Fraud and Corruption Trigger Model Based on Perception of High School Students: A Preliminary Study

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ABSTRACT

Corruption is an enemy that must be exterminated together as it causes massive losses that can hinder the development of many countries including Indonesia. This research is aimed to fathom the causes of corruption and fraud, from a further perspective before the fraud happens, in order to prevent them from happening. The research is done towards high school students in Bandung, Indonesia, through an online survey created based on the results of several FGDs with some groups of lecturers and teachers. The result reveals 10 factors that are suspected to be the cause of fraud, 3 of which are known as the Fraud Triangle, while the other 7 are Environment, Capability, Risk, Values, Life Experience, Education from Parents, and Education from School. Model acquired from the research is named Decuple Model of Fraud.

Keywords: Fraud, Corruption, Decuple Model of Fraud

1. RESEARCH BACKGROUND

Corruption is a serious multidimensional problem ranging from politics, economics, as far as social and culture, thus making eradication of corruption a very difficult thing to do (Wijayanto & Zachrie, 2009). In fact, corruption in Indonesia is growing even more complex as time goes by. The results of the study by Pradiptyo et al. (2016) revealed that there were 803 corruption cases that had been decided by the Supreme Court during 2014-2015 with 967 defendants, with the development of the corruption database as follows:

Table 1: Development of Corruption Database

Period	2001-2009	2001-2012	2001-2013	2001-2015
No. of Cases	549	1289	1518	2321
No. of Defendants	831	1831	2142	3109

The country's losses which are caused by corruption reached 205,080.8 billion Rupiah, which were extremely significant. On the other hand, Corruption Perceptions Index (CPI) published by Transparency International (2015) shows that Indonesia was ranked 88 in 2015 with a score of 36, equal with Albania, Algeria, Egypt, Morocco, Peru and Suriname from 167 countries assessed. This rating is improved compared to 2014 and 2013. Indonesia had been ranked 114 (in 2013) and 107 (in 2014). The results of the Indonesian CPI score also

increased: 32 (in 2012), 32 (in 2013), 34 (in 2014) and 36 (in 2015) of 100 as the highest score, where the higher the number indicates a country to be perceived as less corrupt. Despite the index showing an improved situation, it does not mean that efforts to improve the condition should stop.

Various prevention efforts have been carried out, including the establishment of the Corruption Eradication Commission (namely Komite Pemberantasan Korupsi or KPK), but the findings or disclosure results of existing cases have actually shown that corruption is a complex and a long-standing matter. Therefore, it is deemed necessary to approach the problem by other means, such as through cultural approaches as well as carrying out early prevention of corruption via education at the elementary, secondary and high school level. School is an important basis for character building. The character of integrity can be honed early so that it is deeply rooted. Corruption driven by the tendency of fraudulent behavior can be minimized with a well-developed integrity character obtained through school. The aim of this research is to find out on high school students' perception on corruption, and to obtain information on their current behavior, which may become the root of future corruption behavior after they have become adults and engaged in government or businesses. The result is shaped into a model that is expected to be useful for preventing the occurrence of corruption by eliminating causative factors early.

2. LITERATURE REVIEW

2.1 FRAUD AND CORRUPTION

Fraud is defined as a deception act resulting in benefits, obtained from a person by providing false evidences or objects (ACFE, 2016). Association of Certified Fraud Examiner (ACFE, in Singleton et al., 2006) developed a *fraud* category model called the *fraud tree*, consists of 51 *fraud* schemes grouped into 3 main categories: (1) *fraudulent statements*, (2) *asset misappropriation*, and (3) *corruption*. This research is focusing more on the third *fraud* concept that covers a variety of schemes generally involving more than one party, including *unwilling* parties (Singleton et al., 2006).

Kamiński (2013) stated that the International Financial Audit Standards had specified five unique variances of fraud, which are forgery of data, "Embezzlement of property", the deletion of records of transaction, unlawful usage of accounting policies, and "Registering of apparent transactions"

The word Corruption is originated from Latin as *corruptio* or *corruptus*, brought into English as *corruption/corrupt*, French as *corruption*, Dutch as *corruptive*, and Indonesian as *korupsi*, meaning rottenness, depravity, dishonesty, bribery, and immoral (Hartiningsih, 2011). ACFE (in Albrecht et al., 2009) defined corruption as a *fraud* scheme whereby a person is abusing his/her influences in a business transaction to obtain illegal benefits contradictory to the task entrusted to the person by his/her superior. Albrecht et al. (2009) and Singleton et al. (2006) categorize corruption into 4 schemes: *Bribery scheme, Conflict of interest schemes, Illegal gratuity schemes,* and *Economic extortion schemes.*

Corruption analysis model is required to aid the understanding of the process on how corruption occurs. According to Wijayanto & Zachrie (2009), there are several models that can be used as follow:
1. *Willingness and Opportunity*

2. CDMA Model *(Corruption Discretionary Monopoly Accountability)*
3. *Cost and Benefit Analysis*
4. *Supply and Demand*
5. *Principle Agent Problem (Agency Dilemma)*

2.2 FRAUD TRIANGLE

A research by Cressey (1950, in Adon et al., 2015) raises factors that triggered *fraud* by interviewing fraudsters, with a conclusion stating that every fraud committed by the actors follows three (3) specific factors which triggers the need to cheat (*fraud triangle*), which are:

1. *Pressure*
   Incentive or pressures that cause motivation to commit fraud
2. *Rationalization/Attitude*
   Rationalisation or attitude that justifies fraud
3. *Opportunity*
   Circumstances that allow opportunities that enable the act of *fraud*

The tendency of fraud behavior arises due to the three factors above. Wells (1997, in Morales et al., 2014) further explained that the three factors are *non-shareable problem*. Albrech et al. (2009) clarifies that the interactivity between the three factors are called the *fire triangle*, an analogy representing them as *heat, oxygen,* and *fuel*, in which to extinguish the *fire*, an elimination of one of the three elements is sufficient. This study explores into the triggers of corruption fraud in high school students.

3. RESEARCH METHODOLOGY

The research is a *cross sectional* descriptive study with high school students in Bandung-Indonesia, as analysis unit. It began with organizing several Focus Group Discussions, with some groups of teachers and lecturers. The FGDs showed several factors that were often carried out by teenagers, which are suspected to be the beginning of the *fraud* mentality growth. The factors are then compiled into 29 questions used in a survey for the respondents. The questionnaire distributed by an on-line survey is using Likert scale (smallest score 1, largest score 10). The online surveys were conducted toward students ranging from junior high schools, senior high schools and vocational high schools or of equal levels, for 6 months starting May 2018 to October 2018.

The research population was all active high schools students in the city of Bandung. *Snowball* technique was used as sampling method. Question order is randomized, in the hopes for more unbiased, objective answers. Moreover, a wider Likert range also meant for less subjective answers, as students would not tend to fill in idealistic answers due to the lack of options. The range is also appropriate as it is used often by the students for their casual comparison between items or conditions.

4. RESULT AND DISCUSSION

According to the result of online survey, 214 questionnaires were fully answered and completed, whereby 79.9% correspondents are female students and 20.1% are male students.

Recapitulation result for every question item in the survey are shown below:

Table 2: Scoring Result Recapitulation per Question Item

No	Statement/Question	AV
1	In a school, during a test, the questions are unbelievably difficult. Your friends were not able to cheat due to strict surveillance. You, on the other hand, are quite proficient in cheating. The probability of you cheating is	2.9860
2	When you were in the primary school, when you parents wanted to ask for an errand, and you don't want to/lazy/disobedient, then the probability of your parents would give you an incentive	5.4065
3	During your primary school days, the probability of you getting your incentive up front before doing your parents' errant	4.7523
4	In a particular school, the punishment for cheating is very light. If you are a student in that school, and the invigilator are not paying attention to you, the probability of you cheating	3.3738
5	In a particular school, if you are caught cheating, the consequence is expulsion. If you are a student in that school, and the invigilator are not paying attention to you, the probability of you cheating	1.8692
6	In a particular school, the invigilator will not care if you cheat. If you are a student in that school, the probability of you cheating	4.1028
7	In a particular school, examination is not overseen by an invigilator. During an exam, you are not able to answer the questions, but no one else cheats at the moment. The probability of you cheating	3.4393
8	In a particular school, every single one of the student cheats during an exam. You are not able to answer the questions, and your parents want you to get good grades in this exam. The probability of you cheating	4.1355
9	In your opinion, cheating is a natural thing to do	3.3037
10	If the cafeteria's surveillance is bad, the probability of you not paying for your food	1.2103
11	If the cafeteria's surveillance is bad, but the punishment for stealing is very severe in your school, the probability of you not paying for your food	1.1542
12	If the cafeteria's surveillance is bad, but almost every one of the students does not pay for their food despite the severe punishment, the probability of you not paying for your food	1.2336
13	If the cafeteria's surveillance is bad and you have no money and are very hungry, but almost every one of the students does not pay for their food despite the severe punishment, the probability of you not paying for your food	1.4813
14	Currently, the probability of you passing through a red light when there are no traffic police around	1.8224
15	If you are waiting a traffic light, and a lot of people passed through the red light at that point of time, the probability of you following them	1.8972
16	If you are waiting for a traffic light, and a lot of people passed through the red light at that point of time, the probability of you following them despite the presence of traffic police	1.3364
17	If you got caught by a traffic police, then the probability of you giving bribe instead of paying fine	2.9907
18	You got caught by a traffic police. Because you heard that a lot of people give	2.9346

	bribes, you follow their example instead of paying fine	
19	If you got caught by a traffic police, then the probability of you giving bribe instead of paying fine because you are currently in a hurry and heard that a lot of people do it	3.2897
20	While queuing for food or a show, the probability of you queuing properly despite no one takes charge for the queue	2.6682
21	In a hurry and without anyone taking care of the queue, the probability of you queuing properly	3.1636
22	In a hurry and without anyone taking care of the queue, when there are many who is not queuing properly in your line, the probability of you queuing properly	3.5093
23	If you witness a corruption doer in TV, you thought that it is common occurrence as corruption is likely to happen	2.0374
24	If a corruptor is shown on TV, you will hate this person	2.4206
25	In the current condition in this current time, according to news sources, the probability that you will be involved in corruption when you have a position in the government	1.4673
26	In your opinion, how great is your faith towards God, which assures your behavior to not act on the immoral acts on the previous questions	1.2944
27	In your opinion, how well is your education given by your parents affects your decision to not act on the immoral acts on the previous questions	1.4486
28	In your opinion, how well is your education given by your teachers and school affect your decision to not act on the immoral acts on the previous questions	1.9720
29	In your opinion, how well is your friends and surroundings affects your decision to not act on the immoral acts on the previous questions	2.5888

The result stated in the Table 2 reveals many findings, which are shown below.

4.1 RELATED TO QUESTIONS REGARDING "CHEATING IN EXAM"

Table 3: "Cheating in Exam" Questions Result

No.	Question Number	Average Score
1	1	3
2	4	3.37
3	5	1.87
4	6	4.1
5	7	3.4
6	8	4.1

The result shows that if an opportunity exists yet the punishment is lenient, then students will make use of the opportunity (Question 4 & 7). The probability of cheating increases when the surroundings are doing the same, as it suggests that as long as the others are doing it, the student can do it too (Question 6), especially if pressure is present (Question 8). The opposite happened if there exist high risk and consequence if students are caught cheating (Question 5). As an addition, students with proficiency and ability in cheating would make use of them despite a small opportunity window (Question 1).

4.2 RELATED TO QUESTIONS REGARDING "NOT PAYING FOR FOOD"

Table 4: "Not Paying For Food" Questions Result

No.	Question Number	Average Score
1	10	1.21
2	11	1.11
3	12	1.23
4	13	1.48

The result shows if an opportunity exists, then students will make use of it (Question 10). However, if a high risk exists, such as heavy punishment, the tendency to use the opportunity decreases (Question 11). Despite the high risk, the presence of companions doing the deed, they would tend to do the same (Question 12) or even do more if no one else does it but there are zero risk involved. The probability of not paying increases severely if there is pressure which encourages them to do so (Question 13).

The conclusion is very similar to the "Cheating in Exam" result, but the average score is smaller as not paying for food is deemed to be wrong since the students were little, and does not affect their own goal of finishing their education.

4.3 RELATED TO QUESTIONS REGARDING "NOT ADHERING TO TRAFFIC LAWS"

Table 5: "Not Adhering to Traffic Laws" Questions Result

No.	Question Number	Average Score
1	14	1.8
2	15	1.9
3	16	1.3
4	17	2.9
5	18	2.9
6	19	3.2

The result shows that if an opportunity exists, then the student would use the opportunity (Question 14). The chance would increase if there is no surveillance (Question 15), and would decrease if surveillance does exist (Question 16). A saddening condition can be seen when they got caught, as they would prefer to provide bribe towards the authority, possibly caused by the mindset that it is common in their community to do bribe when the opportunity is present (Question 17 and 18). This probability will increase if a pressure exists (Question 19)

The conclusion is similar to "cheating" questions result, with smaller average score, but greater than "not paying", probably due to similar situation with the "cheating", as it is not emphasized that not adhering to traffic laws are bad, like "not paying".

4.4 RELATED TO QUESTIONS REGARDING "QUEUING ETIQUETTE"

Table 6: "Queuing Etiquette" Questions Result

No.	Question Number	Average Score
1	20	2.7
2	21	3.1
3	22	3.5

The result shows that similar conclusion can be taken from the answers, whereby if there are no surveillance i.e. greater opportunity, then they would tend to queue less orderly (Question 20), and if pressure is present, the tendency is even greater (Question 21), especially if their surroundings are doing the same (Question 22).

4.5 RELATED TO COMMON QUESTIONS REGARDING ROOT CAUSE OF CORRUPTION

Table 7: "Root Cause of Corruption" Questions Result

No.	Question Number	Average Score
1	2	5.4
2	3	4.75
3	9	3.3
4	17	2.9
5	23	2.0
6	24	2.4
7	25	1.46
8	26	1.29
9	27	1.44
10	28	1.99
11	29	2.59

From the table, the score for no. 2 and 3 is quite high. This shows that since the students were little, they are used to "transactional" motive in order to do their responsibilities. This mindset would be dangerous if the habit is deemed as normal, as it would happen when they take office in an organization. Probably, their perception shaped by their current situation makes them thing that a bad act can be done just because it is normal (Question 9 and 17).

Their opinion on corruptor does not seem to be out of the ordinary, or probably even deemed to be common, as the score for Question 24 is not high. However, it is rather contradictory to Question 23's score. This may show their confusion towards the current condition related to corruptors. On one side, it is not reasonable and should not be done (perhaps from the education they had gotten), but on the other hand what they see and heard (i.e. experience) daily, in reality, is that those immoralities happened often. This observation plants a desire for corruption in the future despite a score that can be deemed as not high (Question 25).

Interestingly, from the result, they assumed that the influence of their faith towards God which allows them to stay away from corruption seeds are not strong despite the influence existing. The score for that influence (Question 26) are smaller than education given from parents, and even smaller compared to education given from teachers in school (Question 27 and 28). The greatest influences are actually friends and environment where they live (Question 29).

Several things that may influence the perception of high school students on *fraud* and corruption are:
1. Student's social and cultural regional background
   High school students' daily routines, which are highly affected by stories or education from both parents and school, would be rich of local cultures and circumstances. A folklore named "The Mousedeer" would plant *fraud* and corruption seeds unintentionally because the story tells about the lying, sly and elusive mousedeer. The story "Bandung Bondowoso" would also urge students to achieve their goals through instant means, hence the urge to do *fraud* and corruption. These stories would shape the mindset of high school students.
2. Student's own life story
   Pressures taken may force a student to lie about their spending when reporting them to parents. This behavior would become worse in the future. A 'flight' behavior during a conflict, which will encourage the student to lie or to accuse someone else to get out of troubles, will also encourage *fraud* behavior, as the student would try everything in his/her power to get what he/she does not. Cheating in school is also an example of a bad behavior.

3. Values that is adopted by the student
   Most high school student has been educated on which actions are immoral and illegal, and the ones that are fit to the society's norm. Students had been able to differentiate rights from wrongs due to religions, moral, and ethics taught since they are younger. Students are hoped to adopt their good upbringings into their daily lifes.

4. Public's opinion which will shape the student's perspective on an issue
   Mass media such as newspaper, TV magazines, radio, and social media would be a medium to shape opinions on a specific issue. A sensational story-telling exposure in long period of time would lead the public to agree on an opinion which is not able to be accounted for. *Fraud* and corruption issues which are exposed in social media would also change student's perspective on them.

Life experiences and values that are adopted can affect high school student's perspective on *fraud* and corruption. As such, high school institutions hold an important part as a vessel which can guide the students to adopt good values against *fraud*.

High school students commonly understand that *fraud* and corruption are wrong and unforgivable, seeing that they are notoriously immoral and harmful. This proves high school student's awareness of the effect of *fraud* and corruption. *Fraud* and corruption is seen as a horrible act, remembering the culprit would cause severe disturbances in public. High school students believe that a heavy punishment is important as a deterrent, which would indirectly prevent more *fraud* and corruption.

There are many *fraud* and corruption cases which shows the negative consequences in a form of injustice towards public importance. *Fraud* and corruption happened due to the lack of surveillance, the increase of economic pressure, the lack of law enforcements, improper rationalization, and egoism. A weak self-character would cause the person to stop growing and be lazy, which ultimately would force them to try to find a shortcut such as *fraud* and corruption to fulfill the person's wishes.

From the perception of students, a model can be created, namely DECUPLE MODEL OF FRAUD which can be used as a basis for future researches. The model is shown in Figure 1 below.

Figure 1: Decuple Model of Fraud
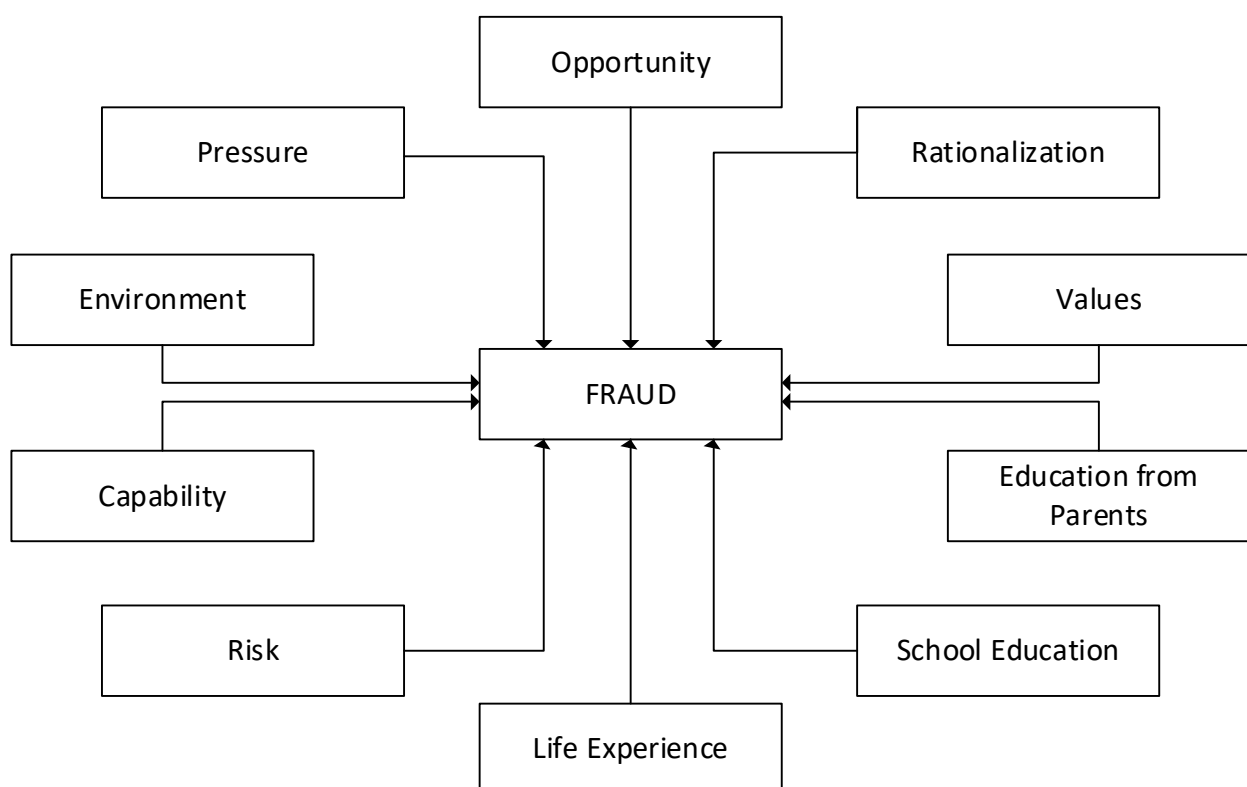
5. CONCLUSION

Based on the perceptions of high school students in this initial study, it was concluded that Opportunity, Pressure, and Rationalization factors in the Fraud Triangle model did affect the occurrence of fraud. However, there exist other factors that also directly or indirectly contribute towards fraud occurrence, which are Environment, Capability, Risk, Values, Life Experience, Education from Parents, and School Education. These causal factors can be classified further and distinguished into two groups, one consists of factors that **exist when fraud or corruption occur** (Opportunity, Pressure, Rationalization, Environment, Capability, Risk) while **the other consists of factors that existed long before the fraud occurred** (Values, Life Experience, Education from Parents, and Education at school). It is hoped that prevention of fraud and corruption can be done earlier, not just by current

repressive or preventive methods such as arrest and good internal control prevention respectively, but also via earlier preventive approaches through educational and cultural means. The model obtained from this study is named Decuple Model of Fraud.

Research Limitation:

Scores obtained from the general average answers tend to result in relatively small values between the ranges of 1-10. Initial observation on some student interviews showed that there are several cases where some answered not based on actual situation but the normative ideal conditions that should occur. This phenomenon is similar to those conditions on student when answering test questions at school. Some others answered in dishonest manner, where it was surprisingly found out that there were "instructions" from teachers for the students to give normative answer that might not reflect the reality. Eliminating those factors from the respondent answers is found quite difficult, thus those results were still accounted in averaged calculation, resulting in lower average score while still supports the conclusions that has been previously elaborated.

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