et al., 2001; O'Fallon and Butterfield, 2005). In terms of hypothesis testing, age variables, work experience, GPA, and ethical

orientation will be treated as covariant variables, so hypothesis testing in addition to using two-ways ANOVA analysis also uses ANCOVA analysis.

The independent factors tested were the integration of ethical material and the moderating variables of the way of delivering the learning materials. The independent variables of ethical material integration consist of: (1) No integration of ethical material in the Auditing Course (2)

The integration of ethical material in this research is how the ethical decision-making process is done by involving emotional factors (affection).

The moderation variable of the way of delivering learning materials, focused on the flexibility of learning, consists of: (1) learning with limited space and time, that is face-to-face class. Duration of delivery of material ranges from 25 to 30 minutes (time constraints). (2) Without the limitations of space and time, that is online learning with high flexibility in learning so it can be done wherever and whenever up to individual needs.

Research Result And Discussion

Results of data processing on the overall demographic characteristics of participants can be seen in Table 3. Participants in this experiment were divided into four treatment groups. Groups A, B, C, and D each consist of 20, 10, 17, and 13 participants respectively. Results descriptive statistics of participants is in Table 3.

Table 3. Descriptive Statistics of Demographics Participants

Description	Group	N	Mean	Variance	Minimum	Maximum
Age	A	20	24,25	11,671	21	35
	B	10	24,80	10,400	22	31
	C	17	22,65	8,8680	21	34
	D	13	29,38	60,423	22	45
	Total	60	25,00	26,068	21	45
Gender	A	20	1,65	0,239	1	2
	B	10	1,60	0,267	1	2
	C	17	1,35	0,243	1	2
	D	13	1,31	0,231	1	2
	Total	60	1,48	0,254	1	2
Work experience	A	20	2,38	11,755	0	13
	B	10	1,20	6,124	0	8
	C	17	0,82	7,029	0	11
	D	13	3,51	24,002	0	15
	Total	60	1,99	12,564	0	15
GPA	A	20	3,49	0,040	3,09	3,82
	B	10	3,33	0,070	2,80	3,68
	C	17	3,44	0,079	2,92	3,89
	D	13	3,22	0,138	2,34	3,66
	Total	60	3,39	0,084	2,34	3,89
Ethic Orientation	A	20	3,72	0,512	2,41	4,94
	B	10	3,73	0,435	3,00	5,24
	C	17	3,68	0,679	2,06	5,06
	D	13	3,07	0,332	2,06	4,06
	Total	60	3,57	0,552	2,06	5,24

Source: Processed Data

Descriptive statistics in Table 3 shows that the youngest participant was 21 years old and the oldest 45 years old. The average age of participants was 25 years. Gender has an average of 1.48 which means that the number of male participants was 1.48 times more than female participants (women participants were 29 people and men participants were 31 people). The average time of participant's working experience was 1.99 years from no work experience and the maximum one has 15 years of work experience. Grade Point Average (GPA) of the average participant was 3.39 with a minimum GPA of 2.34 and a maximum of

3.89. Participant's ethical orientation average was 3.5682, which indicates that the participants tend to have a pretty good ethical orientation (the smaller value of ethical orientation demonstrated a better ethical orientation).

Group A had an average age of 24.25 years. Gender had an average of 1.65 which means that the number of male participants was 1.65 times more than female participants.

The average of work experience was 2.38 years, with average GPA of 3.49, and average ethical orientation was 3.72. Group B had an average age of 24.80 years. Gender has an average of 1.60 which means that the number of male participants was 1.60 times more than female participants. The average work experience was 1.2 years, with average GPA of 3.33, and average ethical orientation was 3.73. Group C had an average age of 22.65 years. Gender has an average of 1.35 which means that the number of male participants was 1.35 times average female participants. The average of working experience was 0.82 years, with average GPA of 3.44, and average ethical orientation was 3.67. Group D had an average age of 29.38 years. Gender had an average of 1.31 which means that the number of male participants was 1.31 times more than female participants. The average of working experience was 3.51 years, with average GPA of 3.22, and average ethical orientation was 3.07.

Internal validity in research experiments should be maintained so the differences in results really occurred because of the

treatment which was given in the experiment. In this research, in addition to checks of manipulation and randomization treatment, variant homogeneity test was also carried out to test demographic data of participants and test the difference in charging time research instruments.

Table 4. Variance Testing of Demographic Character

Demograph Characteristic	Levene Statistic	df1	df2	Significant
Age	8,455	3	56	0,000
Gender	0,254	3	56	0,858
Working Experience	2,230	3	56	0,095
GPA	2,021	3	56	0,121
Ethical Orientation	0,749	3	56	0,527

Source: Processed Data

Test of homogeneity of variance was conducted to test whether four groups have demographic variance of age, gender, work experience, and the same ethical orientation. This variance test results are shown in Table 4. Test results in Table 4 shows that four groups have characteristic variance gender, work experience, and ethical orientation which does not has differences or have identical variance. It can be seen from significance (p- value) characteristics of gender, work experience, GPA, and ethical orientation of participants greater than 0.05. Age has probailitas value less than 0.05, so that all four groups have different age variance. According Ghozali (2012: 75) and Tabachnick and Fidel (2007: 88), in cases where the assumption of homogeneity is violated, it is not fatal to ANOVA (ANOVA robust toward violations of variance homogeneity) and the analysis can be continued as long as group still has a relatively same sample size (proportional) or largest and smallest ratio sample size should not be more than 4: 1 and the ratio of largest and smallest variance cannot be more than 10: 1. The largest and the smallest variance ratio for age data in this study is = 60.423: 8.868 = 6.81 (below 10), so that data does not need to be transformed and age data can be used for further testing (Tabachnick and Fidel, 2007: 221).

PAEP Auditing course consists of four classes (two regular classes and two Saturday-Sunday classes) with different time. Both Saturday-Sunday classes started at

08.00 am (morning), first regular class begins at 13:00 pm (noon), and second regular classes begin at 18:00 pm (evening). This time difference pose different conditions during the charging initial instrument research on ethical orientation and final instrument of ethical decision making. This condition can not be avoided because Auditing classes have been scheduled by the academic PAEP. It is likely to affect the participants at time of filling the research instruments, so it is necessary to prove that time difference does not affect participants at the time of completing research instrument by conducting a test. Testing is done by determining homogeneity of variance with Lavene test first then ANOVA test is performed (Table 5).

Table 5 shows that Levene statistical value ethical orientation and ethical decision making at 0.721 and 1.425 with a significance value at 0.491 and 0.249 each. Significance value was greater than 0.05, which proves that the class in the morning, noon, and night has variance ethical orientation and the same ethical decision making. ANOVA test on difference time indicates ethical orientation significantion value of 0.225 and ethical decision making of 0.549. Both the value of the significance is greater than 0.05 which can be concluded that there is no difference ethical orientation and ethical decision-making caused by the difference in college time.

Table 5. Different Time Courses Testing

Description	Homogeneity Test		ANOVA Test	
	Levene Statistic	Significant	F test	Significant
Ethical Orientation	0,721	0,491	1,530	0,225
Ethical Decision Making	1,425	0,249	0,606	0,549

Source: Processed Data

The testing of research hypothesis conducted with chi-square test for independence and two-ways ANOVA test (two ways ANOVA - main effects and interaction). Hypothesis testing is done at significance limit of 5%.

Before doing test of Hypothesis 1 (H1), it is necessary to conduct a test to see the difference in ethical decision making with four types of treatment. This test is very important because if both (ethical decisions and the level of treatment) are independent, it means that ethical decision making is not affected by type of treatment given, or vice versa. Testing is done with the chi-square test for independence). Chi-square test results are presented in Table 6.

Table 6. Chi Square Test Result

Description	Value	df	Significant (two side)
Chi Square Pearson Significant	160,541	1	0,000
Ratio	159,797	1	0,000
Liniear Relationship Number of Valid Case	161,891 4850	1	0,000

Source: Processed Data

Table 6 shows Pearson chi-square with two-sided significance value of 0.000.

Significance value of Pearson's chi-squared is less than 0.05, which means that there are differences in ethical decision making on treatment type for four groups of participants. It can be interpreted that the ethical decision making and types of treatment are not independent variables, where ethical decision making which taken by participants were affected by type of treatment given.

First Hypothesis Testing

Testing of Hypothesis 1 (H1) are conducted to prove the existence of a major influence on the integration of ethics in ethical decision making. To perform the H1 test used ANOVA test (main effect – ethic learning materials). Descriptive statistics ethical decision making is presented in Table 7.

Table 7. Descriptive Statistic of Ethical Decision Making

Method	Subject Course		
	Non-Integrated Ethics (NE)	Integrated Ethics (IE)	
<i>Face to Face</i> (FTF)	82,00	71,00	78,33
<i>Online</i> (OL)	76,47	92,31	83,33
	79,46	83,04	

Source: Processed Data

Table 7 shows the average value of final ethical decision making (after receiving additional information) in a 2x2 factorial design. Group A has a confidence value of ethical decision making at 82.00; Group B with a value of 71.00; Group C with a value of 76.47; and group D with a value of 92.31. These data showed anomalous results because group A which did not receive the material integration of ethics have a better confidence level in ethical decision making than group B, who received the integration of ethics.

The main effect is whether there is any differences in ethical decision making with the treatment of integration or no intergration of ethics in Audit learning. The weighted average value of ethical decision making for participants who do not accept ethics integration is 79.46 less than the participants who received the integration of ethical material, namely 83.04. The descriptive data can be interpreted that participants who received integration ethics matrial have a confidence level in ethical decision making better than participants who did not receive the material integration of ethics. To prove whether differences in belief value ethical decision making is significant, ANOVA main effect testing is done (table 8) with SSTYPE IV method for different number of participants (unequal simple sizes) in each treatment group (Tabachnick and Fidell, 2007: 220).

Table 8. Hypothesis 1 Test – Main Effect

Description	F	Significant	Conclusion
Ethical Decision Making Homogeneity Test:			
Lavene's test	1,864	0,146	Homogen Data
ANOVA Test:			
Integration of Ethic Material	0,351	0,556	No Differences

Source: Processed Data

Tests on variance homogeneity which indicated by Lavene's test (Table 8) shows the significance value of 0.519 (greater than 0.05). It can be concluded that ethical decision making on any type of treatment has an identical (same) variance.

Anova testing shows the value F value for main effect of ethics integration into audit course of 0.479 and a significance value of 0.492. Significance value greater than 0.05 means that there is no effect of ethics integration in auditing course toward ethical decision making directly (main effect). Statistical tests did not support Hypothesis 1 (H1).

Table 9. Ethical Orientation – Main Effect

Description	F	Significant	Conclusion
Homogeneity Testing: Lavene's test	1,186	0,323	Homogen Data
ANOVA Testing: Ethis integration	13,755	0,000	Different

Source: Processed Data

Anova testing for ethical orientation in table 9 shows F value of main effect of ethics integration in Auditing course is 9.655 and a significance value of 0.000. Significance value less than 0.05 means that there is a direct effect (main effect) factor in Auditing teaching ethic integration towards participants ethical integration.

First objective of this study is to provide empirical evidence on effects of ethics integration toward individual confidence level, especially public accountants in conducting ethical-decision making. With various financial scandals involving accounting profession, it is important to understand the relationship between people's perception of ethical standards for ethical action. Individual who have low ethical standards, have a greater likelihood to commit unethical acts. If ethics education can improve perception of individual ethical standards, very likely ethics education will have a positive impact on business conduct in the future.

The first hypothesis states that the ethics integration in Auditing course influence on ethical decision making made by a public accountant when facing ethical dilemmas. Test results provide empirical evidence that H1 is not supported, which can be interpreted that ethics integration in Auditing course are not influencing ethical decision making of public accountants. Public accountant who received material integration ethics has lower confidence level in ethical decision making better than public accountant who does not accept ethics integration. However, additional analyzes showed that the integration of ethics affecting ethical orientation of participants after receiving the treatment.

The first hypothesis results do not support moral cognitive development theory for ethical decision making but supports theory for ethical orientation. Several studies have shown that although individual has received learning ethic and has reached final stages of moral development, people will act differently when faced with an ethical dilemma (Allen et al., 2005; Ritter, 2006). Ritter (2006) conducted a study of undergraduate college students on Organizational Theory and Behavior subject. The study was conducted on 55 students for pre-test / post-test study for one semester in two classes, first class gets the integration of ethics (experimental group) and the second class did not receive ethics integration (control group). The research proves that positive effects of learning ethics can only be proven on a female student. Ritter (2006) revealed that even though a person has to follow the ethics training, he may be using a different way of thinking when assessing the ethical situation.

The same thing is proven by Allen et al. (2005), which examined impact of ethics training toward principles value of business student. The study was conducted on 170 junior students (first semester) and 122 senior students (final semester). Impact of learning ethics measured by a questionnaire about value principles which required for manager profile, those are emotional values (heart values) and logical values (head values). The results prove that emotional values such as generosity, idealism, compassion, friendship, honesty, loyalty, independence and critical attitude towards authority senior students are lower than a junior. Instead, values of logical (head values) senior students is higher than junior college students. Allen et al. (2005) also revealed that an additional emphasis on ethics in textbook and business materials does not have a significant impact on ethical orientation level and ethical decision-making students. Allen et al. (2005) gives two reasons for not increasing emotional principles values in this study. First, although the learning ethic has been supported by accounting education standards and learning is still more focused on skills, concepts, and theories, the limited time makes learning ethically can not be performed. Therefore, by not explicitly discuss emotional values in teaching imply unimportance of these values. Second, small portion given to teach ethics in certain subjects did not have a significant impact unless there is ethics material integration in accounting subjects, and also a special course that discusses ethics from accountants and business terms.

Empirical findings in this study and anomalies also showed a similar thing. Learning process that integrates ethics material can affect individual ethical orientation, but does not affect the individual ethical decision making. So that, learning with ethics integration can affect character and ability to perform ethical considerations, but ethical decision making is highly dependent on circumstances faced by individual at the time. This can be explained by affective events theory, in which feelings or emotions (irrational aspects) may influence a person in making decisions. Therefore, even though individual has reached the final stages of Kohlberg moral development, people would act differently or take a different decision when faced with an ethical dilemma. According to Tenbrunsel and Smith-Crowe (2008), it is considered as ethical decision making not because decision is consistent with principles or ethical norms, but in process has been considered in terms of ethics. So that, relevance of ethics to issue at hand has been understood and this comprehension encourage consideration of moral implications though not necessarily lead to ethical decision.

Second Hypothesis Testing (The Interaction Effect)

Testing of hypothesis 2 (H2) is performed to verify whether integration interaction of ethics and how online learning influence ethical decision making. To prove the second hypothesis, two-ways ANOVA (Interaction Effect) was used. ANOVA test results (Interaction Effect) are presented in Table 10 and the Figure 2.

Table 10 shows F value for interaction effect of material content delivery of 7.340 with a significance value of 0.009. The significance value less than 0.05 means no interaction

between learning material factors interaction with material delivery on ethical decision making of public accountants. Statistical tests support second hypothesis (H2).

Table 10. Second Hypothesis Testing – Interaction Effect

Description	F	Significant	Conclusion
Ethical Decision Making – ECM			
Homogeneity Testing:			
Lavene’s test	2,590	0,062	Homogen data
ANOVA Testing:			
Ethics Integration	0,238	0,627	No difference
Interaction Ethics*Methods	7,340	0,009	Difference

Source: Processed Data

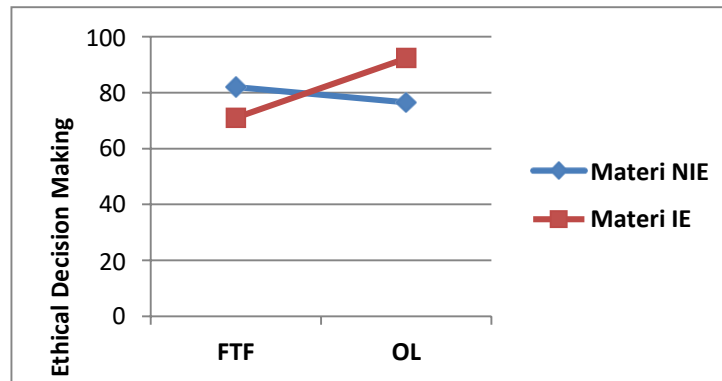


Figure 2. Interaction Effect: Ethics Integration – Learning Method

Figure 2. indicates that although integration of ethics (IE) does not affect ethical decision making but the lines that are crisscrossing linear showed great interaction effect (Bluman, 2007: 643; Doane and Seward, 2009: 479) between ethics integration and learning method (face-to-face or online) to ethical decision making.

Analysis of covariate variables ANCOVA Test

ANCOVA test is performed to eliminate influence of other variables which believed (based on previous research to influence ethical decision) makes bias results of analysis. Other variables were tested in this study were age, work experience, GPA, and ethical orientation. ANCOVA test results are presented in Table 11.

Tabel 11. ANCOVA Test

Description	F	Significant	Conclusion
Ethical Decision Making			
Uji Homogenitas:			
Lavene’s test	2,341	0,083	Homogen data
Uji ANCOVA:			
Ethics Integration	0,010	0,921	No Difference
Interaction Ethics*Method	4,158	0,047	Difference
Covariance Variable:			
Age	0,475	0,494	No Difference
Working Experience	0,032	0,858	No Difference
GPA	0,055	0,815	No Difference
Ethical Orientation	0,257	0,614	No Difference

Source: Processed Data

ANCOVA test results in Table 11 indicates that variable covariates of age, working experience, GPA, and ethical orientation was not significant; significance values are 0.494; 0.858; 0.815; and 0.614 respectively. All four significance values are greater than 0.05, which means that covariate variable did not affect public accountant ethical decision making. Interaction effect between ethics integration and learning method is still remained significant (0.047 significance value less than 0.05) and was not influenced by variables covariates. This proves that type of treatment given in this experiment effect the ethical decision making. Second hypothesis states that interaction of ethics integration and face to face - online technology in learning auditing influence ethical decision making made by a public accountant when facing ethical dilemmas. Test results provide empirical evidence that H2 is supported. It can be interpreted that ethics integration which is done by online learning affect accountant’s confidence level in making ethical decisions.

The results provide support for socio-constructivist theory. This theory suggests that online technology makes

technology to help individuals learn the information in a different way which resembles (mimics) learning directly (person to person), but with advantage can be done anywhere and anytime (Duffy and Jonassen, 1992; Swan, 2005; Willis and Cifuentes, 2005). This is in accordance with Core Competency Framework (AICPA, 2004) which supports concept of continuous learning that starts from academic environment and continued (life-long) through professional education and experience. Several studies have shown that online learning technologies can improve student performance, so that Weinstein (2005) makes a data base of accounting cases, included cases or ethical dilemma scenarios (including ethical issues with setting audit) that can be integrated in accounting education.

In addition to provide support for socio-constructivist theory, results of this research support the theory of cognitive moral development. Cognitive theory of moral development revealed that moral orientation (moral reasoning) are foundation of ethical behavior which has six stages of development. Process of moral development was principally concerned with justice and development continued throughout life. In his research, Kohlberg used stories about moral dilemmas and seeks to understand how people would justify their actions if they are in the same moral issues. Results justification identified six different stages of response. These six stages are divided into three levels: pre-conventional, conventional and post-conventional. Each stage shows development of more constructive responses to ethical dilemmas increased compared to previous stage. Based on this theory, moral development and ability to make ethical decision making is not something that comes by itself, but can be improved through a process that touches all self-aspects, namely physical, mental-emotional-psychological, social, and spiritual (Venkatesh, 2010).

Moral principles as a basis for ethical decision making by accountant is very important. Certified Public Accountants believe that integrity and ethical conduct one of which can be achieved through education because education is the foundation (cornerstone) to create and produce professional accountants (AICPA, 2010). Febrianty (2011) revealed that professional accountants tend to ignore moral issue when finding problems of a technical nature, which means that accountant unscrupulous professional tend to behave when confronted with a problem of accounting. Therefore, based on Sudibyo opinion who argued that accounting education has a considerable influence on ethical behavior of public accountants, Febrianty (2011) concluded that educational process that occurs in accounting education institutions provide a major contribution in shaping attitudes and moral behavior of public accountants.

In addition to provide support for cognitive moral development theory, results of this study also provide support to the need for ethics education in learning process, by providing ethical materials that can enhance value of individual heart. In accordance with affective events theory, making ethical decisions perspective by individuals is affected by such irrational emotions, empathy, and compassion. Heart value individuals need to be improved so that people will have a personal "beyond self-interest" (able to think beyond self-interest) and consider the public interest. Early and Kelly (2004) and Luthar and Karri (2005), who argued that ethics in business curriculum had a significant impact on students' perceptions of relationship between ethics and practices of business results. Results of this study provide support for importance of ethics in accounting education materials. Ghaffari et al. (2008) provide empirical evidence that teaching of ethics needs to be included in accounting education by integrating ethics teaching on courses that already exist.

Results of this study are consistent with research conducted by Bass et al. (1999), Shaftel and Shaftel (2007), Brandon et al. (2007), Saravanamuthu and Tinker (2008), O'Leary (2009), and Sweeney and Costello (2009). O'Leary (2009) and Sweeney and Costello (2009) examined learning context of ethics with three different methods. Their results indicate that ethics teaching can improve their skills in making decisions ethically. Although Shaftel and Shaftel (2007) examined in a different context, but research emphasizes effect of education on changes in individual attitudes. The results of their research proved that learning material has positive effect on individual attitude.

These researches provide empirical evidence that ethics education has positive impact on individual perception of ethical standards. Ethics education also should be able to shape character of people's integrity and better morale. Accounting profession has to provide services and accountable to public. Therefore, accounting profession must be able to maintain integrity and moral. Accounting education is not only emphasizing on improving accounting technical skills, but also giving examples of ethical dilemmas in accounting profession life (Fleming et al., 2009; Allen et al., 2005).

Based on test results support third hypothesis as well as results of previous studies, it can be concluded that integration of ethics matter by way of online submission has positive impact on confidence and individual ability conduct of ethical decision making. Therefore, in accounting education have more discussion and provide concrete examples of ethical dilemmas related to accounting profession. This accounting education is not only accounting education at college, but also continuing education such as continued training program. Observation of IAI training program or Indonesian Institute of Certified Public Accountants (IAPI) have been emphasis more on technical issue in accounting profession. Very little discussions about real-world examples of ethical dilemmas faced by accountants.

Associated with online technology in learning for professional accountants, currently, accounting organization profession such as IAI collaborates with International Federation of Accountants (IFAC) has organized an online ongoing training program, namely IAI Exchange. Nevertheless, material covered is still around on improving accountant technical expertise (eg, discussion of IFRS standards). Ethical discussion in the form of justice discussion (fairness) of accounting actions undertaken by company, social effects of corporate accounting policies and examples of ethical dilemmas in everyday life is still not given to accounting profession. Based on this study results prove that ethical integration in cases form of accountant ethical dilemmas in everyday life can influence ethical decision making, IAI Exchange need to provide materials or discussion about ethics in its online learning.

Conclusion

Accounting as a profession that is responsible to public should maintain integrity, credibility, and moral ethics in their

profession. Certified Public Accountants states that one of integrity and ethical behavior can be achieved through education because education is foundation to create and produce professional accountants. Therefore, greater attention should be given to accounting education that can improve attitude of professional accountants. These results prove that ethics integration in learning by online affect accountant confidence level in making ethical decision. Accountant who gets online ethics integration in learning Auditing have better confidence level in making ethical decision than accountants who do not accept ethics integration. So, accounting education which integrates ethics online learning capable in forming a professional accountants's attitude in ethical decision making. Online learning provides convenience spaces and time to study ethics at anytime and anywhere. Consistent practice and a larger portion that emphasizes ethics in learning will be able to establish and improve ability to make better ethical decisions. Discussion of ethics in training and learning should be more emphasis on real-world examples in everyday life related to accounting profession's life. This discussion can be done through online learning, such as IAI Exchange. These findings confirm the theory of cognitive development, affective events theory, and socio-constructivist theory.

Implication

The implication of these findings is that integration of ethics in higher education and training to prospective accountant or public accountant needs to be done continuously. Discussion about justice (fairness) of accounting action by company, its social effects of corporate accounting policies and examples of ethical dilemmas in accounting profession's life needs to be given to shape character and attitudes of professional accountants. Although, main effect of ethics material in this study can not be proven, but ethics material effect on ethical decision making can occur if a different mode of delivery and use of online learning in addition to face-to-face classroom learning. This finding has implications not only on implementation of accounting education at college or higher education, but also have an impact on education and training of accountants. Accounting education at college has entered era of information and communication technology with the e-learning at any institution of higher education. E-learning facility is important to be fully utilized by accounting educators. To promote ethical problems and how the problems were solved, that did not get addressed and discussed in class can be done through online technologies such as e- learning. As for education and training of accounting profession needs to continue to be done to maintain and enhance accountant's professionalism. Currently accounting professional organizations such as IAI have made use of information and communication technology in the form of IAI-Exchange. The goal is to conduct ongoing training programs online. Nevertheless, the material is given more emphasis on accountant technical expertise, so it needs additional discussion and case examples of ethical dilemmas faced by accountants in everyday life along with solution based on an ethical standpoint needs to be added and can be accessed through IAI-Exchange.

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References

- [1].Abdolmohammadi, M.J., J. Fedorowicz, and O. Davis, 2009. "Accountant Cognitive styles and ethical reasoning: a comparison across 15 years," *Journal of Accounting Education*, 27, p. 185-196.
- [2].AICPA, Certified Public Accountants, 2010. *CPA Horizons Report 2025*. Online available at <http://www.cpa-horizons-report-web-2025.pdf> diakses tanggal 17 Maret 2012.
- [3].AICPA, 2004. *Core Competence Framework and Educational Competency Assessment Web Site*, on line available: <http://www.aicpa.org/interestareas/accountingeducation/resources/pages/corecompetency.aspx> diakses tanggal 18 Januari 2012.
- [4].Allen, W. R., P. Bacdayan, K.B. Kowalski, and M.H. Roy, 2005. "Examining the impact of ethics training on business student values," *Education and Training*, 47, p. 170-182.
- [5].Bass, K., T. Barnett, and G. Brown, 1999. "Individual difference variables, ethical judgments, and ethical behavior intention," *Business Ethics Quarterly*, 9 (2), p. 183-205.
- [6].Bhattacharjee, S. and K. Moreno. 2002. "The impact of affective information on the professional judgments of more experienced and less experienced auditors," *Journal of Behavioral Decision Making*, 15, p. 361-377.
- [7].Bluman, A.G., 2007, *Elementary Statistics: A Step by Step Approach*, Sixth Edition, McGraw Hills, New York.
- [8].Brandon, D.M., D.A. Keller III, L.N. Killough, and J.M., Muller, 2007. "The joint influence of client attributes and cognitive moral development on students' ethical judgment," *Journal of Accounting Education*, 25 (1-2), p. 59-73.
- [9].Brown, J.S., A. Collins, and P. Duguid, 1989. "Situated cognition and the culture of learning," *Educational Researcher*, 18 (1), p. 32-42.
- [10].Bryant, S.M., and J.E. Hunton, 2000. "The use of accounting technology in the delivery of instructions: implications for accounting education researches," *Issues in Accounting Education*, 15 (1), p. 129-162.
- [11]. Chung, J., J. Cohen, and G.S. Monroe, 2008. "The effect of moods on auditors' inventory valuation decisions," *Auditing: A Journal of Practice and Theory*, 27 (2), p. 81-112.
- [12]. Cianci, A.M. and J.L. Bierstaker, 2009. "The impact of positive and negative mood on the hypothesis generation and ethical judgment of auditors," *Auditing: A Journal of Practice and Theory*, 28 (2), p. 119-144.
- [13]. Collett, P., N. Gyles, and S. Hrasky, 2007. "Optional formative assessment tasks and class attendance: Their impact on student performance," *Global Perspectives on Accounting Education*, 4, p. 41-59.

- [14]. Cook, T.D. and D.T. Campbell, 1979. *Quasi-Experimentation: Design and Analysis Issues for Field Settings*, Houghton Mifflin Company: Boston.
- [15]. Curtis, M.B., 2006. "Are audit-related ethical decisions dependent upon mood?" *Journal of Business Ethics*, 68, p. 191-209.
- [16]. D'Aquila, J.M., D.F. Bean, and E.G. Procario-Foley, 2004. "Student's perceptions of the ethical business climate: a comparison with leaders in the community," *Journal of Business Ethics*, 51 (12), p. 155-166.
- [17]. Doane, D.P. and L. E. Seward, 2009, *Applied Statistics in Business and Economics*, Second Edition, McGraw Hills, New York.
- [18]. Doyle, E., J. Frecknall-Hughes, and B. Summers, 2009. "Research methods in taxation ethics: Developing the defining issue test (DIT) for a tax-specific scenario," *Journal of Business Ethics*, 88, p. 35-52.
- [19]. Duffy, T.M., and D.H. Jonassen, 1992. "Constructivism and the Technology of Instruction: A Conversation," Hillsdale, NJ: Erlbaum. Online available: <http://www.questia.com/PM.qst?a=o&d=9212366> diakses 10 Juni 2012
- [20]. Dunbar, A. E., 2004. "Genesis of an online course," *Issues in Accounting Education*, 19(3), 321-343.
- [21]. Early, C.E. and P.T. Kelly, 2004. "A note for ethics educational in an undergraduate auditing course: is there an Enron effect?" *Issues in Accounting Education*, 19 (1), February, p. 53-71.
- [22]. Edmonds, C.T. and T.P. Edmonds, 2008. "An empirical investigations of the effects of SRS technology on introductory managerial accounting students," *Issues in Accounting Education*, Aug, 23 (3), p. 421-434.
- [23]. Ekasari, K., 2012. *(Re)konstruksi Pendidikan Akuntansi di Tingkat Pendidikan Tinggi Vokasi melalui Epistemologi Eling (Studi pada Polinema)*, Draft Disertasi, Program Studi Ilmu Akuntansi, Pasca Sarjana, Fakultas Ekonomi dan Bisnis Universitas Brawijaya, tidak dipublikasikan.
- [24]. Febrianty, 2011. "Perkembangan Model Moral Kognitif dan Relevansinya dalam Riset-riset Akuntansi," *Jurnal Ekonomi dan Informasi Akuntansi (Jenius)*, Vol.1, No.1, p. 57-77.
- [25]. Ferdian, R., and A. Na'im, 2006. "Pengaruh problem based learning (PBL) pada pengetahuan tentang kekeliruan dan kecurangan (errors and irregularities)," *Prosiding Simposium Nasional Akuntansi IX*, Padang, 23-26 Agustus.
- [26]. accounting students' moral reasoning," *Issues in Accounting Education*, 24 (1), p.13-30.
- [27]. Ford, R.C. and W.D. Richardson, 1994. "Ethical decision making: a review of the empirical literature," *Journal of Business Ethics*, 13, p. 205-221.
- [28]. Ghaffari, F., O. Kyriacou, and R. Brennan, 2008. "Exploring the implementation of ethics in UK accounting program," *Issues in Accounting Education*, 23 (2), p. 183-198.
- [29]. Ghozali, I., 2012. *Desain Penelitian Eksperimental: Teori, Konsep, dan Analisis Data dengan SPSS 16.0*, Badan Penerbit Universitas Diponegoro, Semarang.
- [30]. Gintis, H., A. Bowles, R. Boyd, and E. Fehr, 2003. "Explaining altruistic behavior in humans," *Evolution and Human Behavior*, 24, p. 153-172.
- [31]. Gould, J.E., 2002. *Concise Handbook of Experimental Methods for the Behavioral and Biological Sciences*, CRC Press LLC, US.
- [32]. Goyal, E., S. Purohit, and M. Bhaga, 2011. "Study of satisfaction and usability of the internet on students' performance," *International Journal of Education and Development using Information and Communication Technology (IJEDICT)*, 7 (1), pp. 110-119.
- [33]. Gunz, S. and J. McCutcheon, 1998. "Are academics committed to accounting ethics education?" *Journal of Business Ethics*, 17 (11), p. 1145-1154.
- [34]. Haines, R. and L.N.K. Leonard, 2007. "Situational influences on ethical decision-making in an IT context," *Information and Management*, 44, p. 313-320.
- [35]. Hamilton III, B., 2009. *Operationalizing Ethics in Business settings*, online available at: <http://ethicsops.com/default.php> diakses tanggal 20 Juli 2012
- [36]. Haywood, M. E., and D.E. Wygal, 2009. "Ethics and professionalism: Bringing the topic to life in the classroom," *Journal of Accounting Education*, 27(2), p. 71-84
- [37]. Holtzblatt, M., and N. Tschakert, 2011. "Expanding your accounting classroom with digital video technology," *Journal of Accounting Education, Article in Press*, p. 1-22.
- [38]. Karacaer, S., R. Gohar, M Aygun, and C. Sayin, 2009. "Effects of personal value on Auditor's ethical decisions; A comparison of Pakistani and Turkish professional auditor," *Journal of Business Ethics*, 88, p. 53-64.
- [39]. Kerr, D.S. and L.M. Smith, 1995. "Importance of and approaches to incorporating ethics into the accounting classroom," *Journal of Business Ethics*, 14 (12), p. 987-995.
- [40]. Kidwell, L. A., and J. Kent, 2008. "Integrity at a distance: A study of academic misconduct among university students on and off campus," *Accounting Education: an International Journal*, 17 (Suppl.), p. S3-S16.
- [41]. Klopfer E., S. Osterweil, J. Groff and J. Haas, 2009. "Using the technology of today, in the classroom today," *The Education Arcade Massachusetts Institute of Technology*. Online available: <http://creativecommons.org/licenses/by/3.0> diakses tanggal 10 Maret 2011.
- [42]. Kohlberg, L., 1981. *Essay in Moral Development, Volume 1: The Philosophy of Moral Development*, New York, Harper and Row. Online available: http://en.wikipedia.org/wiki/Lawrence_Kohlberg's_stages_of_moral_development diakses 12 Mei 2008
- [43]. Langley, A., H. Mintzberg, P. Pitcher, E. Posada, and S. Macary, 1995. "Opening up decision making: the view from the black stole," *Organization Science*, 6 (3), p. 260- 279.
- [44]. Loe, T. W., L. Ferrell and P. Mansfield, 2000. "A Review of Empirical Studies Assessing Ethical Decision

Making in Business,” *Journal of Business Ethics*, 25, p. 185–204.

- [45]. Luthar, H. K., and R. Karri, 2005. “Exposure to ethics education and perception of linkage between organizational ethics behavior and business outcomes,” *Journal of Business Ethics*, 61, p. 353-368.
- [46]. Misiewicz, K.M., 2007. “The Normative Impact of CPA firms, professional organizations, and state boards on accounting ethics education,” *Journal of Business Ethics*, 70, p. 15-21.
- [47]. Mortensen, T., R. Fisher, and G. Wines, 2012. “Students as Surrogates for Practicing Accountants: Further Evidence,” *Accounting Forum* 36, p. 251-265.
- [48]. O’Fallon, M.J. and K.D. Butterfield, 2005. “A review of the empirical ethical decision-making literature,” *Journal of Business Ethics*, 59, p. 375-413.
- [49]. O’Leary, C., 2009. “An empirical analysis of the positive impact of ethics teaching on accounting students,” *Accounting Education: an International Journal*, 18 (4/5), p. 505– 520.
- [50]. Patel, C., and B.R. Millanta, 2011. “Holier-than-thou perception bias among professional accountants: a cross-cultural study,” *Advances in Accounting, Incorporating Advances in International Accounting*, 27, p. 373-381.
- [51]. Peterson, D., A. Rhoads, and B.C. Vaught, 2001. “Ethical beliefs of business professionals: a study of gender, age, and external factors,” *Journal of Business Ethics*, 31 (3), p. 225-232.
- [52]. Ritter, B. A., 2006. “Can business ethics be trained? A study of the ethical decision-making process in business students,” *Journal of Business Ethics*, 68, p. 153-164.
- [53]. Saravanamuthu, K. and T. Tinker, 2008. “Ethics in education: the Chinese learner and post- Enron ethics,” Editorial, *Critical perspective on accounting*, 19, p. 129-137.
- [54]. Schumann, P.L., T.W. Scott, and P.H. Anderson, 2006. “Designing and introducing ethical dilemmas into computer-based business simulations,” *Journal of Management Education*, 30 (1), p. 195-219.
- [55]. Shaftel, J., and T. L. Shaftel, 2007. “Educational assessment and the AACSB,” *Issues in Accounting Education*, 22 (2), 215–232.
- [56]. Shaughnessy, J.J., E.B. Zechmeister, and J.S. Zechmeister, 2012. *Metode Penelitian dalam Psikologi (Research Methods in Psychology)*, Edisi 9, McGraw Hill, Penerbit Salemba Empat, Jakarta.
- [57]. Sudibyo, B., 2001. *Telaah Epistemologis Standar Evidencial Matter serta Implikasinya pada Kualitas dan Integritas Pelaporan Keuangan di Indonesia*, Pidato Pengukuhan Jabatan Guru Besar pada Fakultas Ekonomi univeritas Gajah Mada, 21 Februari, Yogyakarta.
- [58]. Swan, K., 2005. “A constructivist model for thinking about learning online, in J. Bourne and
- [59]. J.C. Moore (Eds), *Elements of Quality Online Education: Engaging Communities*, Needham, MA: Sloan-C.
- [60]. Swanson, D.L., 2005. “Business Ethics Education at Bay: addressing a crisis of legitimacy,” *Issues in Accounting Education*, 20 (3), p. 247-253.
- [61]. Sweeney, B., and F. Costello, 2009. “Moral intensity and ethical decision-making: An empirical examination of undergraduate accounting and business students,” *Accounting Education: An International Journal*, 18 (1), p. 75–97.
- [62]. Tabachnick, B.G., and L.S. Fidell, 2007. *Experimental Designs Using ANOVA*, Duxbury Applied Series, Thompson, Australia
- [63]. Tenbrunsel, A.E. and K. Smith-Crowe, 2008. “Chapter 13: Ethical decision making: where we’ve been and where we’re going,” *The Academy of Management Anals*, 2, p. 545- 607.
- [64]. Venkatesh, G., 2010. “Three bottom line approach to individual and global sustainability”,
- [65]. *Problems of Sustainable Development*, 5 (2), p. 29-37.
- [66]. Weinstein, G.P., 2005. “A tool for accessing accounting cases,” *Journal of Accounting Education*, 23, p. 204-214,
- [67]. Weisbrod, E., 2009. “The role of affect and tolerance of ambiguity in ethical decision- making,” *Advances in Accounting, Incorporating Advances in International Accounting*, 25, p. 57-63.
- [68]. Weiss, H.M., and R. Cropanzano, 1996. “Affective events theory: a theoretical discussion of the structure, causes, and consequences of affective experiences at work,” *Research in Organizational Behavior*, 18, p. 1-74.
- [69]. Willis, J. and L. Cifuentes, 2005. “Training teachers to integrate technology into the classroom curriculum: online versus face-to-face course delivery (comparative analysis of teacher technology training courses),” *Journal of Technology and Teacher Education*, 3 (1), p. 43-54.
- [70]. Wyatt, A.R., 2004. “Accounting professionalism: they just don’t get it!” *Accounting Horizons*, 18 (1), p. 45-53.