TRIANGLE’S FRAUD THEORY ON ACADEMIC FRAUD BEHAVIOR WHEN ONLINE LEARNING

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ABSTRACT

Purpose: This study aims to examine the dimensions of the fraud triangle to explain academic cheating behavior during online learning.

Theoretical Framework: The theory that examines the causes of fraud is the fraud triangle theory. This theory was first put forward by Edwin Sutherland, who coined the term white-color crime, and Donald Cressey, who was a student of Sutherland’s in a doctoral program in the 1940s and author of Other People Money: A Study in the Social Psychology of Embezzlement.

Design/Methodology/Approach: This study uses multiple regression analysis with the number of samples of this study are 73 accounting students at the Indonesian Christian University in Maluku who have passed auditing courses and business and professional ethics. Data were collected using a survey method.

Findings: The results of this study indicate that partial pressure and opportunity affect academic cheating, while rationalization does not affect academic cheating. This study also shows that simultaneously academic fraud is determined by the dimensions of the fraud triangle, namely pressure, opportunity, and rationalization.

Research, Practical & Social Implications: The implication of this research is to provide useful input to institutions, especially the UKIM Faculty of Economics and Business, to make online learning standards. Also, the teaching staff as input in the teaching and learning process pays attention that pressure, opportunity, and rationalization are important to determine student behavior in academic fraud.

Originality/Value: The results of this research indicate that rationalization does not influence academic fraud behaviors. Rationalization is self-justification or the wrong reasons for wrong behavior. This is due to the awareness of the perpetrators of academic fraud that the fraud committed is an act that is not commendable, so guilt arises when committing academic fraud. It does not support the fraud triangle theory which states that rationalization encourages fraud.

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A TEORIA DA FRAUDE DO TRIÂNGULO SOBRE O COMPORTAMENTO DE FRAUDE ACADÊMICA QUANDO SE APRENDE ON-LINE

Objetivo: Este estudio tem como objetivo examinar las dimensiones del triángulo de la fraude para explicar el comportamiento de fraude académica durante el aprendizaje on-line.

Estrutura teórica: La teoría que examina las causas de la fraude es la teoría del triángulo de la fraude. Esta teoría fue presentada por primera vez por Edwin Sutherland, que cunhou o termo crime de cor branca, e Donald Cressey, que foi aluno de Sutherland em um programa de doutorado nos anos 40 e autor do livro Other People Money: Um Estudo na Psicologia Social do Desfalque.

Design/Metodologia/Proteção: Este estudio utiliza análise de regresión múltipla com o número de amosa este estudio son 73 estudantes de contabilidad de la Universidade Cristã da Indonésia em Maluku que passaram nos cursos de auditoria e ética empresarial e profissional. Os dados foram coletados usando um método de pesquisa.

Resultados: Os resultados deste estudio indicam que a presión parcial e a oportunidade afetam a trapaça acadêmica, enquanto que a racionalização não afeta a trapaça acadêmica. Este estudio también mostra que, simultaneamente, a fraude académica é determinada pelas dimensões do triângulo da fraude, ou seja, pressão, oportunidade e racionalização.

Pesquisa, Implicações Práticas e Sociais: A implicación desta pesquisa é fornecer informações úteis às instituições, especialmente à Facultade de Economía e Negócios do UKIM, para fazer padrões de aprendizagem on-line. Além disso, o pessoal docente como insumo no processo de ensino e aprendizagem presta atenção que a pressión, oportunidade e racionalização são importantes para determinar el comportamiento dos estudantes en fraudes académicas.

Originalidade/Valor: Os resultados desta pesquisa indicam que la racionalização no influye en los comportamientos de fraude académica. A racionalización é a autojustificación ou as razões erradas para um comportamento errado. Isto se deve à consciência dos autores da fraude académica de que a fraude cometida é un acto que não é louvável, portanto, a culpa surge quando se comete uma fraude académica. Isto não apóia a teoría do triângulo fraude que afirma que a racionalización incentiva a fraude.


TEORÍA DEL FRAUDE DE TRIÁNGULO SOBRE EL COMPORTAMIENTO DE FRAUDE ACADÉMICO EN EL APRENDIZAJE EN LÍNEA

RESUMEN

Propósito: Este estudio pretende examinar las dimensiones del triángulo del fraude para explicar el comportamiento de engaño académico durante el aprendizaje en línea.

Marco teórico: La teoría que examina las causas del fraude es la teoría del triángulo del fraude. Esta teoría fue planteada por primera vez por Edwin Sutherland, que cunhou o término delito de guante blanco, e Donald Cressey, que fue alumno de Sutherland en un programa de doctorado en la década de 1940 y autor de Other People Money: A Study in the Social Psychology of Embezzlement.

Diseño/Metodología/Enfoque: Este estudio utiliza el análisis de regresión múltiple con el número de muestras de este estudio son 73 estudiantes de contabilidad de la Universidad Cristiana de Indonesia en Maluku que han aprobado los cursos de auditoría y ética empresarial y profesional. Los datos se recogieron mediante un método de encuesta.

Resultados: Los resultados de este estudio indican que la presión parcial y la oportunidad afectan al fraude académico, mientras que la racionalización no afecta al fraude académico. Este estudio también muestra que el fraude académico simultáneo está determinado por las dimensiones del triángulo del fraude, a saber, presión, oportunidad y racionalización.

Implicaciones prácticas, sociales y de investigación: La implicación de esta investigación es proporcionar insumos útiles a las instituciones, especialmente a la Facultad de Economía y Negocios UKIM, para hacer estándares de aprendizaje en línea. Asimismo, el profesorado como aportación en el proceso de enseñanza y aprendizaje presta atención a que la presión, la oportunidad y la racionalización son importantes para determinar el comportamiento de los estudiantes en el fraude académico.

Originalidad/Valor: Los resultados de esta investigación indican que la racionalización no influye en los comportamientos de fraude académico. La racionalización es la autojustificación o las razones erróneas para un comportamiento erróneo. Esto se debe a la conciencia de los autores del fraude académico de que el fraude cometido es un acto que no es loable, por lo que surge la culpa al cometer fraude académico. No apoya la teoría del triángulo del fraude que afirma que la racionalización fomenta el fraude.
INTRODUCTION

Educational institutions are institutions that aim to educate and produce human resources who are not only professional and intelligent but also have good character and morals. To achieve these objectives, it is essential to establish an academic environment that is virtuous and free from all forms of cheating within an educational institution.

Unfortunately, in the world of education, cheating is a common thing. Cheating in the world of education is known as academic fraud. Academic fraud is dishonest actions/behaviors to achieve success for one’s self. Fitriana & Baridwan (2012) define academic fraud as unethical actions/behaviors committed by students, including violations of applicable rules in completing assignments and exams in dishonest methods.

Examples of several forms of academic fraud are entrusting friends to sign the attendance list, cheating during exams, plagiarizing friends' assignments, plagiarizing lecturers' signatures, quoting answers from the internet without mentioning the source, and various other things that can be categorized as forms of cheating (Motifasari, Maslichah & Mawardi, 2019). Students as intellectual candidates are required to have high integrity, especially for students majoring in Accounting. Academic fraud cannot be regarded as a minor offense. This habit will be very dangerous if it is brought over to the world of work which will result in more significant acts of fraud such as corruption, data fraud, bribery, collusion, and others.

Zaini, Carolina & Setiawan (2015) states that if someone is accustomed to cheating academically in college, they will tend to do the same thing when they are in the world of work. The habit factor is the main driver for someone to take unethical actions such as fraud or violations in their work. The findings of the model of economic development of the people run by the mustahik also vary in the efforts carried out whose main objectives are to save, infaq, and develop businesses to avoid the problem of poverty (Arwani et al., 2022).

There are several types of research on academic fraud applying the fraud triangle theory, which is pressure, opportunity, and rationalization, which have been conducted this research on undergraduate students of Ganesha University and found that (Apriani et al., 2017) pressure and rationalization influence academic fraud behaviors, while opportunity does not influence academic fraud behavior. Ridhayana, Ansar & Mahdi (2018) carried out the same research on undergraduate students at Khairun University and found that pressure and opportunity influence academic fraud, while rationalization does not influence academic fraud. Meanwhile, Ariani,
Pusporini & Priono (2018) who performed this research on students of SMK Negeri X Surabaya found that pressure and opportunity do not influence academic fraud behavior, while rationalization influences academic fraud. Research that finds that pressure, opportunity, and rationalization influence academic fraud includes (Fitriana & Baridwan, 2012; Motifasari et al., 2019; Sihombing & Budiartha, 2020).

With the occurrence of the Covid-19 pandemic, the government took action to impose social restrictions (social distancing) to break the chain of the spread of Covid-19 and the education sector also have to experience the impact. The Minister of Education issued a circular letter No. 36962/MPK.A/H/2020 regarding online learning and working from home to all chiefs of educational institutions from elementary schools to universities., (Hafni, Hanum, & Hasibuan, 2021; Lubis, Effendi, & Fatmawarni, 2021) As a result, all levels of education conduct online learning. For this reason, this study was conducted to determine the effect of the fraud triangle theory (signature, opportunity, rationalization) on academic cheating behavior that occurs during online learning among Accounting Department students at the Indonesian Christian University Maluku (UKIM). This is a differentiating factor from previous studies conducted to examine academic cheating that occurs during offline learning (outside the network). The implications of this research will also provide benefits to the university, especially in the section of the Education Quality Assurance Institute in preparing the standards for the learning process. The necessities of life for each individual in the community will certainly not be the same, to be able to fulfill the purpose of these needs it is financed by the availability of funds or financial means. There are members of the community who are relatively able to meet their financing needs, but not a few of the community have not met their needs (Sungkawaningrum et al., 2022). This study aims to examine the dimensions of the fraud triangle to explain academic cheating behavior during online learning.

LITERATURE REVIEW

Fraud Triangle

The theory that examines the causes of fraud is the fraud triangle theory. This theory was first put forward by Edwin Sutherland, who coined the term white-color crime, and Donald Cressey, who was a student of Sutherland's in a doctoral program in the 1940s and author of Other People Money: A Study in the Social Psychology of Embezzlement (1973). Bara & Pradesyah (2021) they focus their research on fraudsters who violate ethical standards. The fraud triangle consists of a) pressure, fraud is committed due to financial pressure that cannot be assisted by others; b) opportunity, fraud is committed when there is an opportunity not to be
detected during the fraudulent action; and c) rationalization, fraud is committed when there is a moral rationalization of the actions taken (Dorminey et al., 2010). Especially for rationalization, this is needed because someone does not see himself as a criminal, so for every bad action, someone needs self-justification. The fraud triangle can be seen in Figure 1 below.

![Figure 1 Fraud Triangle](source: Prepared by the Authors (2022))

**Academic Fraud**

Fitriana & Baridwan (2012) states that academic fraud is a dishonest act/behavior to get success for one’s self. Academic fraud can be defined as intentional unethical acts/behaviors by students, including keeping absent signatures by friends, plagiarizing friends' assignments, cheating during exams, and quoting sources from the internet without mentioning where the source came from. Clough, Willett & Lim (2015) classify eight (8) types of activities that include academic fraud, including:

1. Plagiarism is the act of someone who copies the work of others without writing/citing the source and acknowledging that it is his/her work.
2. Collusion, is an unauthorized collaboration between two or more people (both students and lecturers/teachers) to work on assignments/exams, the results of which benefit one or two parties.
3. Falsification, which an act of someone acknowledging the work of others as one’s work by including the work of others whose names have been changed.
4. Replication, which an act of submitting the results of the work of the same task, both entirely and partly into more than one media, to get additional scores or credits/points.
5. Bringing or using tools that are not allowed (illegal) during the exam, such as calculators, cell phones, computers, and laptops.

6. Looking for or getting copies of exam questions and/or answers

7. Communicating, talking, or whispering with fellow examinees during the exam.

8. Being a liaison between examinees who cheat.

**Hypothesis Formulation**

Pressure is a situation that encourages someone to commit fraud. Ridhayana et al. (2018) explain that the reason students cheat is because of various forms of pressure which resulted in fear, such as fear of facing parents when getting bad grades or fear of losing scholarships if the grades do not meet the standards. A person who feels afraid because of these various pressures will tend to do things that violate the rules to overcome his fear. The result of the research determines that pressure has an influence on academic fraud (Apriani et al., 2017; Fitriana & Baridwan, 2012; Motifasari et al., 2019; Santoso & Adam, 2013; Sihombing & Budiartha, 2020; Wahidin, Asse, & Bulutoding, 2020; White, 2020). Thus, the first hypothesis can be formulated as:

**H1:** Pressure has a positive influence on academic fraud behaviors among students at the Accounting Department of UKIM in the online learning process.

Opportunity is a condition that allows someone to commit fraud safely, assuming that the fraud is not detected. The greater the perceived opportunity, the higher the possibility of students committing fraud (Apriani et al., 2017; Fitriana & Baridwan, 2012; Motifasari et al., 2019; Santoso & Adam, 2013; Sihombing & Budiartha, 2020; Wahidin et al., 2020; White, 2020). Thus, the second hypothesis can be formulated as:

**H2:** Opportunity has a positive influence on academic fraud behaviors among students at the Accounting Department of UKIM in the online learning process.

A rationalization is a form of self-justification or the wrong excuse for a wrong behavior (Albrecht, Albrecht, & Zimbelman, 2018; Williams & Hosek, 2003) stated that students' dishonest behavior is an act of rationalization of students toward academic cheating behavior. The more the student rationalization of fraudulent behavior, the greater the incentive to commit academic fraud. Thus, the third hypothesis can be formulated as:

**H3:** Rationalization has a positive influence on academic fraud behaviors among students at the Accounting Department of UKIM in the online learning process.
RESEARCH METHOD

This research is quantitative research based on the philosophy of positivism. It is also associative research, which is research that examines the relationship between two or more variables (Sugiyono, 2017). This research examines the dimensions of the fraud triangle in its influence on academic fraud among students at the Accounting Department of UKIM in the online learning process.

The population in this research is students at the Accounting Department of UKIM, with a total of 253 people. The sample selection method used in this research is purposive sampling, which is sample collection is conducted based on certain requirements or criteria, namely 100 students who had passed the courses of Professional Ethics & Auditing and Business. The source of data for this research is primary data obtained through filling out questionnaires which are distributed via Google Form. The instrument applied in this research is an instrument from the research of (Fitriana & Baridwan, 2012) which is modified according to the online learning process.

The data testing carried out is the reliability test, validity test, and classical assumption test. Hypothesis testing is done by using multiple regression analysis tools. The data is processed using computer software, namely: SPSS program Version 24.

RESULTS

The sample of this research is active students at the Accounting Department of UKIM, who have passed the Courses of Business & Professional Ethics and Auditing. Because the research is conducted during the Covid-19 pandemic, the questionnaire is made in the form of a Google Form and distributed widely to the Whatsapp group of Accounting Students Class 2015-2018. Out of all distributed questionnaires, only 73 questionnaires were filled out and given back. The profiles of respondents including gender, class, and GPA, can be seen in the following table:
Based on Table 1, it can be explained that more female respondents filled out and returned the questionnaire (50.7%) compared to male respondents (49.3%). For the GPA category, respondents with a GPA of 3.00 - 4.00 are the largest number (87.7%) while for the class category, the Class of 2018 is the largest (57.5%).

Descriptive Statistics describe various characteristics of data that comes from a sample. The descriptive statistics of the questionnaire’s answers that describe the average value, the smallest value, and the largest value, as well as the standard deviation of each variable originating from 73 respondents, can be shown in Table 2 as follows:

A validity test is applied to measure the validity of a questionnaire. In this research, an indicator is considered valid if the r-count value is more than the r-table value, with a significance level of 5% = 0.2272. The results show that the dimensions of the behavioral variables of academic fraud, pressure, opportunity, and rationality are valid indicators in which the r-count values are greater than the r-table values on each variable.

The Cronbach Alpha test is applied for reliability testing. A variable is considered reliable if its Cronbach Alpha value is more than 0.60. The results display that the academic fraud behavior variable has a Cronbach Alpha value of 0.811, the pressure variable has a
Cronbach Alpha value of 0.739, the opportunity variable has a Cronbach Alpha value of 0.803, and the rationality variable has a Cronbach Alpha value of 0.721. Therefore, all variables in this research can be considered reliable because they have a Cronbach Alpha value above the reliability standard of 0.60.

One sample Kolmogorovskmirnov test is used for the normality test. Based on the results of the normality test, each variable has a value of more than 0.05, so the data is normally distributed. The multicollinearity test is conducted by observing the tolerance value and the VIF value with the assumption that if VIF < 10 and tolerance > 0.10, then there is no multicollinearity. The test result shows that the research data do not experience multicollinearity. The heteroscedasticity test in this research is conducted using the Scatterplot graph test. The result shows that there is no certain pattern because the points were spread out, so it can be concluded that the data in this research do not experience heteroscedasticity.

Multiple Regression analysis models are applied to test the influence of Pressure (X1), Opportunity (X2), and Rationalization (X3) on Academic Fraud Behavior (Y). The result is presented in Table 3 below:

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Regression Coefficient</th>
<th>T-count</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure</td>
<td>0.563</td>
<td>3.815</td>
<td>0.000</td>
</tr>
<tr>
<td>Opportunity</td>
<td>0.254</td>
<td>2.000</td>
<td>0.049</td>
</tr>
<tr>
<td>Rationalization</td>
<td>-0.191</td>
<td>-0.886</td>
<td>0.379</td>
</tr>
<tr>
<td>Constant</td>
<td>= 2.826</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R</td>
<td>= 0.631</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R Square</td>
<td>= 0.348</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjust R Square</td>
<td>= 0.372</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F count</td>
<td>= 15.230</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F table</td>
<td>= 2.737</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig</td>
<td>= 0.000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>= 73</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Prepared by the Authors (2022)

The results of the Simultaneous Test (F test) on the regression model with a significance level of 5% as displayed in Table 3, shows that the calculated F value in the model is 15,230 with a significance level of 0.000. This indicates that pressure, opportunity, and rationalization together have an influence on academic fraud in online learning.

The results of the partial test (T-test) in Table 3 also show that the rationalization variable has a significance value of -0.191 < 0.05, so that, partially, rationalization does not influence academic fraud behavior in online learning. Meanwhile, pressure and opportunity variables have a significance of > 0.05, so partially, these two variables influence the behavior of academic fraud in online learning.
DISCUSSION

The Influence of Pressure on Academic Fraud Behavior during Online Learning

The result of this research indicates that pressure has an influence on academic fraud behavior during online learning. Pressure is a situation that encourages someone to commit fraud. Therefore, someone, who faces pressure, tends to be more prone to academic cheating. In this research, the indicator of questions that received the most answers was that: in online learning, the pressure faced by students was greater, in the form of more assignments and difficult exam questions, so students could not manage their time well. It supports the fraud triangle theory which states that pressure is one of the factors that encourage fraud. The result of this research contradicts the research of (Iriani et al., 2018), but is supported by the research of (Apriani et al., 2017; Fitriana & Baridwan, 2012; Motifasari et al., 2019; Ridhayana et al., 2018; Sihombing & Budiartha, 2020; Wahidin et al., 2020; White, 2020).

The Influence of Opportunity towards Academic Fraud Behavior during Online Learning

The result of this research indicates that opportunity influences academic fraud behavior. Opportunity is a condition/situation that provides an opening for someone to commit fraud. In this research, the indicator of the questions that received the most answers is that the teacher provided opportunities for students, by not checking for plagiarism on assignments, not changing the assignments given, or giving the same exam questions to different groups of students. It supports the fraud triangle theory which states that opportunity is one of the factors that encourage fraud. The result of this research contradicts the research of (Ariani et al., 2018), but is supported by the research of (Apriani et al., 2017; Fitriana & Baridwan, 2012; Motifasari et al., 2019; Ridhayana et al., 2018; Sihombing & Budiartha, 2020; Wahidin et al., 2020; White, 2020).

The Influence of Rationalization towards Academic Fraud Behavior during Online Learning

The results of this research indicate that rationalization does not influence academic fraud behaviors. Rationalization is self-justification or the wrong reasons for wrong behavior. This is due to the awareness of the perpetrators of academic fraud that the fraud committed is an act that is not commendable, so guilt arises when committing academic fraud. It does not support the fraud triangle theory which states that rationalization encourages fraud. The result of this research is supported by the research of (Ridhayana et al., 2018), but contradicts the research of (Ariani et al., 2018) (Apriani et al., 2017; Fitriana & Baridwan, 2012; Motifasari et
CONCLUSION

Based on the discussion above, it can be concluded that the variables of pressure, opportunity, and rationalization that are tested simultaneously influence academic fraud behaviors. However, if tested partially, pressure and opportunity influence academic fraud behaviors in online learning, while rationalization does not influence academic fraud behaviors in online learning. The results of this study are expected to contribute to the improvement of regulations prepared by school management in order to further minimize cheating behavior by students. This research has various limitations. One of them is the collection of research data conducted online via Google form so that respondents’ answers do not necessarily reflect the actual situation. Then, this research also only uses the fraud triangle theory, while there are still various other variables that are not included in this research. The other limitations in this study are using four variables, namely pressure, opportunity, and rationalization as the independent variable and academic cheating behavior as the dependent variable. Suggestions for the next researcher is to use a combination of other independent variables to estimate the dependent variable.

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