STUDENT PERCEPTIONS OF FRAUD AND WHISTLEBLOWING BASED ON GENDER
(Case Study on the Students of Faculty of Economics Universitas Hasyim Asy'ri Tebuireng Jombang)

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Abstract
When giant companies are involved in fraud that has an extremely detrimental effect on the economy, the fraud cases become scandalous. The giant company's fraud case was revealed, mostly because of the information within the company that was revealed by the company's employees, which is called whistleblowing. The purpose of this study is to prove the differences in students' perceptions of fraud and whistleblowing behavior based on gender factors.
Research is conducted on students of the Faculty of Economics of Universitas Hasyim Asy'ari Tebuireng Jombang, who are in the third semester or above so that they already understand fraud and whistleblowing. This type of research is quantitative research based on empirical studies. The research sample was selected by using the technique of probability sampling with the category of simple random sampling. The hypothesis testing using multiple research paradigms with one dummy variable and two dependent variables so that it uses two simple dummy regression tests. The decision on the results of hypothesis testing uses two R Square determination coefficients to explain the relationship of each variable. The results of this study prove that there is no gender effect on the students’ perception of fraud and whistleblowing.

Keywords: Gender, Fraud Perception, Whistleblowing Perception.

INTRODUCTION
Fraud is a hot issue with the development of technology, and changes in the digital age do not make fraud cases decrease. Fraud becomes scandalous when giant companies are involved in fraud that has a hugely detrimental effect on the economy. As a result, fraud is a classic problem that, if scrutinized, no company is genuinely free from the threat of fraud. The first scandalous fraud began with the Enron case in 2001, which resulted in the company eventually leaving around USD31.2 billion in debt and losing $ 1 billion in pension funds. After the Enron case, other similar cases
emerged, namely WorldCom, Tyco, Lehman Brothers, and in early 2017 the British Telecom case (Pertiwi, 2018) emerged. The British Telecom fraud case is an accounting fraud by inflating profits. British Telecom had to spend GBP 350 million because of the fraud case (WE-online, 2017).

In 2018, five fraud cases were the most famous. First, the case of Theranos Inc., a technology company in Silicon Valley, is lost $1 billion. It is suspected that this fraud process has been ongoing since 2013, and in September 2018, Theranos announced the company would stop operating and formally dissolved. Second, the fraud case of money laundering of USD 233 million committed by Danske Bank - Denmark. It is suspected that this fraud case has been running for eight years before it is finally revealed. Third, the case of health funds in the US worth $2 billion, involving 165 medical professionals in 58 states. Fourth, a fraud case of around USD2 billion in Punjab National Bank in India with a duration of fraud for seven years. Fifth, fraud cases involving the Malaysian government with a loss of around USD 681 million. Malaysian Prime Minister, Najib Razak, began facing trial scheduled for February 2019 (Anonymous, 2018). The giant companies’ cases were revealed mostly because of the information from the internal company or by the employees. This revelation is known with the term whistleblowing. Generally, whistleblowing is done by the internal company, although not infrequently from the external company.

Fraud and whistleblowing behavior are not only found in the financial world. This behavior can also be found in the academic community and the everyday environment. One of fraud that is still troubling is the phenomenon of cheating behavior or in terms of research carried out by Mohammed Uyun, is called academic cheating. Academic cheating that occurs in Indonesia, including done by students, lecturers, or instructional staff (BHP, 2017). According to the 2014 ACFE (Association of Certified Fraud Examiners) report, it reported that in the case of fraud, the education industry was ranked fifth out of 23 other types of industries (Hofmann, 2015). The high number of fraud cases in the education industry proves that education in Indonesia has not been sufficiently successful in creating good morals. Qualitative research by Fransiska and Utami (2019) on academic cheating proves that students commit fraud because of environmental pressures, lecturers who do not carry out their duties properly, and the ability to commit fraud. Therefore, students need to realize early on that their current behavior can have an impact until later when they have to devote themselves to the community. Especially if they later become decision-makers whose decisions will affect the fate of many people.

Fraud is more emphasized on the activities of deviant behavior related to legal consequences, such as embezzlement, theft, deception, financial reporting fraud, corruption, collusion, nepotism, bribery (Tuanakotta, 2012). According to Romney and Steinbart (2018), three conditions cause fraud, which is called the fraud triangle. First, pressure, which includes financial pressure, the bad habits of a person, the pressure that comes from external parties, and other pressures. Second, opportunity, which includes the lack of controls to prevent or detect violations, the inability to assess the quality of a performance, a failure in disciplining perpetrators of fraud, ignorance, apathy, or the inadequate capacity of the victim of fraud and lack of access to information. Third, rationalization, which is an internal conflict within the perpetrator as an attempt to justify acts of fraud.

Whistleblowing is reporting violations committed by whistle-blowers. A whistleblower is a term for a person or party that is an employee, former employee, or member of an institution or organization who reports an action that is considered to violate the provisions of the authorized party (Tilton, 2018). In general, all acts that violate the provisions mean breaking the law, rules,
and conditions that pose a threat to the public or the public interest. These violations, including among others, such as corruption, violations of work safety, academic violations, and many more (Wikipedia, NA). There are two types of whistleblowing, namely internal and external whistleblowing. Internal whistleblowing occurs when a person or several employees know about fraud committed by another employee or the head of his department then reports the fraud to the higher-level management of the company. Conversely, external whistleblowing occurs when a person or several employees know of fraud committed by his company and then leak to the public because he/she knows that fraud will harm the community (Riyanto, 2016).

A review of five cases of fraud that shocked the world in 2018, namely the Theranos-US case, Danske Bank-Denmark, US Health Fund, Punjab National Bank-India, and the Malaysian Prime Minister, showed that four of these cases were carried out by men (cases 2-5), while one case was carried out by a woman (the first case). The revelation of the Theranos case occurs because of whistleblowing performed by an internal whistleblower, i.e., male employees of the company (Primeaux, 2019). This act raises the question of whether men and women (gender) will take different or similar actions if faced with a fraud situation? Thus, the purpose of this study is to prove the effect of gender on perceptions of fraud and whistleblowing.

Research into the relationship between gender and fraud has been carried out by Fransiska and Utami (2019), Cumming et al. (2015), Capezio, and Mavisakalyan (2015), and Barnes and Beaulieu (2014). Barnes and Beaulieu (2014) examine whether the increasing involvement of women in politics is caused by the perception that women tend not to commit fraud in politics. Their test results with an experimental survey design proved that the presence of a female candidate systematically reduces the likelihood of suspicion of fraud in elections. These results indicate that women are considered less likely to commit fraud than men. This result is different from the research of Fransiska and Utami (2019), who researched academic cheating with qualitative methods. Their results show that academic fraud is carried out for reasons that exist in the perspective of fraud diamond theory, which is the development of the fraud triangle. Fraud Diamond's theory states that the reason a person commits an act of fraud is the presence of pressure, opportunity, rationality, and ability. Therefore, the first hypothesis (null and alternative hypotheses) in this study was formulated as follows:

\( H_{01} \): gender does not affect student perceptions about fraud

\( H_{a1} \): gender effect on students' perceptions of fraud

One theory about whistleblowing is the standard theory (Davis, 1996). Davis (1996) states that there is a paradox between standard theory (which stems from a systematic understanding of whistleblowing) and facts (what is known about whistleblowing). The standard theory deals with justifying whistleblowing. According to standard theory, there are five standards (three primary standards and two additional standards) to ensure that moral whistleblowing is permissible. First, the organizations where the prospective whistleblower work, through their products, services, or policies, are believed to be detrimental to the public. Second, the prospective whistleblower has identified the loss, reported it to the supervisor, and is confident that the supervisor or organization has not taken any action. Third, the prospective whistleblower has made every effort internally within the organization's systems. Fourth, the prospective whistleblower has evidence that can convince others that his/her opinion about the threat/loss is correct. Fifth, the prospective whistleblower has sufficient reason that disclosing the threat/loss will not be harmful to the other parties. Much whistleblowing happens accidentally (one example is the Theranos case). Primeaux
(2019), from the results of his interview with Theranos employees, it was revealed that the employee accidentally conducted whistleblowing.

Based on the standard theory, men or women have the same opportunity to do whistleblowing provided the five standards are met. However, several studies have shown that gender influences whistleblowing intentions (Kaplan et al., 2009; Hunt, 2010; Liyanarachchi and Adler, 2011; Stylianou et al., 2012; Fapohunda, 2016; and Culiberg and Mihelič, 2016). Stylianou et al. (2012) researched fraud in the field of technology. The results of their research found that gender and computer skills influence the intention to report unethical IT practices. It was reported that women were more likely to report intellectual and privacy violations in the IT field than men. Liyanarachchi and Adler (2011) hypothesized that when the threat of retaliation increased from weak to strong, male accountants were more willing to do whistleblowing than female accountants. Therefore, the second hypothesis (null and alternative hypotheses) in this study was formulated as follows:

H02: gender does not influence uh the students' perceptions about whistleblowing

Ha2: gender effect on students' perceptions about whistleblowing

![Figure 1. Research Model](image)

Where:
X = independent variable (gender)
Y1 = Dependent variable 1 (fraud perception)
Y2 = Dependent variable 2 (whistleblowing perception)

**RESEARCH METHODS**

**Population and Sample**
This type of research is an associative (relationship) research, which is research that aims to find out the relationship between two or more variables. The researcher distributes questionnaires to be filled out by respondents to obtain the data needed in this quantitative approach. Based on the data, the number of students of Faculty of Economics, Universitas Hasyim Asy’ari Tebuireng Jombang, start from the first semesters to the seventh semester, as many as 369 students at the end of 2018. In this study, researchers used a determinant sample based on Sekaran and Bougie (2016), with a minimum sample of 35 respondents. This consideration was taken so that the population was adequately represented in the sample. The sampling technique uses probability sampling with the category simple random sampling. Sampling was done population randomly for the entire student majoring in the Faculty of Economics, Universitas Hasyim Asy’ari Tebuireng Jombang, start from
the 3rd semester to the 7th semester, so that all students have the opportunity to be a sample of this research.

**Operational Definition and Variable Measurement**

Variables in this study are the independent variable of gender (X) and two dependent variables, i.e., the perception of fraud (Y₁) and the perception of whistleblowing (Y₂).

**Gender (X)**

The Gender variable is defined as the sex of male and female. The gender measurement using a nominal scale, score 1 for a female, and score 0 for a man.

**Fraud Perception (Y₁)**

Perception of fraud is defined as the ability of the brain to translate stimuli or processes to translate stimuli that are captured by the human senses. The stimulus given is related to the reasons for conducting fraud (fraud triangle), namely pressure (item 1-7), opportunity (item 1-6), and rationality (item 1-5).

**Whistleblowing Perception (Y₂)**

Perception of fraud is defined as the ability of the brain to translate stimuli or processes to translate stimuli captured by the human senses. The stimulus given is related to the reason for whistleblowing (item 1-7).

The measuring of the perception of fraud (Y₁) and whistleblowing (Y₂) using a Likert scale with a range of 1-4. Scale 1 for strongly agreed (SS), scale 2 for agreed (S), scale 3 for disagreed (TS), and scale 4 for strongly disagreed (STS) of the item of the questionnaires.

**Data analysis technique**

**Validity and Reliability Test**

Validity test is done by comparing the value of r count with r table for a degree of freedom (df) = n-2 where n is the number of samples. If r count is greater than r table, the data is said to be valid. A validity test in this study was conducted using item analysis. Provisions decision if r count positive and r count > r table, then the item of the questionnaires is valid.

Reliability Test is done by consulting r count with r tables. If r table > r table, the instrument is declared unreliable. Triton in Sugiyono (2017) states that if the scale were grouped into classes with a range that is the same, then the size of the stability of alpha can be interpreted as follows:

1) Cronbach's alpha value is 0.00 to 0.20, which means less reliable.
2) Cronbach value of 0.21 to 0.40, which means somewhat reliable.
3) Ni Cronbach is 0.42 to 0.60, which means quite reliable.
4) Cronbach value of 0.61 to 0.80, which means reliable.
5) Cronbach's value is 0.81 to 1.00, which means very reliable.

**Normality test**

The Normal distribution test conducted by using the One-Sample Kolmogorov-Smirnov test, which the basis for a decision that if the significance value > 0.05, then the data is normally distributed.
Hypothesis Test - Simple Linear Regression

The independent variable in this study is Gender, while the dependent variable is Fraud Perception and Whistleblowing Perception. This analysis method uses the SPSS (Statistic Product and Service Solution) program. A simple form of the regression equation with dummy variables is as follows:

1) For the dependent variable Fraud Perception ($Y_1$)
   \[ Y_1 = a + b X \]  
   \[ Y_1 = \text{Fraud Perception Coefficient} \]
   \[ X = \text{Gender} \]
   \[ a = \text{constant} \]
   \[ b = \text{Gender Coefficient} \]

2) For the dependent variable Whistleblowing Perception ($Y_2$)
   \[ Y_2 = a + b X \]  
   \[ Y_2 = \text{Whistleblowing Perception Coefficient} \]
   \[ X = \text{Gender} \]
   \[ a = \text{Constant state} \]
   \[ b = \text{Gender Coefficient} \]

The hypotheses are tested using t-test with the criteria if the probability value $> 0.05$, it can be said that there is no influence of independent variables on the dependent variable (H0 accepted). The coefficient of determination (R Square) test aims to determine the proportion or percentage of the total variation in the dependent variable explained by the independent variable. This study uses a double paradigm with two dependent variables, so two simple regression analyzes are used, which subsequently also uses two R Square determination coefficients to explain the relationship of each variable.

RESULTS AND DISCUSSION

Results

Respondents in this study were 35 Faculty of Economics students. The characteristics of respondents studied were differentiated by gender. The gender distribution of respondents is male (8 students) less than the female respondents (27 students).

Testing the research instrument both in terms of validity and reliability of 35 respondents obtained that the results of the instrument used are valid and reliable with a significance value of less than 0.05 or the value of the core correlations greater than 0.3. The reliability coefficients (Cronbach Alpha) are between 0.4 - 0.8, which means the questionnaires are quite reliable (see Table 1).

<table>
<thead>
<tr>
<th>Table 1. Reliability Test</th>
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<tbody>
<tr>
<td>No</td>
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<tr>
<td>----</td>
</tr>
<tr>
<td>1</td>
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<tr>
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<tr>
<td>2</td>
</tr>
</tbody>
</table>

Source: Data processed
Normality test with the Kolmogorov-Smirnov test against residual value perception variables fraud and whistleblowing perception indicates the number of 0.200 and 0.116 with a significance level of meaning is above 0.05 is therefore concluded that the variable was normally distributed (Table 2).

Table 2. Normality Test

<table>
<thead>
<tr>
<th>No</th>
<th>Variable</th>
<th>Asym.</th>
<th>Sig.</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fraud Perception</td>
<td>0.200</td>
<td></td>
<td>Normal data</td>
</tr>
<tr>
<td>2</td>
<td>Whistleblowing Perception</td>
<td>0.116</td>
<td></td>
<td>Normal data</td>
</tr>
</tbody>
</table>

Source: Data processed

The first and second hypothesis testing is done by using a T-test between male and female students on the perception of fraud and whistleblowing. Table 3 shows that, first, the effect of gender on fraud perceptions from the value of the t value of fraud perceptions (Y1) -1.807 with a significance of 0.080 > 0.05. Thus, it can be concluded that gender does not affect the perception of fraud. Second, the effect of gender on the whistleblowing perception the t value of whistleblowing perception (Y2) 0.313 with the significance of 0.756 > 0.05. Thus, it can be concluded that gender does not affect the perception of whistleblowing. The simple regression equation for the hypotheses test are as follows:

Fraud Perception = 13,816 - 1,162 gender 

Whistleblowing Perception = 20,111 + 0.466 gender

The sign minus (-) or plus (+) of gender coefficients (beta coefficient) indicate that for fraud perception, the minus (-) sign, shows that men are more likely to engage in fraud than women. On the other hand, for whistleblowing perception, the plus (+) sign, shows that women are more likely to engage in whistleblowing than men.

Table 3. Hypothesis Test and Determination Coefficient

<table>
<thead>
<tr>
<th>No</th>
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<th>A constant</th>
<th>Beta Coefficient</th>
<th>t</th>
<th>Sig.</th>
<th>R^2</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gender - Fraud Perception</td>
<td>13,816</td>
<td>-1.162</td>
<td>-1.807</td>
<td>0.080</td>
<td>0.090</td>
<td>H01 received</td>
</tr>
<tr>
<td>2</td>
<td>Gender - Whistleblowing Perception</td>
<td>20,111</td>
<td>0.466</td>
<td>0.313</td>
<td>0.756</td>
<td>0.003</td>
<td>H02 received</td>
</tr>
</tbody>
</table>

Source: Data processed

Based on test results, the determination coefficient R2 (Table 3), explains that the value of R Square for fraud is 0.090, and the whistleblowing is 0.003. This value means that the variable of fraud perception influenced gender only 9%, while the rest of 91% is influenced by other variables not included in this study. Whistleblowing perception variable is influenced by gender only by 0.3%, while the remaining 99.7 % is influenced by other variables not included in this study. These results prove a very weak relationship between gender and students' perceptions of fraud and whistleblowing.
Discussion

The relationship between gender and students' perceptions of fraud.

The results of this study proved that there is no difference in the perception of fraud among male or female students. The results support the fraud triangle theory, which states that the actions of fraud are caused by factors of pressure, opportunity, and rationality. The theory of fraud triangle does not mention gender as a stimulus in the act of fraud, so fraud has nothing to do with gender. However, in terms of rationality, Cumming et al. (2015) revealed that women rationally prefer not to commit fraud than men. Cumming et al. (2015) hypothesized and proved that women are more effective in reducing the frequency and loss of fraud than men. This study supports the research of Fransiska and Utami (2019), which proves that fraud is caused by pressure, opportunity, rationality, and ability.

The results of this study do not support the research of Kray and Haselhuhn (2011), Capezio and Mavisakalyan (2015), and Barnes and Beaulieu (2014). Kray and Haselhuhn (2011) conducted an experimental study on MBA students and found that women tend to act justly and apply ethical principles compared to men. Capezio and Mavisakalyan (2015) examined the relationship between the number of female representatives on the company's board of directors and fraud. The study was conducted at some companies in Australia. Their results proved that the number of female CEOs on the board of directors would reduce the risk of fraud.

The relationship between gender and students' perceptions of whistleblowing.

The results of this study proved that there is no difference in the perception of whistleblowing in male or female college students. These results support the standard theory (Davis, 1996), which states that whistleblowing is morally permissible if it meets the five whistleblowing justification standards. However, Davis did not discuss whether after meeting the five standards, prospective whistleblowers would conduct whistleblowing or not. The act of whistleblowing requires enough courage for potential whistleblowers. Research by Saputra and Dwita (2018) conducted in the context of education of 122 accounting students at the University of Padang proved that men would be more likely to show whistleblowing intentions than women. They revealed that men have more courage to do whistleblowing than women. This evidence is also found by Liyanarachchi and Adler (2011) proved that when the threat of retaliation rose, male accountants are more willing to do whistleblowing than female accountants. Thus, the research of Liyanarachchi and Adler (2011) and Saputra and Dwita (2018) do not support the results of this research.

However, the results of Manafe's (2015) experimental study of strata one accounting economics students at the Universitas Kristen Artha Wacana Kupang, proved that gender does not affect someone's tendency to do whistleblowing. Similar results were found in Shawver and Clements (2014) research. They surveyed 171 professional accountants (109 men and 62 women) to provide opinions on earnings management. The results indicated that both male or female accountants have the same view that earnings management should not be done, and both intend to report if they find evidence of earnings management. Thus the results of the Manafe (2015) and Shawver and Clements (2014) studies support the results of this study.

CONCLUSION

This research proved that gender does not influence student perceptions of fraud and whistleblowing. Therefore, in the world of education, there is no need to distinguish ethical education for male students and female students. Knowledge about student experiences in the
matter of fraud and whistleblowing is beneficial for lecturers and faculty leaders because lecturers can provide treatment for students in following the learning process. Besides, the knowledge of fraud and whistleblowing can be used as a means for lecturers in addressing fraud done by the students. This knowledge protects students and other parties who engage in whistleblowing. It is also necessary to provide students with a new understanding of the meaning of fraud and whistleblowing, which does not only occur on campus but also in the daily environment and community where the students live.

This research still has many limitations; namely, first, the research questionnaire as a tool to measure the variables studied, is not yet reliable enough. Second, the number of questionnaires that were processed only met the minimum criteria, namely 35 questionnaire data. Finally, the results of this study cannot yet be generalized because it is only done to students in one Faculty and only in one university. Therefore, the interpretation of this research results must pay attention to the limited amount of data and objects studied. Further research is recommended to add more data, make a more valid and reliable questionnaire, and select more than one object of research.

REFERENCES


