Visual learning methods: strategy for mitigating unethical decisions in accounting education

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ABSTRACT

The purpose of this study is to examine the causality between obedience pressures and unethical decisions making and whether the causality can be mitigated by visual-based ethics learning methods. This study employs 2x2 between subjects factorial experiment methods with 114 participants from undergraduate students in accounting. The result of this study shows that there is a causal relationship between obedience pressures and unethical decisions making and that visual-based learning methods have encouraged subjects to make more ethical decisions. In addition, this study also finds that the most ethical decision outcomes are generated by the subjects who are under high obedience pressures and receive visual-based ethics learning methods.

ABSTRAK

Riset ini bertujuan untuk menguji hubungan kausal antara tekanan ketaatan dan pembuatan keputusan tidak etis dan apakah hubungan kausal tersebut dapat dimitigasi oleh metoda pembelajaran etika berbasis visual. Penelitian ini menggunakan metoda eksperimen faktorial 2 x 2 antarsubjek dengan 114 partisipan mahasiswa S1 Akuntansi. Hasil penelitian menunjukkan bahwa tekanan ketaatan berpengaruh terhadap keputusan tidak etis dan bahwa metoda pembelajaran etika berbasis visual mendorong seseorang untuk memberikan keputusan yang lebih etis. Selain itu, riset ini juga menemukan bahwa keputusan etis terbaik dihasilkan oleh subjek dalam kondisi tekanan ketaatan tinggi yang menerima metoda pembelajaran etika berbasis visual.

1. INTRODUCTION

The accounting profession is susceptible to dysfunctional behavior due to obedience pressure. It is also argued that the pressure to obey certain authority causes a person to do negative things that are contrary to normative things (Lord & DeZoort, 2001). In addition, the pressure of obedience causes a person to behave contrary to his personal values and act unethically (Milgram, 2009). According to Craig Smith, Simpson, & Huang (2007), employees commit illegal actions at work because of the pressure exerted by their supervisors. Anand, Ashforth, & Joshi (2004) state that orders from the top leaders of an organization rationalize fraud by management. Davis, DeZoort, & Kopp (2006) also show that management accountants carry out budgetary slack due to pressure received from their seniors. According to Lord

& DeZoort (2001), obedience pressure causes auditors to give a fair opinion on financial statements when in fact there are material misstatements. Cahyaningrum & Utami (2015) state that audit decisions become inaccurate2 due to the pressure of obedience in high task complexity.

Experts agree that increasing moral reasoning through professional ethics education is an important component in the effort to reduce malfunctioning behavior in the accounting profession. Previous research has shown that moral reasoning has an important influence on the attainment of ethical awareness (Gaffikin & Lindawati, 2012), resulting in better decisions and ethical behavior (Ponemon, 1992; Abdolmohammadi & Baker, 2006; Thomas, 2012). Shawver (2006) states that professional education programs play an important role in

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raising awareness of accounting students of the importance of applying ethics in dealing with accounting problems. Williams & Elson (2010) also reveal the importance of ethical emphasis in the educational curriculum. Most business schools in Australia agree that ethics education must be included in the accounting curriculum (Dellaportas, 2006). According to Shaub, Finn, & Munter (1993), ethical education can increase ethical sensitivity. Huss & Patterson, (1993) also state that the moral development of accounting students can be improved through the educational process. Guffey & McCartney (2008) explain that effective ethics teaching is important for developing moral thinking for accounting students.

Because of the importance of ethical prospective education for accounting professionals, ethics education researchers have examined innovative methods in ethics education to better embed ethical values in students and professionals (Liu, Yao, & Hu, 2012). However, although researchers agree on the importance of ethics education in higher education, they have not agreed on the right method for learning ethics. Haywood, McMullen, & Wygal (2004) use the game method in learning ethics and increasing professional responsibility for accounting students. Falkenberg & Woiceshyn, (2008) provide empirical evidence that the case study method can improve ethics.

By observing that an unethical decision on prospective accountant students is important to be mitigated, a study conducted by Ricchiute (1984) provides empirical evidence that visual information can improve audit decisions. It was found that visual learning methods are also thought to be capable of mitigating unethical decisions. This study is conducted to examine the causality between obedience pressure and unethical decisions, and how it can be mitigated by visual-based ethical learning methods. This study is expected to provide further empirical evidence about the use of visual-based ethical learning methods to enhance better ethical understanding.

The results of the study above provide practical contributions to accounting education institutions related to ethics learning methods for prospective accountants in carrying out their professions. Appropriate ethics learning methods are expected to be able to mitigate the impact of obedience pressures that arise when prospective accountants enter the workforce. For the development of behavioral research,

this research has contributed in testing the theory of obedience pressure and its interaction with learning theory.

2. THEORETICAL FRAMEWORK AND HYPOTHESES

Obedience Pressure

Obedience pressure is one form of social influence pressure. It is negative and arises from those who have more authority. There are two other forms of social influence pressure: compliance pressure and conformity pressure. Compliance pressure is almost the same as obedience pressure, but compliance pressure arises from the social environment at the same level. Conformity pressure is positive and refers to pressure to conform to existing norms in society. Of the three types of social influence pressure, obedience pressure has a greater force because the pressure from those who have authority is more effective than the pressure exerted by the social environment at the same level (Davis et al., 2006; Baird & Zelin Ii, 2009).

Learning Theory

Learning theory is a conceptual framework that describes how information is absorbed, processed and maintained. The strategy of mitigating unethical decisions can be explained by learning theory. The dimensions of cognitive, emotional, environmental, and past experiences play a role in the process of how understanding is acquired or changed and maintained (Illeris, 2004; Ormrod, 2012). Learning in education is the interaction between students and educators in the process of acquiring knowledge and the formation of attitudes. According to Robbins & Judge (2009), the learning process is a process of forming behavior. The right learning method is able to be a strategy for mitigating unethical decisions on prospective accountants.

Moral Reasoning and Ethical Decisions

Moral reasoning can be defined as an argument about how someone should act or give reasons to justify or criticize certain behaviors (Fox & DeMarco, 2000). Thompson (1998) concludes that moral reasoning consists of three points of view: (a) thinking about what a person must do and why it is necessary to do it; (b) forming ideas to describe and evaluate actions; and (c) assessing certain actions based on general rules that apply. Gaffikin & Lindawati, (2012) define that moral reasoning is a person's argument that aims to explain the process of

ethical decision making, or explain a person's process of building behavior or actions based on individual moral judgment (cognition-judgment action process). Adams, Malone, & James (1995) conclude that the process of one's moral reasoning can be understood as the process of how one internalizes moral standards.

Visual-based Learning Methods

Learning methods are the methods chosen to convey material in a particular learning environment so that goals can be achieved effectively and efficiently (Gerlach, Ely, & Melnick, 1980). Schunk (2012) states that learning has the aim to focus the attention of learners on the processes and methods that help them gain abilities and improve skills. Ability and skills are broad depending on the learning process that is followed by the learners (students). Ethics learning in accounting education has the same goal, to help learners gain abilities and skills in relation to ethical attitudes and behavior.

Visualization refers to visual information presented in the form of graphics or images, while non-visualization refers to information that is presented only in the form of text (Tang, Hess, Valacich, & Sweeney, 2014). More importantly, financial statements that are presented in a visual form allow one to obtain better information and make more accurate decisions. Tang et al. (2014) states that decision makers who receive financial information presented in a visual form enable someone to obtain better information and make more accurate decisions. Likewise with the ethics learning method, visual-based ethics learning methods are expected to provide better information, high ethical understanding, and help students to be able to make ethical decisions.

Relationship between Obedience Pressure and Ethical Decisions

Social pressure is a manifestation of people's preferences towards one's social performance (Baron, 2009). There are three forms of social pressure influence: compliance pressure, obedience pressure, and conformity pressure. Of these three forms of social pressure influence, obedience pressure has the most power to put pressure on someone in the decision making process.

Davis et al. (2006) strengthens the results of research conducted by Lord & DeZoort's

(2001) that auditors are more likely to make unethical decisions when exposed to obedience pressure from superiors. This shows that obedience pressure influences ethical behavior which means that it also influences moral reasoning. The level of reasoning in individuals who receive high obedience pressure will be different from individuals who do not receive obedience pressure. In conditions of high obedience pressure, individuals will tend to take orders from leaders even if it is unethical to do so. From the arguments above, the first hypothesis is formulated as follows:

H1: Subjects without obedience pressure have better ethical decisions than subjects with high obedience pressure.

Relationship between Ethics Learning Methods and Ethical Decisions

Ethical decisions are reflected in moral reasoning which is a cognitive development of an individual. Research on ethics is largely based on Kohlberg's research which builds a theory of moral cognitive development, and also Rest, who builds the development of a model of ethical action that culminates in a neo-Kohlbergian approach (Liu et al., 2012). Thorne (2001) classified research and investigated steps to improve individual cognitive abilities. He found that cognitive development could be improved through educational interventions. According to Özkan (2013), students use their moral cognitive abilities to make decisions, and this conclusion provides an opportunity for educators to find alternative approaches that encourage accounting students to use fundamental opinions in solving ethical accounting dilemmas. Research conducted by Delaney & Coe (2008) provides the result that ethics education is also found to be effective in improving the moral abilities of accounting students. From the results of previous studies it can be concluded that ethics education can improve the moral reasoning of accounting students.

Ethics learning methods in accounting education can vary. The learning that is commonly used is the lecture/ tutorial method. The tutorial method takes the form of a teacher's explanation to students and is usually followed by questions and answers about the contents of the lesson that are not yet clear (Suparman, 2012). This tutorial method is classified in the non-visual learning process (only presented in verbal form). Learning experiences in verbal form are abstract. Ayunanda & Utami (2015)

use visualization to mitigate recency effects, in which the use of visualization in presenting information can increase ethical decisions.

The learning method using visual approach is more concrete than using nonvisual approach. Therefore, visual experiences make learners store more information. According to Schunk (2012), the human body is structured in such a way that we can enter more information through the sense of sight than through the other four senses. Furthermore, visual displays help increase attention, learning, and maintaining it, Likewise with ethics learning in accounting education, ethics learning methods with a visual approach can make accounting students pay attention and retain their memories of ethical values and thus can improve their moral reasoning so that the decisions made are more ethical. Based on the arguments and the results of previous research, the second hypothesis can be formulated as follows:

H2: Subjects with visual-based ethics learning methods have better ethical decisions than subjects with nonvisual-based ethics learning methods.

Interaction among Obedience Pressure, Learning Methods, and Ethical Decisions

Obedience pressure influences ethical behavior and moral reasoning (Lord & DeZoort, 2001). Educational institution, especially accounting education, has an important role in improving the ethical behavior of prospective accountants. Innovations in ethics education can be developed through learning methods. Ethics learning methods with a visualization approach are expected to be able to improve moral reasoning compared to the non-visualization approach. Visual senses are more dominant and visual experiences make learners store more information (Dilla & Janvrin, 2010; Schunk, 2012). The support of visual-based learning methods will increase the level of reasoning because cognitively acquired knowledge is easier to understand. In the condition that the subjects receive high obedience pressure, visual-based ethics learning methods are expected to help learners achieve better ethical understanding so that they are able to make more ethical decisions. The interaction among obedience pressure, learning methods, and ethical decisions is formulated in the third hypothesis as follows:

H3: Under conditions of high obedience

pressure, subjects who get visual learning methods will produce the best ethical decisions.

3. RESEARCH METHOD

Design of Experiment

This study uses a laboratory experimental method. The experimental method is chosen because it has a high internal validity to test the causality between the dependent variable and the independent variable. The experimental design is a 2 x 2 factorial design between subjects. The first factor is obedience pressure which consists of two levels: with obedience pressure and without obedience pressure. The second factor is the learning method, which consists of visual-based learning and nonvisual-based learning.

The subjects undergraduate are students of Accounting Study Program, Faculty of Economics and Business, Satya Wacana Christian University, Salatiga. The number of subjects used in this experiment is 114 people. Students are selected from the internal audit class with the argumentation that the students already understand the practices and assignments of internal audits, specifically compliance testing. The selection of students as subjects is in accordance with the purpose of the research designed. This research emphasizes the cognitive aspects of humans in processing information and making general decisions so that the use of students as professional counselors can be accepted scientifically (Nahartyo & Utami, 2015). For example, Fleming, Romanus, & Lightner (2009) examine ethical dilemmas in a professional context by using students as subjects who act as professional accountants.

Experiment is carried out using paper and pen and supported by visualization in the form of an ethics learning video. The experiment module is executed after going through a pilot test with the subject of accounting students who are not the target of the experiment, with the hope that there will be no effect of maturase on experimental subjects. Preliminary test results indicate that the video still needs to be improved in terms of ethical crime cases that need to be clarified, so that improvements are made to the visualization video. The experimental module is developed from the research of Cahyaningrum & Utami (2015) by modifying the learning method. Ethics learning methods are made in the form of nonvisual (narrative) and visual (video).

The independent variables (manipulated

variables) are obedience pressure and ethics learning method, while the dependent variable (the measured variable) is an ethical decision. Obedience pressure is defined as negative pressure, that is, to take actions that are unethical and arise from those who have higher authority. The obedience pressure is manipulated in the form of pressure to violate government regulations for environmental preservation. Learning methods are defined as the methods chosen to convey material in a particular learning environment so that goals can be achieved effectively and efficiently. Non-visual based learning methods are given in the form of narratives about various dimensions of business activities including the ethical dimension. Visual learning methods are given in the same narrative and video screenings about the effects of environmental damage if ignoring the ethical dimension. Ethical decisions are defined as the result of a person's process of building behavior or actions based on an individual's moral judgment (cognition-judgment action process). Ethical decisions are measured by decisions to be obedient / disobedient on a scale of 10-100 (Cahyaningrum & Utami, 2015).

Table 1 Experiment Matrix

		Ethics Learning Method		
		Visual No		
Obedience Pressure	With obedience pressure	Cell 1	Cell 2	
Nigha	Without obedi- ence pressure	Cell 3	Cell 4	

Note:

Cell 1: with high obedience pressure + visual learning method

Cell 2: with high obedience pressure + nonvisual learning methods

Cell 3: without obedience pressure + visual learning method

Cell 4: without obedience pressure + nonvisual learning method

Order of Experiments

The following are the steps of experiment:

1. Subjects randomly receive one of four prepared modules. The randomization method is to divide the subject modules randomly in each experimental group and the control group. Subjects are

- asked to fill in the subject's profile which contains name, gender, and cumulative achievement index. There are four cases: under high obedience pressure and visual learning methods; under high obedience pressure and nonvisual learning methods, not under obedience pressure and visual learning methods, and not under obedience pressure and nonvisual learning methods.
- Subjects are asked to answer ten fundamental questions in the field of internal audit. Experimental research needs to be convinced that the subjects are only influenced by manipulation and not because of different levels of understanding of accounting.
- 3. Subjects are given profile information of a company where they work, which is a furniture manufacturing company. Subjects are asked to act as members of the organization's internal auditors and tasked with making decisions on the compliance of an organization with environmental maintenance regulations.
- 4. Next, the subjects face three questions relating to manipulation check for understanding their task and role in the company where they work.
 - Manipulation is given according to the case faced by each subject. High obedience pressure is indicated by orders to violate government regulations on environmental preservation. The company is faced with maintaining the forest because the raw material for furniture is wood. The company leaders ask the subject not to prepare a compliance audit report and advise that it not be submitted when the external audit is carried out by the Public Accounting Firm. The company leaders order management not to comply with government regulations because it has an impact on the costs the company has to issue. To show social pressure, it is presented the conditions of competing companies that are performing well despite violating regulations. The control group is not under obedience pressure as indicated by orders from leaders to management to comply with government regulations on environmental preservation. Subjects in the control group are encouraged to conduct compliance audits as a form of added value to the organization.
- 6. Manipulation in the form of learning method is given in visual in the form

of video and nonvisual in the form of narration. Subjects who receive the visual learning method are given a video on the importance of protecting the environment and the impact of environmental damage. Subjects who receive nonvisual learning methods are given narration on the importance of protecting the environment and its impact on the environment.

- 7. The stage after giving manipulation is checking the manipulation.
- 8. The last stage is debriefing, as a stage to explain the aims and objectives of the study.

Analysis Technique

The steps taken in the analysis are as follows:

- 1. Descriptive presentation of research subject data
- Testing the effectiveness of randomization with One-Way ANOVA (the dependent variable is ethical decisions and the independent variables are gender, age and student achievement index).
- Testing manipulation check is done by determining the subject's answer score for the three questions given. If the subject answers two or more questions correctly, then the subject passes the manipulation check.
- 4. The first and second hypothesis testing

is done using the independent t-test. The third hypothesis testing is done using the Two-Way ANOVA (Analysis of Variance) Test. The first and second hypotheses are testing the main effect, while the third hypothesis is testing the interaction effect. The hypothesis is supported if the significance value is less than 0.05. Analysis of the data is based on literature review and test results.

4. DATA ANALYSIS AND DISCUSSION

The subjects of this study consist of 114 students divided into 4 (four) cells: Cell 1, Cell 2, Cell 3, Cell 4. The distribution of subjects in the cells can be seen in table 2. The number of subjects in each cell is relatively comparable. The experiment was conducted on November 23, 2015 in the Internal Audit class at Faculty of Economics and Business, Satya Wacana Christian University, Salatiga. Audit simulations were led by experimenters who acted according to the directions and guidelines in conducting the simulation. The audit simulation process took 50 minutes.

The next step is checking the first stage of manipulation, that is, to test the understanding of the task and the role of the subject in the simulation with 3 questions. The prerequisite for passing the first manipulation check is that the subject correctly answers a minimum of 2

Table 2
Distribution of Subjects in Cells

		<u> </u>		
Cell	Obedience Pressure	Learning Method	Number of Participants	Percentage
1	There is obedience pressure	Visual	28	24.56%
2	There is obedience pressure	Nonvisual	29	25.44%
3	There is no obedience pressure	Visual	29	25.44%
4	There is no obedience pressure	Nonvisual	28	24.56%
	Total Subjects		114	100%

Source: Processed data

Table 3
Manipulation Checking

No	Explanation	Cell 1	Cell 2	Cell 3	Cell 4	Number of Participants
1	Number of participants who meet the requirements	28	29	29	28	114
2	Manipulation checking 1 Understanding of tasks and roles in simula- tions (3 questions)	28	29	29	28	114
3	Manipulation checking 2 Understanding of the situation and conditions faced by the subjects (3 questions)	24	28	26	27	105

of the 3 questions presented. All participants passed the first stage of manipulation check. The second manipulation check is to test the understanding of the situation and conditions faced by the subject. In the second stage of manipulation check, there were 9 or 7.89% of participants who did not pass.

Table 4, shows the demographic characteristics of the research participants which include gender, age, and GPA. Participants consist of 30 men and 75 women with a majority of GPA in the range of 3.01 - 3.5 (52%). Age of majority participants is 20-21 years.

Table 4
Demographic Characteristics of the Research Participants

	I		
Demographic Characteristics		N	%
Gender	Male	30	29
	Female	75	71
GPA	2.5 – 3	24	23
	3.01 - 3.5	55	52
	3.51-4	26	25
AGE	19	13	12
	20	49	47
	21	36	34
	22	5	5
	23	2	2

Source: Processed data

Subjects have various demographic characteristics. In experiment, a randomization is said to be effective if there is no influence of demographic characteristics on the dependent variable (unethical decision). Statistical testing with One Way ANOVA is conducted to provide support that randomization has been effective. The results of the One Way ANOVA test are presented in Table 5.

ANOVA test results in Table 5 show that there is no influence of demographic characteristics including age, gender, and GPA on ethical decisions (significance above 0.05). Thus, it can be concluded that the results of inter-cell research are the result of manipulation received by each cell and not because of differences in subject characteristics.

Testing the Relationship between Obedience Pressure and Ethical Decisions

The first hypothesis states that subjects without obedience pressure will give better ethical decisions than those with high obedience pressure. The results of the first hypothesis statistical test were performed using an independent t-test by comparing between subjects who received high obedience pressure (cells 1 and 2) and those who did not receive obedience pressure (cells 3 and 4). The results of testing hypothesis 1 can be seen in Table 6.

Table 5
Cell Homogeneity Testing Based on Demographic Characteristics

ANOVA				Sum of Squares	df	Mean Square	F	Sig.
Age	Between Groups	(Combined	1)	1,701	6	0,283	0,392	0,882
		Linear	Weighted	0,008	1	0,008	0,012	0,915
		Term	Deviation	1,692	5	0,338	0,468	0,799
	Within Groups			70,814	98	0,723		
	Total			72,514	104			
Gender	Between Groups	(Combined	1)	1,233	6	0,206	0,997	0,432
		Linear Term	Weighted	0,011	1	0,011	0,052	0,820
			Deviation	1,222	5	0,244	1,186	0,321
	Within Groups			20,195	98	0,206		
	Total			21,429	104			
GPA	Between Groups	(Combined	1)	3,375	6	0,562	1,183	0,322
		Linear Term	Weighted	0,192	1	0,192	0,404	0,527
			Deviation	3,183	5	0,637	1,339	0,254
	Within Groups			46,587	98	0,475		
	Total			49,962	104			

Statistical test results show a significance level of 0.000 <0.05. This means that the obedience pressure influences ethical decision making. Subjects who are not under obedience pressure have better ethical decisions than subjects who are under high obedience pressure. Thus the first hypothesis is supported. The process of ethical decision making is a process by which a person builds a behavior or action based on an individual's moral judgment. This process is influenced not only by internal factors (personal values), but also by external factors (the influence of social pressure, one of which is the pressure of obedience). The results of the statistical test in table 6 show that obedience pressure drives someone to make unethical decisions. This can be seen from the significant difference in the average decision (15.290) between the average decision of the group that receives high obedience pressure and the group that does not receive obedience pressure. The average decision of the subjects who are under obedience pressure is 75.094, while the average decision of the subjects who are not under obedience pressure is 90.384. This shows that there are significant differences in decision making between those who are under obedience pressure and those who are not under obedience pressure. The obedience pressure from those who have more authority gives an influence on the ethical decision making of their subordinates. Better ethical decisions are produced by groups without obedience pressure. The results of this study are consistent with the results of previous research conducted by Davis et al. (2006) which also strengthens the results of research conducted

by Lord & DeZoort's (2001) that auditors are more likely to make unethical decisions when exposed to obedience pressure from superiors. The results of this study provide empirical evidence that obedience pressure affects a person in making decisions.

Testing the Relationship between Ethics Learning Method and Ethical Decision

The second hypothesis predicts that subjects who get visual-based ethics learning methods have better ethical decisions than those who get nonvisual-based ethics learning methods. The testing of manipulation of ethics learning methods is carried out using an independent t-test by comparing betweenthe subjects who get visual-based ethics learning methods (cells 1 and 3) and the subjects who get nonvisual-based ethics learning methods (cells 2 and 4). The test results of hypothesis 2 can be seen in table 7.

The result of statistical test of hypothesis 2 shows that the significance level is 0.001 < 0.05. This indicates that ethics learning method affects ethical decisions. Subjects who get visual-based ethics learning methods have better ethical decisions than those who get nonvisual-based ethics learning methods. From the results of statistical test of hypothesis 2, the average group decision for the recipients of manipulation of visual-based ethics learning methods is 96.000, while the average group decision for the recipients of nonvisual-based ethics learning methods is 90,600. This shows that visual-based ethics learning methods affect one's cognitive. Cognitive theory or cognitive psychology explains how humans understand,

Table 6
Test Results of Hypothesis 1

		Mean (SD) (Decision)	F	t	Р
Hypothesis 1	There is obedience pressure	75.094 (21.449)	33.413	-4.708	0.000
	There is no obedience pressure	90.384 (9.489)		-4.738	
Source: Proces	ssed data				

Table 7
Test Results of Hypothesis 2

		Mean (SD) (Decision)	F	t	P
Hypothesis 2	Visual	96.000 (5.962)	20.198	3.401	0.001
	Nonvisual	90.600 (9.981)		3.324	

learn, remember, and think about information (Sternberg, 2006). Presentation of information in a visual form is able to build one's cognitive more open, receive information better, process the information, and maintain it so that it pushes someone to reach ethical awareness, and ultimately take more ethical decisions. Thus it can be concluded that the second hypothesis is also supported. The results of this study are consistent with the statement of Tang et al. (2014) that decision makers who receive financial information presented in a visual form enable one to obtain better information and make more accurate decisions. Likewise with the ethics learning method, the ethical values conveyed in visual form help learners gain a better understanding of ethics so as to provide more ethical decisions.

Testing the Effect of Obedience Pressure and Learning Methods on Ethical Decision

Hypothesis 3 states that the subjects who are under high obedience pressure and get visual-based ethics learning methods will produce the best ethical decisions. Hypothesis 3 examines the effect of different conditions of observational obedience and various ethical learning methods on ethical decision.

The statistical test results of the relationship between obedience pressure, ethics learning methods, and ethical decisions support the third hypothesis with a significance value of 0.026 (<0.05). Table 8 presents the test results of hypothesis 3.

In the relationship between obedience pressure and ethical decisions, the statistical test using Two Way ANOVA in Table 8 shows a significance value of 0.022 < 0.05, which means that obedience pressure has a significant effect on ethical decisions. Subjects who are under obedience pressure provide ethical decisions that are different from subjects who are not under obedience pressure. This is consistent with the test results of Hypothesis 2 using the Independent t-test. Likewise with the relationship between ethics learning methods and ethical decisions, it is consistent with the results of the statistical test of hypothesis 2 that there is a significant effect of 0.000 < 0.05. Subjects who receive visual-based ethics learning methods have better ethical decisions than those who receive no visual-based ethics learning methods. Hypothesis 3 predicts that the subjects who are under conditions of high obedience pressure and get visual-based

Table 8
Test Results of Hypothesis 3

	Test R	courts of 11	ypothesis 5		
Between-Subjects Factor	s			,	
		N			
Pressure	There	is a pressure	e	53	
	There	is no pressu	re	52	
Method	Visual	1		55	
	Nonvi	isual		50	
Tests of Between-Subject Dependent Variable: DE					
Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	5739,302ª	3	1913,101	14,575	0,000
Intercept	840243,408	1	840243,408	6401,546	0,000
PRESSURE	707,745	1	707,745	5,392	0,022
METHOD	4282,454	1	4282,454	32,627	0,000
PRESSURE * METHOD	668,699	1	668,699	5,095	0,026
Error	13256,888	101	131,256		
Total	865900,000	105			
Corrected Total	18996,190	104			
a. R Squared = 0,302 (Ad	ljusted R Squared =	0,281)			

ethics learning methods will produce the best ethical decisions. The test results of hypotheis 3 test show a significance value of 0.026 < 0.05 on the effect of obedience pressure and ethics learning methods on ethical decisions. This shows that there are significant differences in ethical decision making when the subjects are under high obedience pressure while at the same time getting visual-based ethics learning methods. The subjects in this group provide the best ethical decisions. Thus hypothesis 3 is supported. Visual-based ethics learning methods can be used to further enhance one's ethical understanding so as to be able to foster an ethical awareness of individuals when receiving obedience pressures.

5. CONCLUSION, IMPLICATION, SUG-GESTION, AND LIMITATIONS

This study provides empirical evidence that obedience pressure influences someone in making ethical decisions. The results of this research show that subjects who are not under obedience pressure make better ethical decisions than those who are under obedience pressure. The obedience pressure makes someone set aside personal values and produces unethical decisions. This negative pressure of obedience cannot be avoided by the actors of the organization, especially accountants, in carrying out their roles and profession. The impact of this obedience pressure can be mitigated through the education process using appropriate professional ethics learning methods.

The results of this study also provide empirical evidence that subjects who receive visual-based ethics learning methods have better ethical decisions than those who receive nonvisual-based ethics learning methods. In addition, the results of this study state that there is a relationship between obedience pressure, ethics learning methods, and ethical decisions. Visual-based ethics learning methods produce a better understanding of ethics for someone. Through a good understanding of ethics, a person is expected to be able to make more ethical decisions and ultimately produce ethical actions. Thus, visual-based ethics learning method can be one of the strategies to mitigate the impact of obedience pressure.

Limitation and Suggestion

This study has several limitations. First, the experiments were conducted in two internal audit classes at different times. The experiments

which were conducted at the different time have the potential for information seepage. Initially the experiments would be carried out in only one class, but due to insufficient number of subjects, they were conducted in two internal audit classes. However, this threat was minimized with a lag that was not too long. The first wave experiment involving 59 participants was carried out at 10:00 while the second wave experiment involving 55 participants was carried out at 14.00. Secondly, this study was conducted by different experimenters in groups who received visualbased ethics learning methods and groups who received nonvisual-based ethics learning methods. The personality of experimenters, which is an innate factor, has the potential to influence the results of the experiment. To overcome this, the researchers provided guidance for the experimenters in carrying out the experiment so that the procedure carried out remained standard. Researchers did not act as experimenters to avoid the demand effects that could affect the subject's response. Future research could consider the design of internet-based experiments. Other research developments that need to be considered are ethical decision making by participants in group settings and discussions.

Implication

The results of this study provide empirical evidence that visual-based ethics learning methods make the subjects produce better ethics understanding. The results of this study have the implication that high obedience pressure from those who have authority makes someone produce bad ethical decisions. The results of this study contribute to the development of behavioral research in testing the theory of obedience. The results of this study support previous research conducted by Davis et al., (2006) and Baird & Zelin II (2009) that obedience pressure has a greater force because the pressure from the authorities is more effective than the pressure exerted by the social environment in same level.

These findings contribute to the accounting education institutions related to ethics learning methods especially the ethics of the accountant profession as a strategy to mitigate the obedience pressures that arises when prospective accountants enter the workforce. Visual-based ethics learning methods are able to build sensitivity development processes and improve ethics understanding better. A good

understanding of ethics can help someone to make more ethical decisions so that in the end take ethical actions.

REFERENCES

- Abdolmohammadi, M. J., & Baker, C. R. (2006).

 Accountants' value preferences and moral reasoning. Journal of Business Ethics. https://doi.org/10.1007/s10551-006-9064-v
- Adams, B. L., Malone, F. L., & James, W. (1995). Confidentiality decisions: The reasoning process of CPAS in resolving ethical dilemmas. Journal of Business Ethics. https://doi.org/10.1007/BF00872117
- Anand, V., Ashforth, B. E., & Joshi, M. (2004).

 Business as usual: The acceptance and perpetuation of corruption in organizations. Academy of Management Executive. https://doi.org/10.5465/AME.2004.13837437
- Ayunanda, T. I., & Utami, I. (2015). Urutan, Cara Dan Bentuk Informasi: Pengujian Eksperimental Efek Resensi Dan Keputusan Audit. Seminar Nasional Akuntansi XVIII. Retrieved from https://docplayer.info/30464701-Urutan-cara-dan-bentuk-informasipengujian-eksperimental-efekresensi-dan-keputusan-audit.html
- Baird, J. E., & Zelin II, R. C. (2009). An Examination of the Impact of Obedience Pressure on Perceptions of Fraudulent Acts and the Likelihood of Committing Occupational Fraud. Journal of Forensic Studies in Accounting & Business.
- Baron, D. P. (2009). A positive theory of moral management, social pressure, and corporate social performance. Journal of Economics and Management Strategy. https://doi.org/10.1111/j.1530-9134.2009.00206.x
- Cahyaningrum, C., & Utami, I. (2015). Apakah tekanan ketaatan dan kompleksitas tugas berpengaruh terhadap keputusan etis? Simposium Nasional Akuntansi 18.
- Craig Smith, N., Simpson, S. S., & Huang, C.-Y. (2007). Why Managers Fail to do the Right Thing: An Empirical Study of Unethical and Illegal Conduct. Business Ethics Quarterly. https://doi.org/10.1017/s1052150x00002633

- Davis, S., DeZoort, F. T., & Kopp, L. S. (2006).

 The Effect of Obedience Pressure and Perceived Responsibility on Management Accountants' Creation of Budgetary Slack. Behavioral Research in Accounting. https://doi.org/10.2308/bria.2006.18.1.19
- Delaney, J., & Coe, M. J. (2008). Does ethics instruction make a difference? Advances in Accounting Education: TeachingandCurriculumInnovations. https://doi.org/10.1016/S1085-4622(08)09011-1
- Dellaportas, S. (2006). Making a difference with a discrete course on accounting ethics. Journal of Business Ethics. https://doi.org/10.1007/s10551-006-0020-7
- Dilla, W. N., & Janvrin, D. J. (2010). Voluntary disclosure in annual reports: The association between magnitude and direction of change in corporate financial performance and graph use. Accounting Horizons. https://doi.org/10.2308/acch.2010.24.2.257
- Falkenberg, L., & Woiceshyn, J. (2008).

 Enhancing business ethics: Using cases to reach moral reasoning.

 Journal of Business Ethics. https://doi.org/10.1007/s10551-007-9381-9
- Fleming, D. M., Romanus, R. N., & Lightner, S. M. (2009). The effect of professional context on accounting students' moral reasoning. Issues in Accounting Education. https://doi.org/10.2308/iace.2009.24.1.13
- Fox, R. M., & DeMarco, J. P. (2000). Moral Reasoning: A Philosophical Approach to Applied Ethics (2nd ed.). Harcourt School.
- Gaffikin, M., & Lindawati, A. (2012). The Moral Reasoning of Public Accountants in the Development of a Code of Ethics: the Case of Indonesia. Finance Journal.
- Gerlach, V. S., Ely, D. P., & Melnick, R. (1980). Teaching and media: A Systematic Approach (2nd ed.). Englewood Cliffs, N.J.: Prentice-Hall.
- Guffey, D. M., & McCartney, M. W. (2008). The perceived importance of an ethical issue as a determinant of ethical decision-making for accounting students in an academic setting. Accounting Education. https://doi.org/10.1080/09639280701272666

- Haywood, M. E., McMullen, D. A., & Wygal, D. E. (2004). Using Games to Enhance Student Understanding of Professional and Ethical Responsibilities. Issues in Accounting Education. https://doi.org/10.2308/iace.2004.19.1.85
- Huss, H. F., & Patterson, D. M. (1993). Ethics in accounting: Values education without indoctrination. Journal of Business Ethics. https://doi.org/10.1007/BF01686451
- Illeris, K. (2004). The Three Dimensions of Learning: Contemporary Learning Theory in the Tension Field between the Cognitive, the Emotional and the Social (1st editio). Krieger Pub Co.
- Liu, C., Yao, L. J., & Hu, N. (2012). Improving ethics education in accounting:
 Lessons from medicine and law.
 Issues in Accounting Education.
 https://doi.org/10.2308/iace-50150
- Lord, A. T., & DeZoort, F. T. (2001). The impact of commitment and moral reasoning on auditors' responses to social influence pressure. Accounting, Organizations and Society. https://doi.org/10.1016/S0361-3682(00)00022-2
- Milgram, S. (2009). Obedience to Authority: An Experimental View (Reprint ed). Harper Perennial Modern Classics.
- Nahartyo, E., & Utami, I. (2015). Panduan Praktis Riset Eksperimen. Indeks.
- Ormrod, J. E. (2012). Human learning 6th edition. In Pearson Education, Inc.
- Özkan, A. H. (2013). Regional differences on the cognition as a constraint on accounting ethics education. Journal of Global Business Issues.
- Ponemon, L. A. (1992). Ethical reasoning and selection-socialization in accounting. Accounting, Organizations and Society. https://doi.org/10.1016/0361-3682(92)90023-L
- Ricchiute, D.N. (1984). An Empirical Assessment of the Impact of Alternative Task Presentation Modes on Decision-Making Research in Auditing. Journal of Accounting Research. https://doi.org/10.2307/2490715

- Robbins, S. P., & Judge, T. A. (2009). Organizational behavior (13th ed.). Pearson.
- Schunk, D. H. (2012). Learning theories: An educational perspective. In Reading.
- Shaub, M. K., Finn, D. W., & Munter, P. (1993). The Effects of Auditors' Ethical Orientation on Commitment and Ethical Sensitivity. Behavioral Research in Accounting.
- Shawver, T. J. (2006). An Exploratory Study Assessing The Effectiveness of a Professional Responsibility course. Global Perspectives on Accounting Education.
- Sternberg, R. (2006). Cognitive Psychology (9780495006th ed.). USA: Thomson Wadsworth. Suparman, M. A. (2012). Panduan Para Pengajar Dan Inovator Pendidikan (4th ed.). Erlangga.
- Tang, F., Hess, T. J., Valacich, J. S., & Sweeney, J. T. (2014). The effects of visualization and interactivity on calibration in financial decision-making. Behavioral Research in Accounting. https://doi.org/10.2308/bria-50589
- Thomas, S. (2012). Ethics and accounting education. Issues in Accounting Education. https://doi.org/10.2308/iace-50119
- Thompson, K. (1998). Moral Panics (1st ed.). https://doi.org/https://doi. org/10.4324/9780203980903
- Thorne, L. (2001). Refocusing ethics education in accounting: An examination of accounting students' tendency to use their cognitive moral capability. Journal of Accounting Education. https://doi.org/10.1016/S0748-5751(01)00014-8
- Williams, J., & Elson, R. (2010). Improving Ethical Education in the Accounting Program: A Conceptual Course. Academy of Educational Leadership Journal.