The Influence of Fraud Diamond, Gender, Ethical Ideology on Cheating Behavior of Accounting Student

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Abstract. The purpose of this study is to examine the influence of fraud diamond, gender and ethical ideology towards cheating behaviour among accounting students in the Accounting department, Syiah Kuala University. The questionnaire was selected as the data collection used in this study. By using simple random sampling technique, there were 210 questionnaires from accounting students have been analyzed by using multivariate technique analysis-SEM. Through SEM, the results of this study showed that the dimension of fraud diamond, which is called as pressure, opportunity, capability have positively significant influence towards cheating behaviour, and dimension rationalization have no influence on cheating behaviour. Gender was found to have a significant influence on cheating behaviour and have different tendencies between the male group and female group toward the specific category in fraud diamond and ethical ideology. Then, ethical ideology, idealism and relativism were found to have a significant influence on cheating behaviour.

Keywords: Cheating behavior · Fraud diamond · Gender and ethical ideology

1 Introduction

The last few decades, recent research conducted by Galil, Yarmolovsky, Gidron and Geva (2019) suggests that cheating behavior is one of the very serious problems that are very common in the academic world and in everyday life. Perpetrators who commit fraud can come from various backgrounds and different backgrounds. In Indonesia, the results of a survey conducted by the Association of Certified Fraud Examiners (ACFE), the most widespread cases of fraud in the workplace are corruption, amounting to 67%, followed by abuse of state's assets and companies by 31%, and fraudulent of financial statements of 2%. This makes corruption become the most detrimental act of fraud in Indonesia with the most fraud perpetrators having an educational background at the undergraduate and master level. A survey conducted by ACFE Indonesia (2016) shows that a high educational background does not guarantee a person not to commit fraud in the workplace.

Reiss and Mitra (1998) state that the potential for cheating in the world of work in the future, is also assessed by the actions of students, by measuring how tolerant they are to cheating. Fraud is a major problem facing the world of education (Young, 2013). The phenomenon of academic cheating among students is a common thing. Fraud can

be interpreted as a fraudulent act that involves more than one form of fraud, by misusing the work of others as one's own work (Davy et al., 2007). According to Webster's dictionary, academic dishonesty or academic cheating is defined as participation that is done intentionally to cheat on the work or work of others (Faucher and Caves, 2009).

There are various factors that influence students in their actions to commit fraud. Accounting students who will later run the accounting profession are expected to uphold moral and ethical values so as to create graduates who are professional and able to work in a global environment and have high competitiveness. This can be realized by accounting students by rejecting all forms of fraud that occur at the university level.

Fraud diamond theory is a fraud theory which was originally known as the fraud triangle theory which was developed by one of the originators of research on fraud namely Cressey in 1950 cited in (Wells, 2010: 13). Cressey (1950) in Wells (2010: 13) listed three factors that cause fraud, including pressure, opportunity, and rationalization. This theory was later developed and expanded by Wolfe and Hermanson (2004) by considering the fourth element, capability. Fraud is able to occur if the people involved have the right skills and abilities to cheat. People who have these abilities will then see opportunities and take advantage that is not only done once (Wolfe and Hermanson, 2004).

Gender is another factor identified as influencing fraud (Januarti and Eriskawati, 2016). The results of research on the effect of gender variables on cheating behavior in accounting students are still diverse. Ballantine et al., (2014) in their research stated that gender positively affects the level of academic cheating of accounting students in Ireland. Male students tend to be more intolerant of academic cheating while women show more tolerant results of academic cheating. Other research conducted by Januarti and Eriskawati (2016) regarding the effect of gender on cheating at Diponegoro University shows that gender does not influence the academic cheating behavior of accounting students.

Research by Forsyth (1980) developed an instrument called the Ethical Position Questionnaire (EPQ) or an ethical ideology that is used as an approach to take ethical decisions and be a determinant in ethical judgment. Ethical decisions can occur in situations experienced by someone when facing cheating behavior. A person's ethical ideology occurs because of two factors namely idealism and relativism (Forsyth, 1980). Relativism refers to the extent to which a person will reject moral rules universally and the actions that affect one's ethical judgment depend on the circumstances of each individual involved (Ismail, 2014). The second factor, idealism, is described as the concern of the individual for the welfare of others. Idealist individuals assume that the consequences will be accepted according to the action taken. Thus, idealistic individuals will not choose negative actions that will cause harm to others (Ismail, 2014). A high level of idealism shows a tendency to reject acts of fraud, while high levels of relativism indicate a high level of fraud as well.

Research on academic cheating behavior especially in accounting students has also been carried out by previous researchers. Ismail and Hana (2016) examined the trends of cheating behavior between accounting students at universities in Malaysia with gender and the rationalization of justification for cheating behavior as an independent variable. The results showed that male students showed a greater tendency in justification to cheat than female students. Students who cheat on their exams also have a greater tendency to justify their cheating actions.

Research on the prevention of academic cheating behavior in the context of other accounting students was conducted by Ballantine et al., (2014) by measuring gender

and ethical ideology on the level of intolerance of academic fraud at universities in Ireland. The results of the study revealed that the variables that had a significant positive effect on tolerance for cheating behavior were gender and idealism. The variable relativism is known to be unrelated to the intolerance of fraudulent behavior, this proves that accounting students in Ireland tend to be idealistic compared to relative (Ballantine et al., 2014).

The accountant profession is one of the groups that has a high contribution to the economic welfare of the community (Saat et al., 2012). Public accountants are responsible for verifying a recorded transaction, validating it and reporting it according to standards (Saat et al., 2012). Therefore, accountants have an obligation to protect the public interest, and ensure that public and private finances are well managed. Public expectations have increased for the accounting profession. The accounting profession is expected to have high moral values and actions and integrity (Saat et al., 2012). Accounting students who will later run the accounting profession are expected to uphold moral and ethical values so as to create graduates who are professional and able to work in a global environment and have high competitiveness. This can be realized by accounting students by rejecting all forms of fraud that occur at the university level.

This study aims to see the consistency of study results regarding the influence of fraud diamond and ethical ideology on cheating behavior. This study also examined differences between male and female students with respect to their attitudes on each of the dimensions of cheating behavior. The object of this research is the accounting study program students at Syiah Kuala University. An academic dishonesty behavior should not be tolerated because it will have negative consequences and will damage the image of educational institutions, especially in universities. For this reason, a test is needed to evaluate the possibility of actions to prevent fraudulent behavior from occurring.

2 Literature Review and Hypotheses

ENCE AND TECHNOLOGY PUBLICATIONS

2.1 Cheating Behaviour

Cheating Behaviour is a behavior that uses illegal methods to achieve a profit. In the world of education, cheating behavior that occurs is referred to as academic cheating (Farnese, 2011). Fraud is defined as behavior that involves some form of deception, whereby a person's work is misunderstood as his own work (Davy et al., 2007).

According to Webster's dictionary academic cheating is defined as participation that is done intentionally to cheat someone else's work (Faucher and Caves, 2009). The definition of academic cheating according to Lewellyn and Rodriguez (2015) is academic cheating covering all forms of cheating (for example plagiarism, unauthorized assistance on assignments or examinations) and has increased a lot in universities. Hendricks (2004) adds the definition of cheating behavior as actions such as the use of copying notes during an exam, using unfair methods to study what is given before the test, and copying from other students during the exam with or without the owner's permission. Academic cheating becomes a more worrying problem when students have entered the workforce (Davy et al., 2007; Aslam, 2011; Reiss and Mitra, 1998; Graves, 2008). This is a challenge both for educators and university institutions to follow up the problem of fraud in the university environment. These challenges become important especially for accounting students who are highly anticipated to provide future professions with moral values and high integrity (Saat et al., 2012).

The act of cheating in a university environment can be in the form of activities such as lectures in class, activities during exams, assignments given during lectures, the relationship between lecturers and students, and the relationship between students and academic activities (Hendricks, 2004). Cheating in the university environment in general has been explicitly stated in the education law, so the problem of cheating has legal force and is also contained in university academic regulations. The university has in principle established that the academic environment is upheld on the basis of the values of honesty, loyalty, responsibility, tolerance, etc. However, these values are not always applied by students who study at the university.

2.2 Fraud Diamond

The development of fraud theory originally referred to a theory called fraud triangle theory by Cressey (1950) cited in Wells (2010: 13). This theory explains fraud as a white-collar crime which has three important conditions namely pressure, opportunity, and rationalization. This theory shows that fraud is caused by one or more of these conditions. However, the severity of fraud depends on the level of strength or weakness of the condition (Thanasak, 2013). The fraud triangle theory was extended by Wolfe and Hermanson (2004) who argued that the fraud triangle could be increased to be able to prevent and detect fraud by considering the fourth element of fraud, namely capability.

Dorminey et al., (2012) stated that in addition to pressure, opportunity, and rationalization, the theory of diamond fraud also saw the characteristics of each individual who played a strong role in its influence on fraud. The fraud triangle theory is expanded to become a fraud diamond with the aim that with the element of capability, the occurrence of fraud can be controlled so that the fraud does not occur.

Wolfe and Hermanson (2004) add a capability factor by examining the evidence which shows that fraud will not occur if the perpetrator does not have the capability. Opportunities will open the initial door in committing fraud, while pressure and rationalization will attract the perpetrators of fraud closer to the door, so that the perpetrators of fraud must have the capability to recognize opportunities to be able to walk through the door to commit fraud and then such acts of fraud it is hidden (Wolfe and Hermanson, 2004).

2.3 Gender

Gender refers to differences in status, roles, functions and responsibilities between men and women which are the result of social and cultural formation that is instilled through the process of socialization from one generation to another (Puspitawati, 2013). Gender is included in one of the demographic variables related to academic fraud (Donse and Groep, 2013).

Dewi (2006) in her research stated that the concept of gender differs from gender. Gender refers to biological differences between men and women. Concepts that explain gender are caused by culturally determined views or social differences about the general characteristics of men and women. The concept of gender originates from human thought which is then formed in a dynamic community environment due to various factors such as differences in religion, ethnicity, race, and certain customs.

There are two theories used to explain the effect of gender on cheating behavior, namely the theory of differentiation socialization and structural theory (Ballantine et al., 2014). Gender socialization theory holds that both men and women will carry different values that originate from their environment. In this theory women will be more likely to be socialized to follow the rules so that the possibility of women in committing academic cheating is found to be less. But on the other hand, the structural theory of the difference in values between men and women over time will be equal because both of them undergo the same education, so that ethical behavior will be the same between the two (Ballantine et al., 2014). Structural theory will build the same attitudes and behaviors in terms of addressing matters relating to ethical and moral values in the same environment.

2.4 Ethical Ideology

Ethical ideology is defined as a person's approach to ethical decision making and is considered a determinant of ethical behavior in making decisions (Forsyth, 1980). Forsyth (1980) states that a person's ethical judgment when making a decision consists of two scales, namely idealism and relativism. Relativism measures the extent to which a person will reject moral rules and they assume moral actions depend on the situation and each individual involved when they will make ethical judgments (Ismail, 2014). The attitude of relativism will reject ethical values in directing ethical behavior in which people who have a relative nature will reject the principles of universal moral rules. The second factor is idealism which illustrates the individual's concern for the welfare of others, which assumes that there are consequences in every action taken so that they will not choose to commit a crime that will cause bad consequences for others (Ismail, 2014). An idealistic behavior will make individuals continue to demand moral principles that do not violate ethics, because an idealist will assume every action will have its own impact which will have a good effect if what they do does not violate moral rules. Forsyth (1980) states that the concepts of idealism and relativism have two opposing concepts and the scale used is separate. The category of scale can be categorized into four types of ethical ideology, namely situationism (where the level of relativism and idealism is high), subjectivism (where the level of relativism is high, whereas the idealism is low), absolutism (where the level of idealism is low and relativism is low), and expressionism (where the level of relativism is high, while the idealism is low), absolutism (where the level of idealism is low and relativism is low), and expressionism (where the level of idealism and low relativism).

2.5 Hypotheses Development

Fraud Diamond variable contains four underlying elements, namely pressure, opportunity, rationalization and capability, have shown different results and effects in relation to fraud behavior based on the results of previous studies. Research according to Mc Cabe (2004) shown that pressure is the greatest influence to be involved in various forms of academic cheating. This is also in line with what was done by

Murdiansyah et al., (2017); Finn and Frone (2010); and Hendricks (2004) who proved that pressure influences cheating behavior. Factors that make the most pressure to cause academic cheating according to Hendricks (2004) are value competition (35%), insufficient study time (33%) and heavy workload (26%). The opportunity variable shows the same results as the research conducted by Murdiansyah et al., (2017) and Deliana et al., (2017) where the results of the study prove that the opportunity has a positive effect on student academic cheating behavior. The variable rationalization also found the same results with research by Murdiansyah et al., (2017) and Ismail and Hana (2016) which shown that rationalization affects the student behavior of academic cheating. Then, for the last variable namely capability in the study Murdiansyah et al., (2017) proved that the capability has a negative effect on student academic cheating.

- H1a. The higher a pressure, the higher the cheating behavior occurs to students.
- **H1b.** The higher an opportunity, the higher the cheating behavior occurs to students.
- **H1c.** The higher a rationalization, the higher the cheating behavior occurs to students.
- H1d. The higher a capability, the higher the cheating behavior occurs to students.

Gender shows varied research results on its relationship with academic cheating behavior (Kobayashi and Fukushima, 2012). Cheating behavior is more common in male students than in women (Hendricks, 2004). This, according to Hendricks (2004), is due to the theory of gender role socialization, which says women are socialized to comply with regulations, while men tend to be less attached to socialization theory, although it does not deny that women do not commit fraud if they have the opportunity. According to Kidwell and Kent (2008) who examined cheating behavior among Australian students studying on campus and through distance learning found that gender significantly affected cheating behavior. It is the same as research by Ballantine et al., (2014) which states that gender is significantly related to ethical decisions and male students are known to be more involved in cheating than women. Different research results were obtained in Januarti and Eriskawati (2016) who found that there was no relationship between gender and academic cheating. The relationship between gender variables and academic cheating was found not so strong, but most studies tend to conclude that men will be more vulnerable to cheating (Donse and Groep, 2013).

H2. There is a difference between the influence of male and female students in relation to cheating behavior.

The results of ethical ideology research namely idealism conducted by Ballentine et al., (2014) and Ismail (2014) stated that idealism is positively related and significantly related to ethical judgment. This was also proved by Aziz and Cahyonowati (2015) who stated that idealism positively influenced the ethical judgments of students. Another idealism study was conducted by Januarti and Eriskawati (2016), who stated that idealism, had a positive effect on student intolerance of cheating behavior. The research has also shown that high levels of idealism in individuals will also make a person's ability to conduct high ethical judgment. The attitude of idealism that exists in accounting students can make a positive contribution to the improvement of ethics in the classroom and continue in the workplace (Ballantine et al., 2014). The level of idealism that is in a person will be clearer in recognizing if there are moral issues related to ethics (Januarti and Eriskawati, 2016).

Research related to ethical ideology that measured relativism conducted by Aziz and Cahyonowati (2015) shown that relativism has a negative effect on student ethical judgment, so that someone who has a low level of relativism will have a high ability to conduct ethical judgments. There is also a research conducted by Januarti and Eriskawati (2016) which stated that relativism influences student cheating behavior, which contradicted with a research done by Ballantine et al., (2014) who found that cheating behavior was not significantly influenced by relativism.

H3a. The higher the attitude of Idealism, the lower the tolerance level of student cheating behavior.

H3b.The higher the attitude of relativism, the higher the tolerance level of students cheating behavior.

3 Research Method

3.1 Research Design

The purpose of this study was to test the hypothesis or the hypothesis testing. A hypothesis test is used to test the effect of fraud diamond, gender, and ethical ideology as independent variables on cheating behavior as the dependent variable.

3.2 Research Population and Samples

Population used in this research is active students of accounting bachelor degree batch 2014, 2015, 2016, and 2017. The sampling technique used in this study was simple random sampling, Sekaran and Bougie (2010:270) defined it as a sampling technique that each element of the population has the same probability to be chosen as the samples.

No	Batch	Male	Female	Total
1	2014	46	79	125
2	2015	35	65	100
3	2016	23	57	80
4	2017	39	53	92
	Total	143	254	397

Table 1. Number of Population.

Source: Unsyiah Data Portal, 2018

According to Hair, et al. (2018), the general guidelines for minimum sample size in SEM analysis is 10 times by the maximum number of arrows (paths) that affect a latent variable (10 time rule of thumb) that is 6 lanes 10 times as many as 60 samples. However, to provide statistical power, the sample size exceeds these conditions using the Slovin formula. The total number of Accounting students used as a population is 397, and the error rate is 5%, the number of samples is calculated using the Slovin formula.

$$n=\frac{N}{1+Ne^2}$$

Whereas:

- n : Sample size
- N : The number of populations
- e : Rentang toleransi kekeliruan yang dapat diterima

$$n = \frac{397}{1 + 397.5\%^2} = 199.24$$

Therefore, the minimum sample size used in this study is 200 students.

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3.3 Data Sources and Collection Method

Sources of data in this study are primary data and secondary data. The primary data used in this study was through a questionnaire. The questionnaire will be distributed directly to respondents, which are undergraduate accounting students, from 2017, 2016, 2015 and 2014 classes. The questionnaire has been structured and containing closed statements relating to the tested variables. Secondary data are descriptions made by others and written by someone who is not involved in the research being carried out. A dimension and indicator measurements in this study used is a Likert scale. Questionnaire of Hendricks (2004). The fraud diamond study of accounting student cheating behaviour adapted a questionnaire developed by Noor et al., (2014), whereas to assess ethical ideology, which is idealism and relativism, this study used the Ethics Position Questionnaire developed by Forsyth (1980).

3.4 Variable and the Variable Operationalization Definition

3.4.1 Cheating Behaviour

Cheating behaviour is a dishonest act taken by someone in achieving a goal. Some indicators used are copying other people's assignments, plagiarism of other people's sources, doing assignments and tests according to ability, looking at notes/other sources during the exam, working with friends, and refusing to give answers to others.

3.4.2 Fraud Diamond

Fraud diamond is a theory of fraud consisting of 4 dimensions, namely pressure, opportunity, rationalization, and capability. Pressure variable indicators include wanting high scores and ratings, avoiding failure, high competition, and dissatisfaction with the results achieved. Indicators of opportunity using indicators include weak supervision, inaccurate assessment, absence of strict penalties and rules, and indifference of lecturer/supervisors. Variation of rationalization (rationalization) uses indicators that are cheating is often done, the perpetrators commit fraud when in a state of urgency, no party is harmed, and there is a difference between students. Capability indicators use indicators that are the utilization of internal control weaknesses, high self-confidence, and opportunities to influence others to cheat.

3.4.3 Gender

Gender refers to the different statuses, roles, functions and responsibilities between men and women which are the result of social and cultural formation that is embedded through the process of socialization from one generation to another (Puspitawati, 2013).

3.4.4 Ethical Ideology

Idealism is the attitude that exists in individuals who will act according to what feels right and the action is in accordance with the ethics that exist in society and will not interfere with others. Idealism will address one's behaviour as an action that will not violate ethical values. Indicator of idealism by using condition items developed by Forsyth (1980). Relativism is a person's attitude in believing that ethical rules are judged as not universal due to different cultures and have different rules. Therefore, action is influenced by the point of view of a developing society and culture. A relative individual will tend to reject moral principles and choose to follow what he considers to be right. Indicators of relativism use condition items developed by Forsyth (1980).

3.5 Data Processing and Analysis Methods

The research data that has been obtained will then be tested and analyzed quantitatively using a multivariate technique or called the Structural Equation Model (SEM). In SEM, there are five stages in which each stage will be very influential with the next stage. The stages in analyzing using SEM are:

1) Model Specification

In the process of modelling using SEM analysis techniques, the development of model specifications is the first step to planning a design so that it can answer the research objectives. The basis in building model specifications will become a framework for thinking so that it will result in the development of an appropriate structural model (Latan, 2013). In an analysis using SEM, the thing that concerns are the latent variable. Latent variables are abstracts that cannot be directly measured (Unobserved variables), making them require indicators or manifest variables to form latent constructs. These visible indicators or variables are described as questions measured on a Likert scale. The structural equation model (SEM) will also input the measurement error in modelling (error term) associated with the factor in each measurement. The structural model contained in this study is as follows.

2) Model Identification

Identification of the model in the structural equation model (SEM) is a crucial thing to do to see whether a model that has been built in accordance with the empirical data obtained has good value so that later the model can be estimated. If a model contained in SEM analysis has a wrong value, then the model cannot be estimated for the next stage of Latan (2013: 43).



3) Model Estimation

After the model specification and identification stages, the next stage is the model estimation. In the estimation model, the estimation method must be determined first. This study uses the Maximum Likelihod estimation method developed by Lawley in 1940. In the Maximum Likelihod method will produce the best parameter estimation (unbiased) if the data used has met the Multivariate Normality assumption. Maximum Likelihod also requires if a model specification is valid and the data used uses a continuous-interval scale.

4) Model Evaluation

Model evaluation is used to evaluate a model using Confirmatory Factor Analysis. The CFA is also tasked with testing the validity and reliability of latent constructs. Validity test aims to see the validity of the statements contained in the research and see the level of ability of an instrument to answer questions in latent constructs. In order to measure the validity of a construct, it can be seen from the value of the loading factor where the standardized loading estimate must exceed 0.50 or ideally 0.70. The reliability test aims to determine the accuracy of the level of the measuring instrument used, and measurement is said to be reliable if the measurement results have shown consistent results even though it has been done for the same subject.

After testing has been carried out using CFA analysis, the next stage of the structural model evaluation is knowing the significance of the P-Value, R-Square values and

evaluating the Overall Fit Model or Goodness of Fit Model bypassing the fit model size:

a) Chi-Square

A model can be considered as a fit model if the Probability (P) > 0.05 or the Chi-Square < Chi-Square table according to the degrees of freedom which has no distinction between the previously observed covariance matrix input and the predicted model (Latan 2013:50).

b) Goodness of Fit Indices (GFI)

GFI has a range of value 0-1. The higher the value, the better the specification model. The suggested standards of GFI as the fit model is > 0.90 or > 0.95 (Latan,2013:53).

c) Root Mean Square Error of Approximation (RMSEA)

The value of RMSEA ≤ 0.05 shows an outstanding fit model. RMSEA of $\leq 0.06 - 0.08$ shows an average well, and the RMSEA > 1.00 shows that the model needed to be fixed (Latan, 2013:54).

- d) Expected Cross-Validation Index (ECVI) A value of ECVI is used to evaluate the comparison between models. If the value shown is smaller, then the model is better. In a single model, the ECVI value which the model is close to the EVCI saturated value shows a good fit.
- e) Normed Fix Index (NFI)

NFI range value is from 0-1; if the value gathered is higher, then the model is better. NFI that shows > 0.90 is a very good fit, if between 0.80 < NFI < 0.90 is a good fit.

f) Comparative Fit Index (CFI)

CFI range value is from 0-1, which if the value gathered is higher, then the result is better. CFI value > 0.90 is a very good fit, while 0.80 < CFI < 0.90 is a good fit.

g) Incremental Fit Index (IFI)

IFI range value is from 0-1, which if the value gathered is higher, then the result is better. IFI value > 0.90 is a very good fit, while 0.80 < IFI < 0.90 is a good fit.

- h) Relative Fit Index (RFI) RFI range value is from 0-1, which if the value gathered is higher, then the result is better. RFI value > 0.90 is a very good fit, while 0.80 < RFI < 0.90 is a good fit.
- i) Adjust Goodness of Fit (AGFI) Recommended value of AGFI is excellent if the result gathered is ≥ 0.90. If AGFI shows 0.80 < AGFI < 0.90 is a good fit.
 - 5) Model Modification

Model Modification conducted after model evaluation and tested the goodness of fit estimation comprehensively, however in the process if the result shows that the model is not a fit model, then modification or re-specification model is needed. A model that is stated as a fit model recognized that it is accurate or correct.

4 Results and Discussion

4.1 SEM Assumption Test

4.1.1 Confirmatory Factor Analysis Full Mode

The CFA of all variable in the form of a full model can be seen in Figure 2. Based on the research model, the gathered data then inputted and collected to be tested, in order to see whether the assumption is fulfilled. The result of the data input process from each tested variable is in Table 2.



Fig. 2. Result of CFA Test.

From the output of Table 2 know that the loading factor value for all indicators has fulfilled the specified conditions, where the loading factor for each indicator is ≥ 0.50 so that the conclusion can be drawn that all constructing indicators tested are valid. This

is also the case with the construct reliability value of ≥ 0.70 which states that all constructs meet the requirements and the instrument is declared reliable.

Construct	Construct Dimension		Loading Factor	Description	Construct Reliability	Description	
Fraud	Pressure	X1T1	0.804	Valid	0.842	Reliable	-
Diamond		X1T2	0.753	Valid	•,• · -		
		X1T3	0.648	Valid			
		X1T4	0.802	Valid			
	Opportunity	X2P1	0.826	Valid	0.840	Reliable	
	11 5	X2P2	0.812	Valid	,		
		X2P3	0,722	Valid			
		X2P4	0,781	Valid			
	Rationalistic	X3L1	0,792	Valid	0,861	Reliable	
		X3L2	0,788	Valid	,		
		X3L3	0,738	Valid			
		X3L4	0,681	Valid			
		X4K1	0,661	Valid	0,834	Reliable	
	Capability	X4K2	0,821	Valid			
		X4K3	0,893	Valid			
Ethical	Idealism	X5I1	0,714	Valid	0,823	Reliable	
Ideology		X5I2	0,782	Valid			
		X5I3	0,693	Valid			
		X5I4	0,799	Valid			
		X515	0,707	Valid			
	Relativism	X6R1	0,683	Valid	0,856	Reliable	
		X6R2	0,707	Valid			
	AND -	X6R3	0,760	Valid	PUBL	ICAT	
		X6R4	0,703	Valid			
		X6R5	0,708	Valid			
Cheating	Cheating in	Y1C1	0,656	Valid	0,833	Reliable	
Behaviour	Individual	Y1C2	0,596	Valid			
	Assignments						
	Cheating in	Y1C3	0,740	Valid			
	Group	Y1C4	0,808	Valid			
	Assignments						
	Cheating in	Y1C5	0,607	Valid			
	Exam	Y1C6	0,698	Valid			_

Table 2. Validity and Reliability Test Result.

Sumber: Data processed, 2019

4.1.2 Analysis of Structural Equation Model (SEM)

After analyzing the whole model with CFA analysis, which tests the dimensions of each of the indicators as forming latent variables, the next step is to analyze data processing at the full SEM model stage which is carried out by carrying out the suitability test and statistical test. The results of data processing for the full SEM model analysis are shown in Figure 3.



Fig. 3. SEM Full Model.

From the test results using SEM analysis, the model obtained an estimate of the Goodness of Fit research model where the results can be summarized in the table below.

GOF	Cut-Off	Absolute Fit	Estimation	Description
		Measures	Result	_
Chi-Square	$< X^{2}$		825,247	Less Good
RMSEA	≤0,08	<0,05	0,069	Good Fit
PNFI	≥0,90	0,60-0,90	0,695	Good Fit
NFI	≥0,90	0,80 <nfi<0,90< td=""><td>0,783</td><td>Less Good</td></nfi<0,90<>	0,783	Less Good
CFI	≥0,90	0,80 <cfi<0,90< td=""><td>0,877</td><td>Less Good</td></cfi<0,90<>	0,877	Less Good
IFI	≥0,90	0,80 <ifi<0,90< td=""><td>0,878</td><td>Good Fit</td></ifi<0,90<>	0,878	Good Fit
RFI	≥0,90	0,80 <rfi<0,90< td=""><td>0,756</td><td>Less Good</td></rfi<0,90<>	0,756	Less Good
GFI	≥0,90	0,80 <gfi<0,90< td=""><td>0,806</td><td>Good Fit</td></gfi<0,90<>	0,806	Good Fit
TLI	≥0,90	0,80 <tli<0,90< td=""><td>0,861</td><td>Good fit</td></tli<0,90<>	0,861	Good fit
AGFI	≥0,90	0,80 <agfi<0,90< td=""><td>0,768</td><td>Less Good</td></agfi<0,90<>	0,768	Less Good

Table 3. The Goodnes of Fit (GOF) Test.

Sumber: Data processed, 2019

Chi-square is very sensitive to sample size, therefore, to get a fit model, an analysis can be seen from other goodness of fit measures. The value gathered from the analysis shows that the chi-square value of 825,247 with an opportunity of 0,000 shows that the model is less fit, but from the other goodness of fit measures, it shows that some get good fit values, which are RMSEA, PNFI, IFI, TLI and GFI then from that, it can be said that the model proposed in this study is acceptable.

4.2 Hypothesis Testing

After all the assumptions are met, then the hypothesis that has been prepared previously is tested. Hypothesis testing is done based on the value of the critical ratio (CR) of the relationship of a causality test results conducted by SEM.

Table 4. Hypothesis Fest Result.									
		Estimate	Standard Error	Critical Ratio	Probability Error	Standardize Esimate	Description		
÷	Opportunity	0,170	0,42	4,056	0,000	0,269	Significant		
←	Pressure	0,233	0,41	5,921	0,000	0,379	Significant		
							Not		
←	Rationality	0,026	0,046	0,556	0,578	0,043	Significant		
							Significant		
←	Capability	0,231	0,039	5,919	0,000	0,226	Significant		
←	Idealism	0,171	0,043	4,057	0,000	0,198	Significant		
←	Relativism	0,275	0,054	5,047	0,000	0,384	Significant		
	+++ $+$ $++$	 Opportunity Pressure Rationality Capability Idealism Relativism 	Estimate \leftarrow Opportunity0,170 \leftarrow Pressure0,233 \leftarrow Rationality0,026 \leftarrow Capability0,231 \leftarrow Idealism0,171 \leftarrow Relativism0,275	$ \begin{array}{c} \hline \\ \hline $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c c c c c c c c c c c c c c c c c c c $		

Table 4. Hypothesis Test Result.

Sumber: Data processed, 2019

Table 4 shows that all CR values obtained are above 1.96 and a probability of 0,000, except for the rationalization dimension. Therefore, from the estimation results of the structural model, it is stated that all hypotheses can be accepted, except for the dimensions of rationality in the diamond fraud construct, which hypotheses are rejected because the probability error value is > 0.05. The results of testing the hypothesis test also found that in the diamond fraud construct which is the dimensions, pressure, opportunities, and capabilities significantly influence cheating in a positive direction, which increases the pressure, opportunity and capability in a person will also increase the level of fraud in its environment. In the construct of ethical ideology, it is known that the dimensions of idealism and relativism are equally influential on student cheating behaviour in a positive direction, which if high levels of idealism and relativism will also increase cheating behaviour. In contrast to the dimensions of rationality, found that there is no significant effect between the level of rationalization with the behaviour of fraud that occurs.

4.2.1 The Effect of Fraud Diamond on the Cheating Behaviour of Accounting Students

The result of SEM analysis illustrated that the dimension of pressure significantly influences to the student's cheating behaviour which is 37.9% with positive direction, which means that the higher pressure of the students will make the cheating behaviour more likely to have by them. This result is in line with the research by Murdiansyah et

al., (2017), Finn and Frone (2010), and Hendricks (2004) that prove that pressure influence cheating behaviour.

On the dimension of opportunity, the estimation result shows the value of 26.9% which means that the opportunity influences the cheating behaviour on students as 26.9% with positive direction. It illustrates that the greater opportunity that the students have, the greater opportunity of cheating activity will be conducted by students. This result also proved by the research conducted by Murdiansyah et al., (2017) and Deliana et al., (2017).

The result also shows that there is no significant influence of rationality dimension on the cheating behaviour, which means that the hypothesis is rejected. The collected data could not prove the level of rationality has a relationship with the cheating behaviour of students.

In addition, the result of the capability dimension shows that the capability level of a person influences the cheating behaviour on students as 22.6%, with a positive direction. It shows that the higher capability tends to lead the cheating behaviour a person has. This result is contrary to the research of Murdiansyah et al. (2017) which resulted that a capability will negatively influence cheating behaviour.

4.2.2 The Effect of Ethical Ideology on Cheating Behaviour of Accounting Students

The output of estimation value by using SEM analysis shows that ethical ideology construct which consists of idealism and relativism influence cheating behaviour of accounting students. The dimension of idealism affects 19.8% of the cheating behaviour in a positive direction. Research on the dimension of idealism also conducted by Ballentine et al., (2014) and Ismail and Hana (2014) which resulted that idealism positively affects students' behaviour. For the result of the dimension of relativism shows that it influences cheating behaviour as 38.4%, which means that the higher relativism level will lead to more cheating behaviour is done. This is in line with the research of Aziz and Cahyonowati (2015) and Januarti and Eriskawati (2016) who stated that relativism influences cheating behaviour.

4.3 SEM Analysis in Gender

The hypothesis testing of the relationship of gender on student cheating behaviour, a test was conducted to be able to see how the tendencies of each gender group with the help of SEM analysis method to see the differences between male and female groups in relation to student cheating behaviour.

4.3.1 Relationship of Male Group to Cheating Behaviour

SEM analysis is used to help see how the group responds to statement indicators about fraud and see how the estimated value of the results obtained and the effect of each variable to be tested. The structural model of the SEM analysis of the gender group of male students can be seen in Figure 4.



Fig. 4. Structural Model Test of Male Group.

The output results from the data that have been inputted in the Amos program; it was found that the loading factor of each indicator ≥ 0.50 indicates that the indicator is valid. Then the results of the output are then analyzed by looking at the relationship of male gender groups with the construct being tested. Table 5 shows the relationship of male gender groups to the constructs contained in the study.

			Estimate	S.E.	S.E. C.R.		Standardized Estimate
Fraud	<	Opportunity	,266	,063	4,242	***	0,496
Fraud	<	Pressure	,262	,069	3,811	***	0,530
Fraud	<	Rationality	,016	,062	,256	,798	0,025
Fraud	<	Capability	-,195	,083	-2,356	,018	-0,250
Fraud	<	Idealism	-,111	,061	-1,834	,067	-0,168
Fraud	<	Relativism	,097	,053	1,842	,066	0,156

Table 5. Analysis Result of Male Group Structural Equation.

Sumber: Data processed, 2019

Table 5 shows that for the male group, fraud diamond construct that is the pressure dimension has an effect of 49.6% in relation to fraud behaviour, the opportunity

dimension has an effect of 53% with cheating behaviour, the rationality dimension has no effect, and the capability dimension negative effect on cheating behaviour by 25%. In the construct of ethical ideology, idealism has a negative effect of 16.8% in relation to cheating behaviour, and the dimension of relativism affects cheating behaviour by 15.6% in a positive direction.

4.3.2 Relationship of Female Groups to Cheating Behaviour

SEM analysis is performed to see how the response of the female group to the indicators of the construct being tested, and to get how the estimated value of the effect of each variable to be tested. The structural model of the SEM analysis of the gender group of the female can be seen in Figure 5.



Fig. 5. Struktural Model Test of Female Group.

The output of the female group for each question indicator was found that the loading factor of each indicator was 50.50, so it showed that the indicator was valid. Then next, the results are analyzed by looking at the level of influence of each construct being tested. Table 6 shows the relationship of female groups to the construct contained in the study.

			Estimate	S.E.	C.R.	Р	Standardized Estimate
Fraud	<	Opportunity	,208	,066	3,151	,002	0,293
Fraud	<	Pressure	,249	,062	3,988	***	0,327
Fraud	<	Rationality	,018	,060	,299	,765	0,032
Fraud	<	Capability	,249	,062	3,988	***	0,223
Fraud	<	Idealism	,208	,066	3,151	,002	0,210
Fraud	<	Relativism	,288	,091	3,172	,002	0,384

Table 6. Analysis Result of Female Structural Equation.

Sumber: Data processed, 2019

The results obtained from the testing of the female group from the diamond fraud construct are the opportunity dimension influences on cheating behaviour by 32.7%, the pressure dimension influences the cheating behaviour with a percentage of 32.7%, the rationality dimension is found to have no effect on the cheating behaviour from the results estimate that has a value <0.05, the capability dimension is known to have an effect of 22.3%. For the construct of ethical ideology, the idealism dimension is known to have a 21% effect on cheating behaviour, while the relativism dimension has a 38.4% effect on student cheating behaviour.

4.4 Independent Sample T-Test Group Gender Male and Female

After each gender group has been analyzed, to see whether there are differences between male and female gender groups in relation to cheating behaviour can be seen in table 7.

Table 7. Structural Weight Group Independent Sample T-Test.									
Model DF CMIN P NFI IFI RFI TLI									
		· · · · ·	Delta-1	Delta-2	rho-1	rho2			
21	50,376	,000	,011	,013	,002	,003			
22	51,027	,000	,011	,013	,002	,002			
53	118,986	,000	,025	,031	,003	,004			
	Structu DF 21 22 53	Structural Weight DF CMIN 21 50,376 22 51,027 53 118,986	Structural Weight Group I DF CMIN P 21 50,376 ,000 22 51,027 ,000 53 118,986 ,000	Structural Weight Group Independer DF CMIN P NFI Delta-1 21 50,376 ,000 ,011 22 51,027 ,000 ,011 53 118,986 ,000 ,025	Structural Weight Group Independent Sample T. DF CMIN P NFI IFI Delta-2 21 50,376 ,000 ,011 ,013 22 51,027 ,000 ,011 ,013 53 118,986 ,000 ,025 ,031	Structural Weight Group Independent Sample T-Test. DF CMIN P NFI IFI RFI Delta-1 Delta-2 rho-1 1 <t< td=""></t<>			

Sumber: Data processed, 2019

Table 7 shows that the P-value on structural covariances <0.05 shows that there are significant differences between groups of men and women in this full model. The difference in gender sensitivity to each construct is shown in table 8.

				÷		
DV		IV	Male	Female	Plus-Male	Plus-Female
Fraud	<	Opportunit y	0.496	0.293	0.203	-
Fraud	<	Pressure	0.53	0.327	0.203	-
Fraud	<	Rationality	0.025	0.032	-	0.007
Fraud	<	Capability	-0.25	0.223	-	0.473
Fraud	<	Idealism	0.168	0.21	-	0.042
Fraud	<	Relativism	0.156	0.384	-	0.228

Table 8. Construct Sensitivity According to Gender.

Sumber: Data processed, 2019

The result obtained from Table 8 explains that the influence of opportunity and pressure on cheating behaviour, the male gender group is known to have greater responsiveness than female because it has a greater Beta value than female. However, for the variable rationalization, capability, idealism and relativism of the female group were more responsive than the male group.

5 Conclusions, Implications, and Limitations of Research

5.1 Conclusions

The results showed that the variables that significantly influenced accounting student cheating behaviour were pressure, opportunity, capability, idealism and relativism, while the rationality variable was known not to have a significant effect on student cheating behaviour.

When reviewed the relationship to the influence of each dimension, the dimension of pressure has a significant effect on student cheating behaviour, where the influence of pressure on cheating is 37.9% in a positive direction which when high pressure in students will increase cheating behaviour. In the Opportunity dimension, the estimation results show a value of 26.9%, where it states that the opportunities that influence student cheating behaviour are 26.9% in a positive direction. This shows that the greater the opportunities, the greater the fraudulent activity. The dimension of rationalization has no influence and is not significant on cheating behaviour. The capability dimension shows that the level of ability possessed by someone will influence the cheating behaviour of students by 22.6% in a positive direction. This shows that the higher one's ability will increase the tendency to cheat. The idealism dimension influences 19.8% of cheating behaviour in a positive direction. In the dimension of relativism, the value that affects a person's relative level of cheating behaviour is 38.4%, where the higher the level of relativism in one's eating will further increase the cheating behaviour that occurs.

In terms of the different gender groups, there are differences in the influence between men and women on their actions of cheating. On the dimensions of opportunity and pressure, the influence of cheating behaviour on male gender groups was found to be more responsive than women, but for the variables of rationalization, capability, idealism and relativism, the female group turned out to be more responsive than the male group.

5.2 Implications

This research is expected to be beneficial for educational institutions or institutions, especially universities, to pay more attention to the issue of fraud in the university environment, so that prevention is obtained and reduce the problem of fraud in the university environment, especially in accounting study programs so that it will create quality graduates and respect moral values.

5.3 Limitations

The limitations of this study are that the sample is limited to accounting students who study at Syiah Kuala University only and in gathering research conclusions based only on primary data collected through questionnaires, so that it can cause misperceptions of respondents in answering questionnaire statements that may differ from actual conditions which are a condition which cannot be controlled because it is beyond the ability of the researcher.

References

ACFE Indonesia. (2016). Suvey Fraud Indonesia.

- Aslam, M. S. (2011). The Impact Of Personality Traits On Academic Dishonesty Among Pakistan Students. The Journal Of Commerce, 3(2), 50–61. Retrieved From http://www.ciitlahore.edu.pk/papers/abstracts/146-8588087886673289558.pdf
- Aziz, A., & Cahyonowati, N. (2015). Pengaruh Ethical Ideology Terhadap Ethical Judgements Pada Mahasiswa Akuntansi, 4, 1–8.
- Ballantine, J. A., Mccourt Larres, P., & Mulgrew, M. (2014). Determinants Of Academic Cheating Behavior: The Future For Accountancy In Ireland. Accounting Forum, 38(1), 55– 66. https://doi.org/10.1016/j.accfor.2013.08.002
- Cressey, D. R. (1950). The Criminal Violation Of Financial Trust. American Sociological Review, 15(6), 738–743.
- Davy, J.A., Kincaid, J.F., Smith K.J., & Trawick, M. (2007). An Examination Of The Role Of Attitudinal Characteristics And Motivation On The Cheating Behavior Of Business Students. Ethics And Behaviour, 17(3), 281–302.

Deliana, Abdulrshmsn, N. (2017). Perilaku Kecurangan Akademik (Academic Fraud) Mahasiswa Akuntansi Pada Perguruan Tinggi Negeri.

- Dewi, S. R. (2006). Gender Mainstreaming: Feminisme, Gender Dan Transformasi Institusi. Jurnal Perempuan, No 50.
- Donse, L., & Groep, I. H. Van De. (2013). Academic Dishonesty Among College Students : Predictors And Interventions. Social Cosmos, 10(1), 40–50.
- Faucher, D., & Caves, S. (2009). Academic Dishonesty: Innovative Cheating Techniques And The Detection And Prevention Of Them. Teaching And Learning In Nursing, 4, 37–41.
- Farnese, M. L., Tramontano, C., Fida, R., & Paciello, M. (2011). Cheating Behaviors In Academic Context: Does Academic Moral Disengagement Matter? Procedia - Social And Behavioral Sciences, 29(2010), 356–365. https://doi.org/10.1016/j.sbspro.2011.11.250
- Finn, K. V., & Frone, M. R. (2010). Academic Performance And Cheating: Moderating Role Of School Identification And Self-Efficacy, (January 2015), 37–41. https://doi.org/10.3200/joer.97.3.115-121
- Forsyth, D. (1980). A Taxonomy Of Ethical Ideologies. Journal Of Personality And Social Psychology, Vol. 39 No, 175–184.
- Galil, A., Yarmolovsky, J., Gidron, M., & Geva, R. (2019). Cheating behavior in children: Integrating gaze allocation and social awareness. Journal of experimental child psychology,178, 405-416.
- Graves, M. S. (2008). Student Cheating Habits: A Predictor Of Workplace Deviance. Journal Of Diversity Management, 3(1), 15–22.
- Hendricks, B. (2004). Academic Dishonesty: A Study In The Magnitude Of And Justifications For Academic Dishonesty Among College Undergraduate And Graduate Students. Jurnal Of College Student Development, Thesis, 212–260.

- Ismail, S. (2014). Effect Of Ethical Ideologies On Ethical Judgment Of Future Accountants: Malaysian Evidence. Asian Review Of Accounting, 22(2), 145–158. https://doi.org/10.1108/ ara-08-2013-0052
- Ismail, S & Hana ,Salwa. (2016). Cheating Behaviour Among Accounting Students: Some Malaysian Evidence. Accounting Research Journal, Vol. 29. https://doi.org/10.1108/arj-02-2016-0015
- Januarti, Indira & Eriskawati, E. (2016). The Influence Of Relativism, Idealism, And Gender On The Students's Academic Cheating Behaviour. Jurnal Dinamika Akuntansi, 8, 73–83.
- Kidwell, L. A., & Kent, J. (2008). Integrity At A Distance: A Study Of Academic Misconduct Among University Students On And Off Campus. Accounting Education, 17(SUPPL.1). https://doi.org/10.1080/09639280802044568
- Kobayashi, E., & Fukushima, M. (2012). Gender, Social Bond, And Academic Cheating In Japan. Sociological Inquiry, 82(2), 282–304. https://doi.org/10.1111/j.1475-682x.2011.0 0402.x
- Latan, H. 2013. Structural Equation Modelling: Konsep dan Aplikasi Menggunakan Program Lisrel8.80. Bandung: Penerbit Alfabeta
- Lewellyn, P. G., & Rodriguez, L. C. (2015). Does Academic Dishonesty Relate To Fraud Theory? A Comparative Analysis. American International Journal Of Contemporary Research, 5(3), 1–6.
- Mc Cabe, Donald (2004). Academic Dishonesty At The Graduate Level. Ethics & Behavior, 11(3), 287–305. https://doi.org/10.1207/s15327019eb1103
- Murdiansyah, I., Sudarma, M., & Nurkholis. (2017). Pengaruh Dimensi Fraud Diamond Terhadap Perilaku Kecurangan Akademik (Studi Empiris Pada Mahasiswa Magister Akuntansi Universitas Brawijaya). Jurnal Akuntansi Aktual, 4(2), 121–133.
- Noor, R. M., Ridhuan, M., & Dangi, M. (2014). Empirical Study On Student 'S Higher Education Institution System Using Fraud Diamond Theory. Gading Business And Management, 18(2), 31–50.
- Puspitawati, H. (2013). Konsep, Teori Dan Analisis Gender. Institut Pertanian Bogor.
- Reiss, M. C., & Mitra, K. (1998). The Effects Of Individual Difference Factors On The Acceptability Of Ethical And Unethical Workplace Behaviors. Journal Of Business Ethics, 17, 1581–1593. https://doi.org/10.1023/a:1005742408725
- Saat, M. M., Porter, S., & Woodbine, G. (2012). A Longitudinal Study Of Accounting Students 'Ethical Judgement Making Ability. Accounting Education: An International Journal, 21:3, 215-229. https://doi.org/10.1080/09639284.2011.562012
- Sekaran & Bougie. (2010). Research Methods For Business: A Skill Building Approach 5th Edition. (J. Wiley, Ed.) (7th Ed.). New York.
- Sugiyono. (2007). Metode Penelitian Pendidikan (Pendekatan Kuantitatif, Kualitatif, dan R & D). Bandung: Alfabeta.
- Thanasak, R. (2013). Beyond The Fraud Diamond. International Journal Of Management And Administrative Sciences, 2, Pp.01-05.
- Webster. (2000). Webster Dictionary.
- Wells, T Joseph. 2010. Principle of Fraud Examination. Fourth Edition. Wiley : USA
- Wolfe, B. D. T., & Hermanson, D. R. (2004). The Fraud Diamond : Considering The Four Elements Of Fraud, 2.
- Young, D. (2013). Perspectives On Cheating At A Thai University. Language Testing In Asia, 3(1), 6. https://doi.org/10.1186/2229-0443-3-6