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#### **Conference Paper**

# Academic Fraud Behaviour Among Students in Accounting Diploma Program: An Empirical Study in Bali

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#### **Abstract**

This study aims to find empirical evidence of the influence of self-efficacy and fraud diamond variables on academic fraud behaviour of the students in accounting diploma program in Bali. The samples used in this study are 183 respondents consisting of accounting students of diploma program from state and private universities in Bali that were willing to fill the research questionnaires. The type of data used is primary data. Hypothesis testing was conducted using multiple linear regression. The result of this study stated that the student academic fraud behaviour is simultaneously influenced by academic self-efficacy, pressure, opportunity, rationalization and capability variables. Partial test indicates that academic self-efficacy, pressure, and rationalization do not have influence on the student academic fraud behaviour, while opportunity and capability variables have positive effects on the occurrence of the student academic fraud behaviour.

**Keywords:** self-efficacy, academic fraud behaviour, capability, opportunity, pressure, rationalization

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## 1. Introduction

Significant losses in business caused by the practice of fraud that is done by business people occur repeatedly. The collapse of many world class big companies in the early 2000s that was caused by different kinds of fraud some of which involved accountants staggered the world. But now the fraud in Business world that involves accountants is no longer a staggering phenomenon because it is often revealed in many scandals happening in companies and is published by various media.

The latest data from the Association of Certified Fraud Examiners (2014) state that accounting department plays the biggest role in fraud cases in the world of work. The Fraud that is committed by accountants must be taken seriously by policy makers in education, especially the education of accounting because according to Irianto (2003),

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the involvement of accountants in various cases of fraud that occurred recently or in previous decades leads integrity of accountants to public spotlight.

Unethical behaviour in workplace is closely related to the level of academic fraud committed by a person in his youth [9]. Lawson (2004) also mentions that academic fraud done at universities is a strong predictor of the fraud in the workplace. Similar view is suggested by Becker et al. (2006) that state that the students that tend to commit academic dishonesty will tend to commit dishonesty in the workplace. Therefore, more attention to academic fraud that is committed by some students is very important because these students are future leaders [10].

Preliminary research, on academic fraud committed over 60 years ago, which was conducted by Drake (1941 in Bolin, 2004) found that 23% of students did various forms of academic fraud. Although academic fraud has been studied for years, it is now still a topic that draws great attention in education world [7] and is the headline topic at campuses around the world (Bae et al., 2015).

One case that is considered the biggest scandal that has ever found in university was the one that happened in Duke University. It involved 34 postgraduate business students that were caught doing fraud (Wright, 2007). In Indonesia, according to a survey conducted by Media Research Group in six major cities and involving 480 respondents, it is found that the majority of the students both in schools and in universities have committed academic fraud. The survey also tells that academic fraud is caused by school environment and situation of education [17].

A person's behaviour is influenced by a various factors [2] likewise, when a person commits fraud. In 1950 Cressey introduced fraud triangle, which was actually the factors that cause a person to commit fraud. The fraud triangle was also used by Becker et al. (2006) in their research on academic fraud. In 2004, Wolfe and Hermanson developed the fraud triangle by adding one factor that was called *capability*. They argued that fraud will not occur if a person does not have the capability. This theory then became known as fraud diamond.

There are many researches about diamond fraud in relation to the cheating behaviour in academic world at universities in Indonesia, one of which was carried out by Prawira and Irianto (2015) at several universities in Malang. They found empirical evidence that the students who cheated were influenced by the factors included in fraud diamond. The study, that was a development of the previous research conducted by Nursani and Irianto (2014), found that pressure, opportunity, rationalization and capability positive influence to students' academic cheating behaviour.



Since there are many researches on this matter, this research needs to be done to find new empirical evidence or the evidence that reinforce the previous research results by adding other factors. This research is the development of the research conducted by Prawira and Irianto (2015) with variable academic self-efficacy as an additional variable. This study aims to determine the effect of academic self-efficacy and fraud diamond (pressure, opportunity, rationalization and capability) on academic cheating behaviour of accounting students.

### 2. Methods

## 2.1. Population of the study and sample

The population in this research was accounting students of universities, which are located in three districts, in Bali. The sampling design used in this research is purposive sampling, and the sample was the students in semester 4. The reason for choosing these individuals was because they were assumed to have adapted well to the environment and the atmosphere of studying at a university. Another reason was most of them had not had jobs yet, this reduced differences of respondents' background. There were 210 questionnaires distributed to public and private universities in Bali which have accounting diploma program.

## 2.2. Data instruments and analysis

The data were collected with six different questionnaires that had been tested for their validity and reliability. The questionnaires were College Academic Self-Efficacy that was ever used by Ayiku (2005), and adapted from instruments made by Owen and Fromman (1988), questionnaires for measuring pressure, opportunity and rationalization, by using an instrument that has been used by Pamungkas (2015), questionnaires to measure the capability by using the instruments that had been developed by Wolfe and Hermanson (2004), and the questionnaire to measure students' academic cheating behaviour was Academic Cheating Scale that was developed by Albretch et al. (2012).

The data were analysed with descriptive data analysis to obtain an overview of delivery and return of the questionnaires, a general overview of survey respondents (age, gender, semester) and a description of construction of the research showing minimum, maximum, mean and standard deviation. To test hypothesis 1,2,3,4 and 5



that were proposed in this research, multiple linear regression analysis was conducted by using software SPSS 21.

## 3. Results and Discussions

The research instrument validity and reliability tests were done before the distribution of the questionnaires. The result of Pearson correlation test showed that the questionnaire of academic self-efficacy, fraud diamond (pressure, opportunity, rationalization and capability) and academic fraud behaviour was valid (Appendix 1). The reliability of the instrument was tested using the Cronbach Alpha coefficients. The test showed several results namely academic self-efficacy has an alpha of o.826; pressure o.87; opportunity o.918; rationalization o.961; capability o.809; and academic cheating behaviour o.983. Thus, all the variables in this study are reliable.

This study involved 183 respondents who were the accounting students from 4 universities in Bali consisting of 54 males (29.5%) and 129 females (70.5%). There were 76 respondents studying in the fourth semester and the rest of the respondents were in the sixth semester (37%). The average time that the respondents usually spend for learning is 2.8 hours a day.

The results of the classical assumption test that was processed by using SPSS 21 showed that the variables in the study were distributed normally, free from multicollinearity and heteroskedasticity. The normality test on data was done using Kolmogorov–Smirnov test. The results of the test showed that the significance of each variable was 0.327 (it is more than 0.05) so it can be assumed that the data was normally distributed. Tests on multicollinearity were indicated by the Variance Inflation Factor values of each variable, that is, academic self-efficacy 1.044; tolerance rate 0.958; pressure 1.041; opportunity 1.086; rationalization 1.053 and 1.062 ability (see Appendix 1). Glejser test conducted to reveal the problem of heteroskedasticity showed that the variables were free from heteroskedasticity.

After the regression model has passed the classical assumption test, the hypothesis in this research was tested through multiple linear regression technique using alpha  $(\alpha) = 5\%$  to assess the significance of the relationship among variables. The hypothesis test results are summarized in the Table 1:

The table shows that the adjusted value of R<sup>2</sup> is 0.112 or 11.2%. It means that the variant of the dependent variable of academic cheating behaviour is 11.2% influenced by independent variant variable academic self-efficacy, pressure, opportunity, rationalization, and capability while 88.8% is explained by other variables that is



TABLE 1. Analytica	I result of multiple line	ar regression. Dependent	Variable: Academi	r Fraud Rehaviour
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	Unstandardized Coefficients	T	Significance
	В		
Constant	22.682	2.607	0.010
Academic Self-efficacy	-0.012	-0.215	0.830
Pressure	0.047	0.363	0.717
Opportunity	0.372	2.296	0.023
Rationalization	-0.194	-1.689	0.093
Capability	0.788	4.003	0.000
$R^2$			0.136
Ajusted R <sup>2</sup>			0.112
F-test			5.587
Signifikansi F			0.000

not included in the model. *F*-test value is used to observe the relationship between independent variable with dependent variable that is 5.587 with 0.00 significance level (it is less than 0.05). This means that the variables simultaneously affect student academic cheating behaviour.

The first hypothesis states that academic self-efficacy of the accounting students has a negative effect on student academic cheating behaviour. The result of t statistical test shows that the academic self-efficacy variable has negative coefficient value of 0.215 to academic fraud behaviour with significance level of 0.830, which is higher than  $\alpha$  = 0.05. Based on this, the first hypothesis is rejected. This means that student academic self-efficacy does not affect student academic fraud behaviour. The level of student academic self-efficacy does not reflect student academic fraud behaviour. This result of the study rejects the findings of Elias' (2009); Angell (2006 in Gunawan, 2012), who states that the higher the academic self-efficacy of a person, the lower the academic fraud behaviour of that person.

The second hypothesis states that the pressure experienced by accounting students has a positive effect on student fraud behaviour. The result of t statistical test shows that the pressure variable has positive coefficient value of 0.363 to student fraud behaviour with significance level of 0.717, which is higher than  $\alpha$  = 0.05. This result does not go in line with the second hypothesis. This means that the pressure variable experienced by the student does not affect the student fraud behaviour. Big or small



pressure does not affect the academic fraud behaviour the accounting students. This result of the test on the second hypothesis rejects the findings in Becker et al. (2006), Nursari and Irianto (2014), Purnamasari and Irianto (2014), Prawira and Irianto (2015).

The third hypothesis states that opportunity affects student fraud behaviour. The result of t statistical test shows that the opportunity variable has coefficient value of 2.296 to student fraud behaviour with significance level of 0.023, which is lower than  $\alpha$  = 0.05. This result supports the third hypothesis. This means that the opportunity variable has a positive effect on the student fraud behaviour. The bigger opportunity a person has, the bigger possibility of that person to do academic fraud. A person can do academic fraud because he has an opportunity, that is an opportunity and benefits coming from other sources. This finding supports the study conducted by Albrecht et al. (2012), Becker et al. (2006), and Prawira and Irianto (2015).

The fourth hypothesis states that rationalization variable affects student fraud behaviour. The result of t statistical test shows that the rationalization variable has negative coefficient of 0.194 with significance level of 0.093, which is higher than  $\alpha$  = 0.05. The test result is not in line with the fourth hypothesis. This means that the rationalization variable does not affect the student academic fraud behaviour. Rationalization is a self-justification or a false reason for a wrong behaviour [1]. The finding indicates that justification for academic fraud behaviour does not always cause it to occur. On the other hand, even if the justification is absent a student can still commit academic fraud. This finding is inconsistent with the ones of the previous studies conducted by Becker et al. (2006), Nursani and Irianto (2014) and Prawira and Irianto (2015).

The fifth hypothesis states that the variables of ability affect the behaviour of student cheating. The result of the t statistic test shows that the fraud variable has positive coefficient equal to 0.788 with significance level equal to 0.000 smaller than value  $\alpha$  = 0.05. Test results show that the fifth hypothesis is accepted. This means that the variables affect the student's academic fraud behaviour. The greater the capability to cheat the greater the tendency of students to perform academic cheating behaviour. These findings are consistent with findings from previous studies by Wolfe and Hermanson (2004) who point out that many frauds will not occur if a person does not have the capability of the fraud. This opinion is reinforced by the results of research conducted by Nursani and Irianto (2014) and Prawira and Irianto (2015).

## 4. Conclusion, Limitations, and Implications



### 4.1. Conclusion

This study aims to find empirical evidence of the influence of self-efficacy and fraud diamond variable on fraud behaviour of the accounting students in Bali. Based on the results of the test on the hypotheses, it can be concluded that the student academic fraud behaviour is simultaneously influenced by academic self-efficacy, pressure, opportunity, rationalization and capability to do fraud variables. Partial test indicates that academic self-efficacy, pressure, and rationalization do not have influence on the student academic fraud behaviour while opportunity and capability variables have positive effects on occurrence of the student academic fraud behaviour. The findings of this study partially support and reject the findings of previous studies. This phenomenon perhaps occurs because of different location and time of the study from those of the previous ones.

The results of this study can be taken into consideration for policy makers in universities to do various efforts, which are to anticipate the academic fraud behaviour of accounting students. This is important particularly for building good characters of accounting students as the accountants of the future.

### 4.2. Limitations

The limitations of this research are: (1) Data collection through questionnaire can cause bias because the information obtained is based only on the respondents' perception. Such information may not reflect the actual condition. (2) The sample used in this study is limited to accounting students in regular program at four universities in Bali. Consequently, the results of this study cannot be generalized. (3) Based on determination coefficient value (adjusted R²) of 0.112, variant of independent variables – academic self-efficacy, pressure, opportunity, rationalization and capability – influence the dependent variable of academic fraud behaviour of 11.2% while the remaining 88.8% is explained by other variables, which are not included in research model. This means that there are other variables that need to be identified in order to know the factors that influence academic fraud behaviour of accounting students

## 4.3. Implications

The implications of this study are both theoretical and practical. Theoretically, this study contributes to knowledge development in the form of empirical evidence which



partially supports and partially rejects the results of previous research and this study also shows that the academic variables of self-efficacy, pressure, rationalization, opportunity and capability are important predictors to test student academic fraud behaviour. Meanwhile, the practical implication of this study is to reduce student academic fraud behaviour. It can be done by reducing the chances of academic cheating by improving the supervision to the students at the examination. Another thing that is also important is to improve students' awareness to maintain integrity through honest behaviour.

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