Cognitive Moral Development, Organizational Situation and Ethical Decision Making in Business and Accounting

Abdul Hamid Habbe¹, Andi Kusumawati¹, Alimuddin¹, Yohanis Rura¹ & Iskandar Muda²

¹ Department of Accountancy, Faculty of Economics and Business, Universitas Hasanuddin, Makassar, Indonesia
² Department of Accountancy, Faculty of Economics and Business, Universitas Sumatera Utara, Medan, Indonesia

Correspondence: Iskandar Muda, Department of Accountancy, Faculty of Economics and Business, Universitas Sumatera Utara, Medan, Indonesia.

Received: May 20, 2020 Accepted: July 10, 2020 Online Published: September 21, 2020
doi:10.5430/ijfr.v11n5p93 URL: https://doi.org/10.5430/ijfr.v11n5p93

Abstract

This study examines the effect of the interaction between cognitive moral development (pragmatic, accommodating, and autonomous) and an organizational situation (agency and stewardship) in business ethical decision making (earnings management and expropriation). This research employed a laboratory experiment design of full factorial factor 3x2 between-within subjects. There were 97 postgraduate students of Hasanuddin University that acted as participants. Data were analyzed by ANOVA and t-test. The results showed that the level of cognitive moral development is positively related to the degree of ethical decisions in accounting and expropriation. The higher the level of cognitive moral development, the more managers act ethically in decisions relating to accounting and expropriation. Meanwhile, the agency and stewardship situation have no effect on the differences in ethical decision making both in accounting and expropriation. Similarly, the exposure to an organizational situation has no impact on the relationship between levels of cognitive moral development and ethical decision making. The assumption stating that cognitive moral development of each participant has been an anchor and not easily changed to the different or the opposite situations is empirically proven.

Keywords: cognitive moral development, agency situation, stewardship situation, ethical decision, anchor

JEL Code: D23, D81, L21

1. Introduction

The relationship between moral value and ethical behavior is interesting to investigate when it involves external influences such as situational factors. Particular factors that are being experienced by someone will interact with his/her moral value which in turn influences his/her ethical orientation. Both situational and environmental variables can justify his/her judgment to behave more ethically or not. The interaction between individual or personal values and situational factors in influencing ethical decision-making behavior had been investigated by Trevino and Youngblood (1990) in their study. They termed this interaction as bad apples in bad barrels.

It is attributed that the manager with a pragmatic and opportunistic character will tend to behave more unethically in a massive agency problem environment. Conversely, a manager that places high value on idealism would be expected to behave ethically in a favorable situation. However, it is important to question the ethical orientation of an individual with a pragmatic opportunistic disposition in a sound condition as well as those with a high cognitive moral being in a contrary situation. It is assumed that both would not easily change; the former would not become more ethical while the latter would not turn out to be less so. Bad apples will remain bad despite being in a good barrel, and vice versa. Consistently, Habbe et al., (2019) states that a cognitive morality would be rooted in a person as he/she grows up in terms of age, education, experience, social interaction, and cultural environment. Therefore, a cognitive morality tends to be a personal character (fundamental belief) which cannot easily change despite being in a contrary condition.

The relationship between internal and external factors could be reciprocal in nature. Individual factors or personal values will influence the ethical decision of a person while the ethical decision in an organization will affect personal ethical behavior in decision making (Trevino, 1986; Ferrel and Gresham, 1985, and Prabowo et al., 2017). Moreover, Hunt and Vitell (1986) suggested that the ability to understand and be sensitive to ethical problems in a professional
circumstance is influenced by factors such as the culture or society where a company operates, the profession, organization, and personal experiences.

Robbin (1996) supported this view, proposing that the factors determining the behavior of ethical decision making relates to good development stages, the locus of control, and organizational environment. Finn et al. (1988), Shaub et al., (1993), Khomsiyah and Indriyantoro (1998) and Dalimunthe et al., (2017) developed a study regarding the perception of the ethical component introduced by Hunt and Vitelli (1986). They found factors influencing sensitivity and ethics orientation such as culture, environment, personal experiences, organizational setting and commitment, and professional atmosphere and commitment. Additionally, Griffin and Ebert (1998) suggested one’s working environment as one of the contributing influences.

Based on those views, it is thus justifiable to state that one’s ethical orientation and sensitivity is affected by both internal factor and external exposure which interact with each other. The strength of interaction would be determined by the relativity of each factor. This study will investigate the interaction between one’s cognitive level of morality as an internal factor and the organizational situation as an external factor in influencing ethical behavior in business. The authors developed upon research conducted by Riyono (2016) which examined the effect of Cognitive Moral Development (CMD), theories exposure, and threats of embarrassment in ethical decision making in accounting. There are two issues that extend from this study. Firstly, the case of ethical decision making in accounting is illustrated in both positive and negative forms, while Riyono (2016) did merely describe the negative aspect, which possibly led the participants to the given situation due to the absence of other alternatives. Secondly, the experimental design employed is a full factorial laboratory experiment between and within subjects without the controlling group; all the cells are active. This design alternates Solomon’s design, and experiment which was conducted through the website by Riyono resulting in high morality levels in his research (2016).

This study is contextually relevant in Indonesia as a developing country where different unethical behavior, for instance, corruption, is practiced extensively. According to the International Transparency Institution, the Indonesian Corruption Perception Index score in 2015 was 34 ranked at 88 from 168 most corrupt countries. Unethical behavior does not only exist in the governmental sector, but also in a business setting. It is probably an indication that Indonesians largely possess a pragmatic cognitive moral development (Muda et al., 2018). Additionally, the situation in the Indonesian context is considerable conducive to corruption indicated by the extensive practice of collusion and nepotism (Putra et al., 2018). The shame culture as a means of personal internal control has not been well developed. The weakness of social control, a culture of low whistleblowing, and massive permissive attitudes are all among contributing factors to unethical behavior in Indonesia. It is worsened by problematic law enforcement resulting in a deterrent effect that is yet to be satisfied. Consequently, unethical behavior becomes a common issue. As such a question is raised. Is Indonesian society on average identical with bad apples while the Indonesian state represents the bad barrel?

The two cases of the ethical dilemma that will be discussed in this study are earnings management and expropriation. Earnings management is the discretionary behavior of the manager who manipulates financial reporting to maximize a company’s value to achieve a specific objective, for instance for bonus scheme, debt covenants, political costs (Watt and Zimmerman, 1986). Earnings management could be in the form of income increasing, income decreasing, or income smoothing which is possible by abusing discretionary accruals of expenses, revenue, or accounting methods within accounting standards. Meanwhile, expropriation behavior is the process of taking over the right of minority shareholders by the controlling interests through a control mechanism (Claessens et al. 2000). It is to maximize own welfare and redistribute wealth from others.

Two ethical issues above were used to observe ethical decision-making behavior in business due to two reasons. Firstly, both earnings management and expropriation practice are categorized as unethical conduct but considered as a legal action. The former is carried out through accrual manipulation which indirectly impacts a company’s cash flow to conceal the misappropriation of a company’s assets. The latter, on the other hand, is legally acceptable as it is practiced under the control of majority shareholders, which is lawful according to company law. This legal situation may turn an individual towards a different ethical orientation when facing an ethical dilemma whether it violates or conforms to the law, even though that will prejudice another party. It’s expected that the presence of legal threats would increase the level of ethical orientation, and vice versa. It is thus interesting to observe the ethical behavior of decision makers, particularly managers or majority shareholders in the situation which is contextually absent from law violation but inflicts disadvantages to other parties.

Secondly, expropriation in Indonesia is widely practiced due to a pyramid scheme of ownership structure. Unlike corporations in the US which are predominantly dispersedly owned, Claessens et al. (2000) have evidenced that the
control in East Asian countries, including Indonesia, is generally through the scheme of pyramid structures and cross-holdings among firms leading to a concentration of the company’s control. These mechanisms offer an opportunity for controlling shareholders to act as a pragmatic opportunist.

2. Literature Review and Hypotheses Development

2.1 Cognitive Moral Development

Kohlberg (1971, 1977) proposed that cognitive development is a personal value gained through a process of thought and expression. Every important moment experienced involves thought, and expression processes will encourage an individual to improve his/her moral behaviour (DeTienne et al., 2019). An opinion of a person will explain his/her thought process when facing a conflict in an interaction with others possessing higher moral level (Cherington, 1994). Kohlberg created a series of moral development stages ranging from a simple consequence which was a personal discomfort, to appreciation and awareness of the universality of humanities (Elias, 1989, Gibson, 2019 and Mathes, 2019). The assumptions applied by Kohlberg in developing his theory are as follows. Firstly, to understand one’s moral behavior, it is important to comprehend his/her moral philosophy. Secondly, the level of cognitive moral development is structured as a comprehensive way of thinking. Every person will consistently follow his/her moral consideration stage. Thirdly, the concept of cognitive moral development describes a series of developmental sequences which is universal in nature and applicable in any culture system.

According to those assumptions, the concept of cognitive moral development offered by Kohlberg is characterized by four main features. Firstly, human beings progress consecutively from one stage to the next in a similar sequence. A person cannot skip any stage and neither can they go back to any previous stage. Secondly, the development stages would always be arranged sequentially in increments. Thus, someone who makes a moral judgment at a higher level can easily understand moral judgments at the lower level. Thirdly, the development stages are structured comprehensively. That is, someone will be consistently at his moral judgment. Finally, the development stages emphasize the moral judgment instead of its content.

According to Kohlberg’s theory, moral reasoning develops in six stages which are grouped into three levels, each consisting of two stages. The first two steps, the punishment and obedience orientation and the instrumental relativist orientation, are consolidated into the pre-conventional level (Pragmatic) where people (generally children) will make a decision based on reward and punishment. Stage three and four, the interpersonal concordance orientation and the law and order orientation, are grouped into the conventional level (accommodating). In this level, a person goes further in his personal conformity to be more aware of his group or surroundings and social order. Lastly, stage five and six, the social contract legalistic orientation and the universal ethical principle orientation, are grouped into the post-Conventional level (Autonomous) where the community interest would be the consideration that contributes to the moral reasoning.

Kohlberg (1981) believed that cognitive moral development could be applied to predict moral behavior. The higher the cognitive morality of someone, the more ethical the decision would be. The prediction accuracy and consistency of the CMD model introduced by Kohlberg has been tested by several other studies, for instance, Blasi (1980), Windsor and Ashkanasy (1995), Ashkanasyi et al. (2006), and Riyono (2016).

2.2 Situational Variables

External factors such as environment and culture are believed to impact one’s ethical orientation. A sound environment and culture will encourage people to behave ethically. Conversely, a bad environment and culture will lead someone to behave unethically. Hunt and Vitelli (1986), Finn et al. (1988), Shaub et al. (1993), Robbin (1996), and Khomsiyah and Indriyanto (1998) proposed factors determining ethical decision-making behavior such as organizational environment, organizational setting, professional environment which influence ethical sensitivity and orientation. These findings are supported by Griffin and Ebert (1998) stating that the working environment contributes to one’s ethical orientation and sensitivity.

2.3 Agency Problem Situation

An unconducive atmosphere in an organization for business practices is indicated by the existence of moral hazard behavior, adverse selection, and opportunism. Such behaviors are typical of agency problems between agents and a principal as suggested by agency theory (Jensen and Meckling, 1976). According to this theory, the managers tend to maximize their utility and mitigate the risk by using the facilities and assets of the company. The agent and principal are both bounded by a self-interested relationship. An agency problem existing in an organization for a relatively extended period will turn into part of the culture of that organization. In this situation, the ethical sensitivity and orientation of the organization member will be blunted. A poor organizational culture will set the same definition in
members’ observance. It is consistent with the self-fulfilling prophecy by Merton (2010) which is the foundation theory for social sciences, stating that if people define a situation as a reality, then the situation will become real. This argument is also supported by social learning theory (Bandura, 1986) which explains that as social human beings, one will tend to observe others’ behavior and event that will cause them to be rewarded, punished, or ignored.

2.4 Stewardship Situation

Stewardship situation in an organization will encourage the member to behave altruistically, which is to prioritize the interest of the organization rather than personal interest. The stewardship theory explains the antecedent of intrinsic characteristics such as collectivism, belief, and pro-organizational behavior (Davis et al., 1997). This theory, as agency theory, is a theoretical model which explains the relationship between the manager and the owner of a company. This theory does not perceive human beings as merely prioritizing their personal interest, opportunists, and maximize economic utility (Jensen and Meckling 1976). It assumes the manager as a responsible steward whom can be trusted and concerned for the mutual benefit of the company’s constituent (Davis et al. 1997, Donaldson and Davis 1991). The possibility of moral hazard is assumed to be absent as the managers (steward) are working on behalf of the owner. Thus, the risk of a dispute between owner and manager which could trigger an unethical action from the director is not expected not to be executed by the steward manager. The steward manager believes that the ownership is fair and the residual claim of a company is to be fairly distributed. In other words, there is no such misalignment between the manager and the company owner’s interest since the manager believes that pursuing the best for the organization will benefit their constituents and themselves (Davis et al. 1997). This assumption is the foundation of the similarities between the manager and company’s owner which is contrary to individualistic, self-portion, and opportunistic assumption which is proposed as management model in business in a market system (Donaldson 1990).

2.5 Ethical Decision Making

The theory of ethics is divided into two views which are namely the deontological and teleological view. The former emphasizes the obligation of human beings to behave based on rules. An action judged by examining the nature of the action rather than its consequences or motives. Human action is considered morally right if that action complies with specified duty or obligations regardless of its good motives or consequences. Therefore, deontological ethics are very much focused on one’s goodwill and strong character. On that basis, according to Kant, an action is considered safe if it is both duty-complied and conducted for the sake of duty (Kerf, 1998).

Teleological theory, on the other hand, is that the rightness and wrongness of an action are based on the objective to achieve or the consequences raised. An individual’s action is justified morally good if the aim is right or the result is safe and beneficial (Kerf, 1998). Teleological ethics aim at creating happiness at the maximum level both quantitatively and qualitatively and at the same time minimizing unhappiness (Bertens, 1993). There are two main teleological theories, utilitarianism and egoism (Dusca and Dusca, 2003). The former focuses on maximum satisfaction for a large number of people, while the latter concerns on results that maximize person’s self-interest. Unethical behavior in the practice of earnings management and expropriation in a business environment which is based on agency relationship is to maximize specific utility on both a personal and group scale. Earnings management practice will benefit the agent at the expense of the principal while expropriation will benefit majority shareholders at the cost of minority interests. The orientation of both these practices is utilitarian egoism.

2.6 Hypotheses Development

Cognitive moral development is a determinant factor in ethical decision-making behavior. Someone possessing a higher level of moral development will place others’ right in higher priority. Cognitive moral development, as suggested by Kohlberg (1984), comprises of three levels, pre-conventional (pragmatic), conventional (accommodation), and post-conventional (autonomous). The first tier focuses on personal being, the second tier focuses on personal relationships, and the third tier focuses on universality principles. If the cognitive moral development of an individual shifts to a higher standard, it will, in turn, raise his ethical orientation and sensitivity.

Kohlberg (1981) believed that cognitive moral development (CMD) could be applied to predict moral behavior. The higher the CMD of someone, the more ethics the decision that would be made. Blasi (1980) evaluated 75 studies concluding that CMD and moral attitude are statically related. Consistent with Kohlberg’s theory (1969, 1976), Windsor and Ashkanasy (1995) and Ashkanasy et al. (2006) stipulated CMD as a categorical variable which are divided into three groups, autonomous for high CMD, accommodation for medium CMD, and pragmatic for low CMD. It is consistent with the methods adopted in several studies, particularly in studies concerned with behavior.
Based on the formulation of CMD theory, people with the highest CMD which is the autonomous category, tend to behave and act more ethically compared to those with lower CMD, accommodation and pragmatic categories. Furthermore, people categorized as being in the accommodation category will tend to behave more ethically than those in the pragmatic, which is the lowest CMD category. Therefore, by referring to study by Ashkanasy et al. (2006) and Riyono (2016), this study develops several hypotheses as follow.

H1: There are differences in the level of ethical decision between the pragmatic, accommodating, and autonomous group in accounting and expropriation

H2a: The Autonomous category of people behave more ethically in accounting and expropriation decision compared to accommodation and pragmatic category.

H2b: The accommodation category of people behave more ethically than the pragmatic group in accounting and expropriation decision

The interaction between CMD and situational factors may influence the ethical decision in accounting. By CMD, the pragmatic person will always prioritize his interest over others. It is in line with the teleological egoism which concerns on the objectives of an individual or specific group. As suggested by Ashkanasy et al. (2006), pragmatists will make the most unethical decision in agency problem as well as in stewardship situations. Their CMD has become an anchor which cannot easily change in a different situation opposite to that anchor (Habbe, 2017). Hence, the agency and stewardship situation exposure will not influence the ethical decision value. Null hypothesis stated below:

H₃: The pragmatic group of people acts unethically in accounting and expropriation in both agency and stewardship situation.

The accommodating group will tend to focus on the personal relationship. The group moral actions are influenced by the prevailing situation. They will behave more ethically in a stewardship situation but will behave more unethically in an agency situation.

H₄: The accommodating group of people acts more ethically in accounting and expropriation in stewardship situation than in an agency situation.

Autonomous is a category which views ethics universally. In contrary to the pragmatic group, this group follows the teleological utilitarianism. This group, as a pragmatic group, will not be influenced by any situation in a specified period. CMD of each cluster has become fundamental belief or an anchor which is hard to change in a different or contrary situation. Hence, a null hypothesis is formulated as follows:

H₅: The autonomous group of people will act ethically in accounting and expropriation in both agency and stewardship situation.

3. Methodology

This research is an experimental laboratory research of 3x2 between and within-subject relating to Cognitive moral development at three levels (pragmatic, accommodating, and autonomous), and situational exposure at two forms (agency and stewardship situations). All of them are active cells and, therefore, there are no control groups (Habbe et al., 2019). Ethical decision making as manipulation effect is tested with ANOVA and t-test. Participants of this experiment are postgraduate students of Economics and Business Faculty, Hasanuddin University. Students were used as a manager proxy based on three reasons. Firstly, most of the people (this context applies to students and manager) have an identical response when they receive information in the same form and with high conditions of uncertainty. They tend to use their cognition to receive and exploit the information to make decisions. Secondly, students are selected to control the factor of experience, which amongst current managers in an organization, is a variable that can disturb the causality effect of manipulated main variables. Thirdly, postgraduate students are perceived to know and have achieved the highest moral achievement throughout ethics, life experience, and knowledge about decision making in accounting and business (Habbe and Mande, 2016; Gusnardi et al., 2016 and Habbe, 2017). Research subjects were divided into two treatment groups:

a. Group X treated by giving an explanation of the agency-stewardship situation
b. Group Y treated by giving an explanation of stewardship-agency situation

The ethical decision level was measured by giving two cases: case A depicting the event of ethical decision making in
accounting (earnings management) and case B describing the ethical decision making in expropriation.

3.1 Variables and Measurements

Dependent variables in this research were ethical decision making in accounting and expropriation ethical dilemma. The ethical decision level was measured using the ethical decision score. The ethical dilemma was divided into two categories. The first type related to the earnings management dilemma. This category faces thirteen cases adopted from Bruns, Jr. and Merchant (1989, 1990), and Riyono (2016) with adjustments to Indonesian contexts and the existence of positive statement for two cases. Then the following category covers four cases of expropriations by majority shareholders to minority ones.

Choosing ethical decision making is stated in a positive and a negative statement to avoid guided statements for participants. It is performed as an effort to minimize the limitation from previous research that has given participants one and only choice in a negative form. The agreements of respondents in dilemma cases was measured on a scale of 1-7; from one (very much agree) to 7 (very much not agree).

Independent variables in this research are Cognitive Moral Development (CMD) which consists of three levels (pragmatic, accommodating, and autonomous) and situational variables composed of two levels (agency and stewardship conditions). Kohlberg’s Model of Cognitive Moral Development (1969, 1976) is used as the level of cognitive moral. This measurement is capitalized because Kohlberg (1981) believed that CMD is the prediction to moral acts. The higher CMD, the more ethical one tends to act and make decisions. Kohlberg’s model was tested for its validity and consistency by Blasi (1980), Windsor and Ashkanasy (1995), and Ashkanasy et al. (2006). The CMD of Kohlberg is measured using the defining issues test (DIT) by Rest (1979). The complete stories employed are 3 of 6 available stories. The reason behind decreasing stories is to cut the high morality threat based on previous research. Rest (1979, 1994) stated that the rate of the reliability coefficient of Cronbach Alfa DIT 3 stories reached 0.70. Respondent selection of statements is based on a given story and will measure their CMD. Those with a score of CMD below 27 will be categorized as pragmatic, 27-41 as accommodative, and over 41 as autonomous.

Meanwhile, situational variables consist of two situations (agency and stewardship). Agency situation is an explanation describing agency problems in an organization motivating someone to abandon the practices of good management (moral hazard) while stewardship illustrates togetherness and dedication that can encourage someone to leave bad management practices. The agreements of respondents to abide by agency situation or stewardship is measured on the Likert scale of 1-7. Score one implies one very much agrees, and seven is when one very much disagrees (Ghoshal, 2005), Junaid et al. (2015), Riyono (2016) and Muda et al., (2018).

3.2 Experiment Procedures

The experiment was conducted with a laboratory design in one of the classes located in the building of Economics and Business Faculty, Hasanuddin University. The experiment was conducted before a workshop session of experimental methodology for postgraduate students of Accounting, Hasanuddin University. The other session was for postgraduate students of Management before a regular lecture class. The experiment was assisted by four assistants doing several things, including distributing research instruments, organizing and guiding subjects, as well as inputting experiment data. The duration was on the average 45 minutes. These are the steps of experiments conducted:

a. The participants of the experiments are categorized into two groups defined randomly, which are X and Y groups.

b. At an early stage, the two groups are required to fill out basic identity information including name, age, gender, bachelor background study, work experience, and the position on the practice field.

c. The next step is that they are asked to read Cognitive Moral Development scenarios and fill out the questionnaires based on the readings. The questionnaires are measurements of Cognitive Moral Development for each participant.

d. Then participants proceed to do experiment I. They are asked to read the situational explanation carefully. With that information, they answer the questions to know their understandings on given scenarios (manipulation check). Group X reads the agency while Group Y reads the stewardship situational explanation.

e. By this situational explanation, the subsequent step is that they decide to choose on ethical dilemma cases about earnings management and expropriation.

f. Then participants go to experiment II. In this stage, Group X provided with the stewardship situational explanation, and Group Y provided with the agency situational explanation.

g. Lastly, based on their readings on the situational explanation provided, they decide their ethical judgment on earnings management and expropriation cases.
This research cannot be generalized to Accounting students of the Postgraduate University of Hasanuddin. This is a weakness of the experimental research method. To cover up these weaknesses, additional research is applied in the form of quantitative methods that have their own characteristics. The distinctive feature of this research is to cover up these weaknesses by the existence of a control group by using selectable variables and other variables that can influence the experimental process that can be tightly controlled. So in this method the researcher manipulates at least one variable, controlling other relevant variables. This variable origin is one of the characteristics that distinguishes experimental research from other studies.

This study is more appropriate to use the ANOVA test than using the Multiple Regression Test because it tests variance between groups in accordance with the sample of this study. This cannot be done with the Regression statistical test tool. ANOVA is a statistical test procedure that can test the differences of more than two groups.

4. Results and Discussion

4.1 Result

Target respondents in this experiment were Magister students in the field of management and accounting who are currently studying in the Postgraduate School of University of Hasanuddin. A total of 104 students agreed to participate in this experiment representing 49% male students and 51% female students who are an average age of 29 years old. Mostly, they are from accounting and finance bachelor degree background possessing an average of 6 years working experience as an accountant, auditor, manager, lecturer, trainer, or other. From the 104 copies, seven were unusable leaving only 97 for analysis.

Table 1 shows the interaction between CMD and situation in two cases, earnings management and expropriation. The totals of 97 participants were divided into six cells in each case. Apparently, the participants represent 68.04% (66) pragmatic category, 18.56% (18) accommodation category, and 13.40% (13) autonomous category. This figure confirms that students possessing high CMD with universal ethical sensitivity are only a small part of the sample surveyed. It is contrary to the number of people categorized as pragmatic which was dominant. The table also demonstrates what the difference ethics score means in both earnings management and expropriation case whether in agency or stewardship situation. Additionally, the table infers that the statistic resulted in the smallest score for the autonomous category and the highest score for the pragmatic category. In total, the mean score of the autonomous group is 3.429 for the earnings management case and 2.058 for the expropriation case. Meanwhile, the mean score of accommodation and pragmatic are 2.954 and 4.205 respectively for earnings management case and 2.875 and 3.520 respectively in the expropriation case. Furthermore, in both cases of earnings management and expropriation, the mean score of the three groups, pragmatic, accommodation, and autonomous which were exposed either with an agency or with stewardship situation, are consecutively getting smaller show in Table 1.

Table 1. Experiment Situation and ethics score

| Case       | Situation (SIT) | Cognitive Moral Development (CMD) | Total |
|------------|-----------------|----------------------------------|-------|
|            | Pragmatic       | Accommodation                    | Autonomous |       |
| A          | Agency (n=30)   | 4.250 (n=11)                    | 3.145 (n=8) | 4.000 (n=49) |
| Earnings   | Stewardship (n=36) | 4.167 (n=7)    | 3.900 (n=5) | 4.074 (n=48) |
| Management | Total (n=66)    | 4.205 (n=18)     | 3.429 (n=13) | 4.036 (n=97) |
| B          | Agency (n=30)   | 3.469 (n=11)                    | 1.969 (n=8) | 3.109 (n=49) |
| Expropriation | Stewardship (n=36) | 3.562 (n=7)    | 2.200 (n=5) | 3.302 (n=48) |
|            | Total (n=66)    | 3.520 (n=18)     | 2.058 (n=13) | 3.204 (n=97) |

Source: SPSS Output Result (2017).
Table 2 below demonstrates the result of the test of ethical decision means based on CMD in the case of earnings management and expropriation. In the earnings management case, the score of ethical decision for pragmatic, accommodation, and autonomous is consecutively getting smaller. It indicates that the most ethical group is autonomous while the most unethical are a pragmatic group in accounting decision making. The Table 2 confirms that the autonomous students are the most ethical group while the pragmatists are the least ethical group in their accounting decision making.

### Table 2. ANOVA between subject ethical decision based on CMD

| Case | CMD       | N  | Mean  | SD   | F Value | Sig. |
|------|-----------|----|-------|------|---------|------|
| A    | Pragmatic | 66 | 4.205 | .786 | 5.432   | 0.006|
|      | Accommodation | 18 | 3.858 | .819 |         |      |
|      | Autonomous | 13 | 3.429 | .957 |         |      |
| B    | Pragmatic | 66 | 3.520 | 1.309| 8.917   | 0.000|
|      | Accommodation | 18 | 2.875 | .912 |         |      |
|      | Autonomous | 13 | 2.058 | .891 |         |      |

Source: SPSS Output Result (2017).

Table 2 shows that the F-score is 5.432 at the significance level of 1%. Consistently, in the case of expropriation, the autonomous students are the most ethical group in their action. The pragmatic group, on the other hand, contributes to the highest unethical score. The difference of ethical decision means of the three groups is represented by F-score of 8.917, significant at level 1%. Therefore, H1, H2a, and H2b are accepted.

The findings are consistent with Trevino and Youngblood (1990), Windsor and Ashkanasyi (1995), Ashkanasyi et al. (2006), Riyono (2016) which proposed that an autonomous group of people act more ethically than the accommodation and pragmatic group, with the pragmatic as the least ethical group. These findings also support Kohlberg’s model of the classification of the stage and level of one’s cognitive moral as well as its prediction accuracy regarding the ethics orientation and sensitivity of someone. Thus, it confirms Kohlberg’s belief that CMD is the prediction of moral behavior. Moreover, differences in ethics orientation and sensitivity among the three groups are consistent with the ethics teleological theory stating that pragmatists tend to have a teleological egoism ethic where the ethical orientation and sensitivity is concerned with personal or particular group interests, while autonomous people tend to have teleological utilitarianism ethic which focuses on the universal concern. The accommodation group is between the two.

Table 3 shows that the level of CMD influences the ethical decision making in accounting and expropriation as a follows:

### Table 3. Summary of ethical decision between subject factorial 2x3

#### Panel A: Case (A) Earnings Management

| Situational (SIT) | CMD       | Factor         | Sum of squares | df | Mean square | F      | Sig.  |
|-------------------|-----------|----------------|----------------|----|-------------|--------|-------|
| Agency            | Pragmatic | CMD            | 5.938          | 2  | 2.969       | 4.471  | .014  |
|                   | Accommodation | CMD x SIT | .332           | 1  | .332        | .500   | .481  |
|                   | Autonomous |               | 2.133          | 2  | 1.066       | 1.606  | .206  |

#### Panel B: Case (B) Expropriation

| Situational (SIT) | CMD       | Factor         | Sum of squares | df | Mean square | F      | Sig.  |
|-------------------|-----------|----------------|----------------|----|-------------|--------|-------|
| Agency            | Pragmatic | CMD            | 23.912         | 2  | 11.956      | 8.083  | .001  |
|                   | Accommodation | SIT | .023           | 1  | .023        | .016   | .901  |
|                   | Autonomous | CMD x SIT     | .407           | 2  | .204        | .138   | .872  |

Source: SPSS Output Result (2017).
Table 3 shows that the F-score are 4.471 and 8.083 respectively, significant at the 5% level. On the contrary, the situational factors were found to have no impact on ethical decision making both in accounting (F=0.500; α>5%) and expropriation (F=0.016; α>5%). Next, the impact of CMD level on ethical decision making was not influenced by agency and stewardship situation both in accounting (F=1.606; α>5%) and expropriation (F=0.138; α>5%). These support H03 and H05 to be accepted while H4 rejected.

These results strengthen the assumption proposed that the cognitive morality of someone has become his/her anchor or fundamental belief - which cannot easily change in a different or contrary situation. Therefore, this study confirms Habbe (2017) and the statement from Trevino and Youngblood (1990), about “bad apples in bad barrels.”

Table 4 is an additional test to demonstrate the ethics score difference between the groups given two different situations: agency and stewardship as a result:

Table 4. Tests of change in ethics score within the subject

| CMD       | Case  | XY    | YX    | N  | SD    | t    | Sig |
|-----------|-------|-------|-------|----|-------|------|-----|
| Pragmatic | Case A| 4.169 | 4.263 | 66 | .653  | -1.166| .248|
|           | case B| 3.596 | 3.606 | 66 | 1.221 | -.067| .947|
| Accommodation | Case A| 3.893 | 4.080 | 18 | .716  | -1.107| .284|
|           | Case B| 3.014 | 3.097 | 18 | 1.111 | -.318| .754|
| Autonomous | Case A| 3.442 | 3.391 | 13 | .474  | .390 | .704|
|           | Case B| 2.385 | 2.404 | 13 | 1.332 | -.052| .959|

Source: SPSS Output Result (2017).

Note:
XY= Participants who were given situation X then Y
YX= participants who were given situation Y then X

Table 4 shows that the T score indicates insignificance in the three groups of pragmatic, accommodation and autonomous in both earnings management and expropriation case. This result infers that the stewardship group is not more ethical than the agency group. Simply, there is no difference between the group exposed to either agency or stewardship in ethical decision making.

4.2 Discussion

This empirical finding supports the previous results that the organizational situation cannot change the ethics orientation and sensitivity of managers in an environment different or contrary to their CMD. It indicates how superior the CMD is in determining one’s ethical orientation and sensitivity. This empirical result supports the assumption that the CMD of every participant has become their anchor which cannot easily change in a situation they experience in a relatively short period. It is because one’s CMD grows along with age, education, experience, interaction, and the environment. Thus, CMD has become a personal character. Situational exposure to the agency problem was indicated by the existence of opportunistic chances such as earnings management and expropriation, but do not shift the ethical orientation of pragmatic and autonomous people. It means situational exposure does not influence an individual's ethical sensitivity. The pragmatic group will remain in their unethical orientation and will not turn to be more ethical, although being in a stewardship situation of the organization. Similarly, autonomous individuals will stay with their ethical orientation and will not become more unethical while being in the agency problem situation. In contrast, the accommodation group is predicted to change their ethics orientation and sensitivity according to the situation they face. People possessing this CMD level tend to focus on the situation. However, this study has not found sufficient evidence to support this view. It indicates that the accommodation group, compared to the pragmatic and autonomous, do not easily change opinions in accordance to the situation.

5. Conclusion

According to the result of the analysis and discussion above, it can be concluded that the level of CMD positively influences the ethical decision making in both accounting and expropriation. The higher the level of CMD, the more ethical a manager in making a decision about accounting and expropriation matter. While people possessing autonomous character tend to act more ethically as indicated by their disagreement with earnings management and
expropriation practice, those within the pragmatic group of individuals tend to act unethically. The accommodation group is in between these two groups.

Furthermore, it proved that exposure the agency and stewardship situation resulted in no difference in the ethical decision making both in accounting and expropriation. Similarly, situational exposures are found not to impact the relationship between the level of CMD and ethical decision making. These findings indicate that the pragmatic and autonomous individual is not influenced by the environment situation of the organization. The assumption that the CMD of each participant has become an anchor that cannot easily be shifted has been empirically verified in this study. This finding implies that increasing the ethical orientation and sensitivity of a manager to a better should be treated as progressive. That is, cognitive morality should be identical amongst good apples. A bad situation for an organization, attributed as bad barrels, should be integrated with stewardship values to turn it into a healthy culture which can then become attributed to a good barrel. The interaction between autonomous CMD and the stewardship situation in an organization will trigger safe and conducive management practices. The absence of the influence of situational exposure and its interaction with CMD on ethical behavior in this experimental study suggests further research by exploring situational aspects with legal consequences. Also, it is proposed to consider religious value as internal spiritual variables accompanying CMD as a cognitive factor. Researchers recommend for further research to use a test tool that uses several reflective indicators and formative indicators to test the effect between unobserved variables with statistical tools such as SPSS AMOS, SMART PLS or with LISREL.

Acknowledgements
This study is dedicated to the University of Hasanuddin that has been providing assistance funding for this research in 2017.

References
Ashkanasy, N. M., Windsor, C. A., & Trevino, L. K. (2006). Bad Apples in Bad Barrels Revisited: Cognitive Moral Development, Just World Beliefs, and Ethical Decision Making. Business Ethics Quarterly, 16(1), 449-473.

Bandura, A. (1986). Social Foundations of Thought and Action: A Social Cognitive Theory. Englewood Cliffs, NJ: Prentice-Hall.

Bertens, K. (1993). Ethics, Jakarta. Gramedia Pustaka Publishers.

Blasi, A. (1980). Bridging Moral Cognition and Moral Action: A Critical Review of the Literature. Psychological Bulletin, 88, 1-45.

Bruns, W. J., & Merchant, K. A. (1989, March-April). Ethics Test for Everyda Managers. Harvard Business Review, 220-221.

Bruns, W. J., Jr., & Merchant, K. A. (1990). The Dangerous Morality of Managing Earnings: The Majority of Managers Surveyed Say It’s not Wrong to Manage Earnings. Management Accounting, 72(2), 22-25.

Cherington, D. J. (1994). Organizational Behaviour: The Management of Individual and Organizational Performance. Boston. Ally and Balon.

Claessens, S., Djankov, S., & Lang, L. H. P. (2000). Separation of ownership from control of East Asian firms. Journal of Financial Economics, 58, 81-112.

Dalimunthe, D. M. J., & Muda, I. (2017). The Empirical Effect of Education and Training to The Performance of Employees. International Journal of Economic Research, 14(21), 403-413.

Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a Stewardship Theory of Management. Academy of Management Review, 22(1), 20-47.

DeTienne, K. B., Ellertson, C. F., Ingerson, M. C., & Dudley, W. R. (2019). Moral Development in Business Ethics: An Examination and Critique. Journal of Business Ethics, 1-20.

Donaldson, L. (1990). The Ethereal Hand: Organizational Economics and Management Theory. Academy of Management Review, 15, 369-381.

Donaldson, L., & Davis, J. H. (1991). Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns. Australian Journal of Management, 16(1), 49-65.

Duska, R. F., & Duska, B. S. (2003). Accounting Ethics. USA Blackwell Publishing.

Elias, J. L. (1989). Moral Education: Secular and Religious. Florida: Robert E. Krieger Publishing Co., Inc.
Evraert, S., & Prat dit Hauret, C. (2002). Auditor Independence: An Empirical Study. Paper Presented at the IAAER 9th World Congress of Accounting Educators. Hong Kong. November.

Ferrel, O. C., & Gresham, L. G. (1985). A Contingency Framework for Understanding Ethical Decision Making in Marketing. Journal of Marketing, 49(Summer), 87–96.

Finn, D. W., Chonko, L. B., & Hunt, J. D. (1988). Ethical Problem in Public Accounting: The View from the Top. Journal of Business Ethics, 7, 605-615.

Ghoshal, S. (2005). Bad Management Theories are Destroying Good Management Practices. Academy of Management Learning & Education, 4(1), 75-91.

Gibbs, J. C. (2019). Moral development and reality: Beyond the theories of Kohlberg, Hoffman, and Haidt. Oxford University Press.

Griffin, R. W., & Ebert, R. J. (1998). Business (4th ed.). Prentice Hall Inc. Englewood. Clift.

Gusnardi, R. R. M., & Muda, I. (2016). Competency mapping and analysis of students competency based on economics subject national examination and its alternative solutions in state high schools at Pekanbaru. International Journal of Economic Research, 3(5), 2133-2148.

Habbe, A. H. (2017). Estimation Error of Earnings Information: A Test of Representativeness and Anchoring-adjustment Heuristic. International Journal of Economics and Financial Issues, 7(1), 224-233.

Habbe, A. H., & Mande, H. (2016). The Effect of Information Sequential And Personality On The Investor Belief Revision (An Experimental Study In Decision Making). PONTE, International Scientific Researches Journal, 72(10), 150-166.

Habbe, A. H., Rasyid, S., Arif, H., & Muda, I. (2019). Measuring Internal Auditor’s Intention to Blow the Whistle (A Quasi-experiment of internal auditors in the local government). Business: Theory and Practice, 20, 224-233.

Hunt, S. D., & Scott, M. V. (1986). A general theory of marketing ethics. Journal of Macromarketing, 6(Spring), 5-15.

Jensen, M. C., & Meckling, W. H. (1976, October). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. Journal of Financial Economics, 3, 305-360.

Junaid, A., Sudarma, I. M., Habbe, A. H., & Syarifuddin. (2015). The Mediating Effect of Performance on The Influence of Symbol Interpretation and Strength of Identity On The Accountability of Ideology-Based Private Universities In Indonesia. International Journal of Applied Business and Economic Research, 13(5), 2885-2901.

Kerf, S. A. (1998). Business Ethics: Demands and Relevance. Yogyakarta. Kanisius Publishers.

Khomsiyah, & Indriantoro, N. (1998). The Effect of Ethical Orientation on Commitment and Sensitivity of the Ethics of Government Auditors in DKI Jakarta. Journal of Indonesian Accounting Research, I(2), 13-28.

Kohlberg, L. (1969). Stage and Sequence: The Cognitive-Developmental Approach to Socialization. In D. A. Goslin (Ed.), The Handbook of Socialization Theory and Research. Chicago: Rand McNally.

Kohlberg, L. (1971). Stages of Moral Development as a Basis of Moral Education. Moral education: interdisciplinary approaches, 23-92.

Kohlberg, L. (1977). The Cognitive-Developmental Approach to Moral Education. In Rogrs, D. (Ed.), Issues in adolescent psychology (pp. 283-299). New Jersey: Printice Hall, Inc.

Kohlberg, L. (1981). The Philosophy of Moral Development: Moral Stages and the Idea of Justice. Michigan, Harper & Row Limited, the University of Michigan.

Kohlberg, L. (1984). The Psychology of Moral Development: The Nature and Validity of Moral Stages. Harper & Row Limited, the University of Michigan.

Majid, J., Mediaty, Habbe, A. H., Herryanto, & Possumah, B. T. (2019). Factors Affecting Director Remuneration: A Study of Manufacturing Companies Listed on ASEAN State Stock Exchanges. International Journal of Innovation, Creativity and Change, 7(9), 238-250.

Mathes, E. W. (2019). An evolutionary perspective on Kohlberg’s theory of moral development. Current Psychology, 1-14.

Merton, R. K. (2010). The Self-Fulfilling Prophecy. Antioch Review, 68(1), Winter, 173-190.

Muda, I., Rahmanta, M., & Putra, A. S. (2018). Institutional Fishermen Economic Development Models and Banking
Support in the Development of the Innovation System of Fisheries and Marine Area in North Sumatera. *IOP Conference Series: Materials Science and Engineering*. 2017, 288. https://doi.org/10.1088/1757-899X/288/1/012082

Muda, I., Roosmunawati, F., Siregar, H. S., Ramli, H. M., & Banuas, T. (2018). Performance Measurement Analysis of Palm Cooperative Cooperation with Using Balanced Scorecard. *IOP Conference Series: Materials Science and Engineering* 2017, 288. https://doi.org/10.1088/1757-899X/288/1/012081

Muda, I., Siregar, H. S., Sembiring, S. A., Ramli, H. M., & Zein, Z. (2018). Economic Value of Palm Plantation in North Sumatera and Contribution to Product Domestic Regional Bruto. *IOP Conference Series: Materials Science and Engineering* 2017, 288. https://doi.org/10.1088/1757-899X/288/1/012080

Pasupathi, M., & Staunding, U. M. (2001). Do Advanced Moral Reasoners also Show Wisdom? Lining Moral Reasoning and Wisdom Related Knowledge and Judgment. *International Journal of Behavioral Development*, 25, 401-415.

Ponemon, L. A., & Gabhart, D. R. L. (1994). Ethical Reasoning in the Accounting and Auditing Professions. In J. R. Rest, & D. Narvaez (Eds.), *Moral Development in the Professions: Psychology and Applied Ethics*. Hillsdale, NJ: Lawrence Erlbaum.

Prabowo, M. A., Iswaningtyas, A., Syofyan, E., Idris, I., Mulazid, A. S., & Habbe, A. H. (2017). Board of directors and CSR disclosure in Indonesian banking industry: does education matter?: *International Journal of Trade and Global Markets*, 10(4), 322-338.

Putra, A. M., Pagalung, G., & Habbe, A. H. (2018). Culture and Corruption-Driven Agency Costs and Earnings Management: Evidence From South East Asian Countries. *Intangible Capital*, 14(4), 499-517.

Rest, J. R. (1979). Received Manual for the Defining Issues Test: An Objective Test for Moral Judgment Development. Minneapolis, Minnesota, Moral Research Project.

Rest, J. R. (1994). Background Theory and Research. In J Rest, & D. Narvaez (Eds.), *Moral Development in the Professions: Psychology and Applied Ethics*. Hillsdale, NJ: Erlbaum and Associates.

Rest, J. R., Narvaez, D., & Bebeau, M. S. (1999). *Post-Convention Moral Thinking: A Neo-Kohlberg Approach*. Lawrence Erlbaum Associates, Mahwah, NS.

Riyono, B. A. (2016). Influence of Cognitive Moral Development, Exposure of Management Theory, and Threat of Penalty on Ethical Decision Making in Accounting. *UGM Dissertation*, Unpublished.

Robbin, S. P. (1996). *Organizational Behavioral* (7th ed.). Englewood Cliff. Prentice Hall, Inc.

Shaub, M. K., & Finn, D. W. (1993). The Effect of Auditor’s Ethical Orientation on Commitment and Ethical Sensitivity. *Behavioral Research in Accounting*, 5(1), 146-166.

Trevino, L. K. (1986, July). Ethical Decision Making in Organization: A person Situation Interactionist Model. *Academy of Management Review*, 601-617.

Trevino, L. K., & Youngblood, S. A. (1990). Bad Apples in Bad Barrels: A Causal Analysis of Ethical Decision Making Behavior. *Journal of Applied Psychology*, 75, 378-385.

Warming-Rasmussen, B., & Windsor, C. A. (2003). Danish Evidence of Auditors’ Level of Moral Reasoning and Predisposition to Provide Fair Judgments. *Journal of Business Ethics*, 47, 77-87.

Watts, R. L., & Zimmerman, J. L. (1986). *Positive Accounting Theory*. New York, Prentice Hall.

Windsor, C. A., & Ashkanasy, N. M. (1995). The Effect of Client Management Bargaining Power, Moral Reasoning Development, and Belief in a Just World on Auditor Independence. *Accounting Organizations and Society*, 20, 701-720.

**Copyrights**

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (http://creativecommons.org/licenses/by/4.0/).