

A Study on Academic Dishonesty and Moral Reasoning

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Abstract

Academic dishonesty in the form of cheating and plagiarism among university students has been a prevalent issue. This study investigates the role of moral reasoning as a moderator of fraud risk factors (Fraud Triangle - pressure, opportunity, and rationalization) on academic dishonesty. The data were collected through a survey of 178 undergraduate accounting students in one public university in Indonesia. The result of the partial least squares structural equation modeling analysis revealed that pressure, opportunity, and rationalization directly and positively affected academic dishonesty. The structural model was also examined across two groups based on the level of moral reasoning (Group 1: individuals with low moral reasoning; Group 2: individuals with high moral reasoning). The results showed that the pressure, opportunity, rationalization – academic dishonesty model remained invariant between the groups, a new finding contributed to the literature on academic dishonesty and the moderating effects of moral reasoning. The results of the study also suggest that university should uphold academic integrity by creating an environment where academic dishonesty is unacceptable and reduce the opportunity to commit dishonest acts because everybody might commit such acts regardless of their morality.

Keywords: academic dishonesty; fraud triangle; moral reasoning

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INTRODUCTION

Academic dishonesty is a prevalent issue in higher education and has emerged as one of the most researched aspects of education for some decades (McCabe and Trevino, 1997; McCabe, Trevino, and Butterfield, 2001; McCabe, Butterfield, and Trevino, 2006; Boyle, Boyle and Carpenter, 2016). In accordance with the review conducted by McCabe et al. (2001), students' cheating has increased significantly in the last 30 years. In the US, 56% of graduate business students admitted to engaging to cheating (McCabe et al., 2006). Further, 41% of Australian university students admitted to cheating and 81% admitted to plagiarism (Marsden, Carroll, and Neill, 2005). Moreover, a study in Indonesia setting also found a relatively similar number where 77.5% of university students admitted to committing academic dishonesty acts (Winardi, Mustikarini, Anggareini, 2017). These findings asserted that academic dishonesty is on the rise.

The trend of academic dishonesty rises significantly in the digital age. With the help of technology, students have broad access to the internet, making it possible for them to copy someone else's

idea, paste it into their paper, and give improper credit to the sources. Thus, plagiarism detection application is widely used by various universities (Scanlon and Neumann, 2002).

There is no exact definition of what academic dishonesty is. The term is commonly related to intentional action to obtain desired academic results by violating academic policy. This dishonest action can be defined in all forms of cheating, such as copying others' idea work without acknowledging the source and claim it as one's own ideas, cheating on a test in any ways (for example, using crib notes on test), and using unauthorized assistance in assignments or tests (McCabe & Trevino, 1997; Lewellyn & Rodriguez, 2015).

The problems of academic dishonesty have caused some significant concerns due to their intensity and their possibility to lead to the degradation of academic quality for both students and institutions. Furthermore, some researchers argued that academic dishonesty will affect one's professional career (Crown & Spiller, 1998; Nonis & Swift 2001; Harding et al. 2003). Students who commit any unethical behaviors

during their academic careers are more likely to do similar things in their workplace.

As stated earlier, the topic of academic dishonesty has been greatly investigated. Most studies focus on the prevalence, determinant factors, techniques, and ethical judgment (West, Ravenscroft, & Shrader, 2004; McCabe et al., 2006; Becker, Connolly, Lentz, & Morrison, 2006; Jung, 2009; Comas-Forgas & Sureda-Negre, 2010; Choo & Tan, 2015). Most of the studies also had similar factors associated with academic dishonesty.

Student's behavior and pressure factors are found to be associated with academic dishonesty. Bad time management, pressure for a better grade, and assignment-load are some driving factors to commit academic dishonesty (Ameen, Guffey, & McMillan 1996). While the minimum oversight of teachers for students' assignments, open internet sources, and the lack of penalties imposed on cheating provide opportunities by the students to engage in dishonest behavior (Guo, 2011; Smith, Davy, Rosenberg, & Haight, 2002). Students then justify their actions by rationalizing that there is an unclear academic policy and feels that no one gets hurt with their actions (Becker et al., 2006; Guo, 2011).

Those three main driving factors (pressure, opportunity, and rationalization) that motivate someone to commit dishonest acts are similar to the factors in the prominent theory of the "Fraud Triangle" within a business setting. Various researchers use this theory as a guide to develop survey questions and found that pressure, opportunity, and rationalization are the significant determinants of academic cheating (Lewellyn & Rodriguez, 2015). Several studies found that pressure, opportunity, and rationalization are the significant determinants of academic cheating (Becker et al., 2006; Lewellyn & Rodriguez, 2015; Choo & Tan, 2015).

Furthermore, the Fraud Triangle theory contended that fraud is likely to occur if pressure, opportunity, and rationalization are present altogether. This theory is used to explain the cause of fraud in a business environment before Becker et al. (2006) and Choo & Tan (2015) used this model to explain the same phenomenon in the academic setting. The pressure is something that motivates or acts as a perceived incentive by students to commit academic dishonesty. It may emerge from an internal and external factor, for example, pressure from parents for better grades and competition among students (McCabe 2001). While opportunity represents the possibility of committing dishonest behaviors without being caught due to weakness in control and/or oversight, as perceived by the perpetrators (Boyle et al., 2016), particularly in homework assignments in which teachers could not oversee the process, thus, it provides the opportunity for students to cheat (Swift & Nonis, 1998). Lastly, rationalization refers to justification and means to neutralize any unethical behaviors (Michaels & Miethe, 1989). Thus, cheating would be more likely to occur if students perceived pressure and opportunity to get rid

of being caught then justify the unethical behavior. However, these factors only consider situational factors, while some argued that dishonest behavior is also influenced by individual factors, particularly ethical judgment (McCabe et al., 2001; Jung, 2009).

Some previous researches investigated the three Fraud Triangle factors among the students when they make some ethical judgments that were driven by moral reasoning. Several studies found that the level of an individual's moral reasoning affected their ethical ability to resolve ethical dilemmas (Welton, Davis, & LaGroune, 1994; Liyanarachi and Newdick, 2009). The individual will behave differently according to their levels of moral reasoning. An individual's morality will affect his/her propensity to commit unethical acts. Thus, this study attempts to expand the literature about the fraud triangle to explain academic dishonesty using moral reasoning as a moderator variable. The current study is perhaps the first to study the interaction effects of the moral reasoning on academic dishonesty and between risk factors-academic dishonesty.

Moral reasoning is associated with the cognitive processes of an individual before making any ethical decisions (Kohlberg, 1969, as cited in McPhail and Walters, 2009). There are three levels of cognitive moral development, starting from pre-conventional, conventional, to post-conventional. Each individual will go through these processes. An adult will reach the highest level and capable of applying moral reasoning to universal principles (Forte, 2004). This highest level can be achieved if actions are taken based on moral principles. When someone used general moral principles to determine whether an action is ethical or unethical, it can be said that he/she has reached full moral development.

The level of moral reasoning is associated with the maturity level of an individual. The higher an individual's level of moral reasoning and the higher the stage of an individual's morality, they are more likely to do "good thing" (Kohlberg, 1984; Rest, 2000). Thus, individuals with higher moral reasoning levels will be more likely not to engage in any unethical conduct (i.e. academic dishonesty) compared to individuals with lower levels of reasoning.

METHOD

Sample and data collection procedures

The purpose of this study was to examine the fraud risk factors on academic dishonesty across different levels of moral reasoning. Figure 1 below shows our research model:

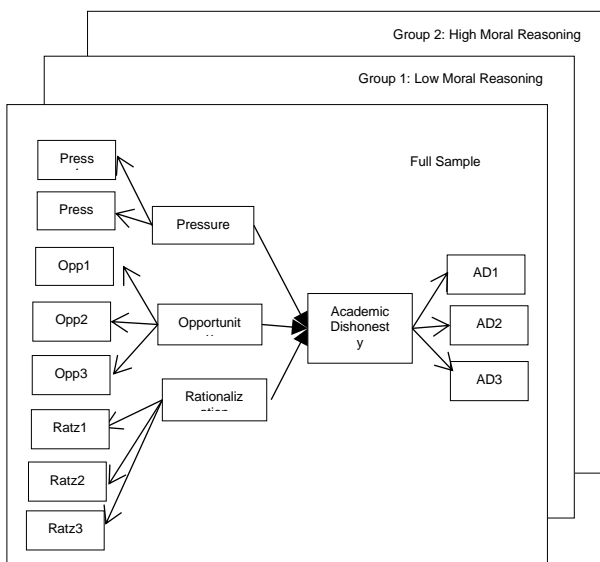


Fig. 1. The theoretical model of the study. It represents the relationships among pressure, opportunity, rationalization, and academic dishonesty. The model will also be examined across two groups to investigate the moderating effect of moral reasoning

To achieve the study objectives, this study employed a questionnaire survey method. The respondents were the accounting students (from the 1st year to the 4th year of study) at a public university in Indonesia. The questionnaires were self-administered to students during class time. The researcher clearly highlighted that the responses would be treated with a high level of confidentiality and would be used only for academic purposes.

A total of 187 questionnaires were returned and 9 of them had some missing data. As a result, the final sample which consisted of 178 usable responses were received. The vast majority of respondents were between 18-20 years old (65%), were predominantly female (73%), and across various levels of studies (i.e. sophomore, intermediate, and final year). In addition, 62% of respondents actively join student associations, ranging from one to three associations.

Research Instrument

Each theoretical construct was measured with multiple items and rated on a five-point Likert scale. In order to ensure the internal consistency of measurement, a Composite Reliability coefficient was calculated for each scale. The questions related to pressure, opportunity, and rationalization, the participant used a 5-point rating scale ranging from (1) strongly disagree, (2) disagree; (3) neutral; (4) agree; and (5) strongly agree.

Pressure measurement was adapted from Becker et al. (2006) and Boyle et al. (2016). Some examples of this item were: pressure to obtain high grades and inability to achieve it without cheating. Opportunity measurement was adapted from McCabe & Trevino (1997) and Boyle et al. (2016). Some examples of the

items were: lack of monitoring and control of cheating behavior in the classroom by the faculty and free access to lecture materials due to technology. Finally, rationalization measurement was adapted from Davis et al., (1992), Becker et al., (2006), and Boyle et al. (2016). Some examples of items that rationalize cheating were: the benefit of academic dishonesty outweighs the consequences of getting caught and academic dishonesty is perceived as an acceptable behavior because many other students do it.

Moreover, items related to academic dishonesty consisted of nine behavior items adapted from McCabe & Trevino (1997). The participants were asked to indicate whether they ever engaged in the dishonest acts by using a 5-point rating scale ranging from (1) never; (2) seldom; (3) sometimes; (4) often; and (5) always. Some examples of dishonest actions were copying others' works and turn it in as their own works and cheating during exams using all means.

Meanwhile, moral reasoning was assessed using Rest's (1979) Defining Issues Test (DIT). We employed DIT consisting of three scenarios that the participants have never encountered. They were asked to read and rate ethical dilemma situations using several options: very not important, not important, neutral, important and very important. The options were based on 12 considerations that reflect reasoning from Stages Two to Six. Then, for each scenario, they ranked the top four considerations. The P score on the DIT involved the determination of the four top considerations based on Kohlberg's (1969, cited in McPhail and Walters (2009)) Stages Five and Six. Two groups of moral reasoning levels (low vs. high) were created using a median split and then used to examine the moderating role of this variable.

Data Analysis

To test the hypotheses, we employed PLS-SEM using SmartPLS (v. 3.2.8) to assess measurement and structural models with a two-step approach: (1) validation of the outer models, and (2) examination of the inner model (Chin, 2010). The structural model was also examined across the moral reasoning groups through multi-group permutation tests (Henseler, Ringle, & Sinkovics, 2009).

Hypotheses in this study were:

- H1a.** Pressure positively affects academic dishonesty
- H1b.** Opportunity positively affects academic dishonesty
- H1c.** Rationalization positively affects academic dishonesty
- H2.** The relationship between pressure, opportunity, and rationalization was stronger for individuals with low moral reasoning than for individuals with high moral reasoning.

RESULTS AND DISCUSSION

Respondents' Demographic Data

Table 1 provides a summary of the demographic information of the respondents. The respondents were

comprised of accounting students from various academic years (i.e. sophomore, intermediate and final year).

Table 1. Sample Demographic

Variable	Category	N	Valid %
Age	< 18	1	0.01
	18 – 20	116	0.65
	21 – 23	60	0.34
	23 and above	1	0.01
Gender	Male	48	0.27
	Female	130	0.73
Cohort	Semester 3 (Year 2)	66	0.37
	Semester 5 (Year 3)	51	0.29
	Semester 7 (Year 4)	55	0.31
	> Semester 7 (> Year 4)	6	0.03
Joining Student organization?	Yes	111	0.62
	No	67	0.38
Number of the student organizations	1	68	0.61
	2	35	0.32
	>3	8	0.07

Outer model analysis

The internal reliability for the pressure, opportunity, rationalization, and academic dishonesty constructs were established as composite reliability values were above the lower limit of 0.60 (Hair, Hult, Ringle, & Sarstedt, 2017). The reliability indicator was established as all outer loadings were higher than 0.70 (Table 2). The convergent validity of the constructs was

also fulfilled with AVE values above 0.50. Finally, the discriminant validity was verified, as the confidence intervals for the heterotrait-monotrait ratio (HTMT) of the correlations between the three reflective constructs were lower than 0.85.

Table 2 - Results of the reflective construct assessments

Latent Construct	Indicator	Outer Loading	Composite Reliability	Average variance extracted (AVE)
Pressure	Press 1	0.84	0.791	0.655
	Press 1	0.778		
Opportunity	Opp1	0.803	0.828	0.707
	Opp2	0.877		
Rationalization	Ratz1	0.831	0.842	0.639
	Ratz2	0.799		
	Ratz3	0.767		
Academic Dishonesty	AD1	0.874	0.902	0.755
	AD2	0.879		
	AD3	0.853		

Inner model analysis

There were no collinearity issues among the predictor constructs, as all VIF values were below 5 (pressure to academic dishonesty = 1.431; opportunity to academic dishonesty = 1.153; and rationalization to academic dishonesty = 1.353) (Hair et al., 2017). The results, as presented in Table 3, show that pressure, opportunity, and rationalization were positively and significantly related to academic dishonesty supporting H1a, H1b, and H1c.

Table 3 - Path estimates of the inner model

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	p-values
Pressure -> Academic Dishonesty	0.133	0.134	0.070	1.895	0.059*
Opportunity -> Academic Dishonesty	0.254	0.253	0.060	4.238	0.000***
Rationalization -> Academic Dishonesty	0.330	0.339	0.081	4.053	0.000***

* $p < 0.1$, ** $p < 0.05$, ***

$p < 0.01$

Multi-group analysis

The structural model was cross-validated across two moral reasoning groups using multi-group permutation tests (Henseler et al., 2009). Despite several differences in terms of significant path estimates

between the two groups, as indicated in Table 4, the multi-group permutation tests (p -value) show no significant differences between them on any of the paths. This result indicates that moral reasoning does not moderate the relationships among pressure, opportunity, rationalization, and academic dishonesty (Hair et al., 2017). Thus, H2 is not supported because

pressure, opportunity, rationalization, and academic dishonesty did not produce significantly different results between the two groups.

Table 4 - Multi-group analysis result

Path	Grp 1	Grp 2	Grp 1 vs
	(Low) N = 96	(High) N = 82	Grp 2
	β	B	p-value
Pressure -> Academic Dishonesty	0.040	0.219	0.200
Opportunity -> Academic Dishonesty	0.317	0.212	0.384
Rationalization -> Academic Dishonesty	0.362	0.307	0.725

Note β = Path coefficient

Discussion

The data collection included respondent characteristics: age, gender, cohort, and the number of student organizations they join in, as presented in Table 1. Most respondents were between 18-20 years old. They were not evenly distributed in terms of gender in which the number of female students (73%) exceeded the male students (27%).

Based on Table 3, the result is consistent with the Fraud Triangle theory in which pressure, opportunity, and rationalization affect academic dishonesty (Becker et al., 2006; Lewellyn & Rodriguez, 2015; Choo & Tan, 2015) and provide evidence for Indonesia context. External pressures may be difficult to reduce, particularly from parents, peers, and scholarship committees. However, pressure from internal can possibly be controlled by the lecturers. The pressures encompass students' perceived incapability of achieving their expected grades without cheating and time availability to complete all assignments. Therefore, in the classroom, lecturers may emphasize the importance of comprehension of each material rather than simply aiming for high grades.

Among the three factors, the opportunity is the most controllable factor. An opportunity exists when the university does not take serious action in handling dishonest behavior. For instance, if they have a weak system, lacking supervision during exams, and imposing non-strict sanctions on academic violations. Therefore, the university should establish a suitable environment that limits students from committing dishonest behavior. For instance, it should enforce strong punishment and strengthen supervision during the exam.

With regard to rationalization, students tend to justify their unethical acts and manifest themselves further in dishonest behaviors. The university must clearly state its honor codes and share them with the entire university members. It may reduce the students' ability to rationalize that cheating is acceptable because everyone does the same (Becker et al., 2006). In the classroom context, ethics-related messages should be

embedded in each course and shared using the course's syllabus.

This study also provides a new theoretical contribution by examining to what extent the students' moral reasoning (measured by DIT) influences the relationships among pressure, opportunity, rationalization, and academic dishonesty. Examining the structural model across two groups, it is initially predicted that the structural relationships among the constructs would be stronger for students with low moral reasoning compared to students with high moral reasoning. However, the PLS-SEM multi-group analysis failed to prove that moral reasoning can act as a moderator variable, indicating that moral reasoning does not strengthen the relationships between pressure, opportunity, rationalization, and academic dishonesty.

This result demonstrates that even individuals with a high level of morality might commit dishonest acts. The general assumption is that unethical actions could occur in the absence of morality. However, academic dishonesty could occur even among individuals who value morality.

This finding raises the question on why good people do bad things. A study conducted by Bersoff (1999) and Gino (2015) found even individuals who value morality could do unethical acts when they are presented with an opportunity to cheat. They do not behave consistently in a different situation regardless of their level of morality. They might perceive themselves as honest people and utilize some mechanisms that allow them to engage in a certain number of unethical acts while maintaining their positive self-concept (Mazar, Amir, & Ariely, 2008). It implies that morality is changing and flexible instead of representing a stable trait that characterizes an individual. Furthermore, individuals might fail to restrain the temptation to commit some unethical acts or encounter some dilemmatic moral issues when making decision (Gino, 2015). Therefore, students who consider themselves as honest people and uphold morality might also commit academic dishonesty within a certain limit when they are presented with some opportunities, though they maintain positive views of themselves.

CONCLUSION

This research contributes a better understanding of how to understand and control academic dishonesty. The results also demonstrate an approach to examine a structural model with multiple predictors of performance under moderating conditions, providing a holistic integrated model of academic dishonesty. More importantly, it indicates that the moderating effect of moral reasoning remains inconclusive.

With regard to the practical contribution, the university should uphold academic integrity by creating an environment where academic dishonesty is absolutely unacceptable and reduce the opportunity to commit dishonest actions. The university may organize some workshops or training in an anti-academic

dishonesty program for new students to create awareness about academic dishonesty.

In terms of limitation, the sample of this study only included the students in one public university in Indonesia; thus, it is possible that the environmental factors that are unique to this university have influenced these students differently from other students in other universities.

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REFERENCES

- Ameen, E. C., Guffey, D. M., & McMillan, J. J. (1996). Accounting student's perceptions of questionable academic practices and factors affecting their propensity to cheat. *Accounting Education*, 5(3): 191-205.
- Becker, D., Connolly, J., Lentz, P., & Morrison, J. (2006). Using the business fraud triangle to predict academic dishonesty among business students. *Academy of Educational Leadership Journal*, 10(1), 37-54.
- Bersoff, D. (1999). Why good people sometimes do bad things: motivated reasoning and unethical behavior. *Personality and Social Psychology Bulletin*, 25(1): 28-39.
- Boyle, D. M., Boyle, J. F., & Carpenter, B. W. (2016). Accounting student academic dishonesty: What Accounting faculty and administrators believe. *The Accounting Educator's Journal. Special Edition*: 39-61.
- Chin, W. W. (2010). How to write up and report PLS analyses. In V. E. Vinzi, W. W. Chin, J. Henseler, & H. Wang (Eds.). *Handbook of partial least squares: Concepts, methods and applications* (pp. 655-690). Berlin: Springer-Verlag.
- Choo, F., & Tan, K. (2015). The effect of fraud triangle factors on students' cheating behaviors. *Advances in Accounting Education*, 205-220. [http://dx.doi.org/10.1016/S1085-4622\(08\)09009-3](http://dx.doi.org/10.1016/S1085-4622(08)09009-3).
- Comas-Forgas, R. & Sureda-Negre, J. (2010). Academic plagiarism: Explanatory factors from students' perspective. *Journal of Academic Ethics*, 8, 217-232. doi: 10.1007/s10805-010-9121-0
- Crown, D. F & Spiller, M. S. (1998). Learning from the literature on collegiate cheating: A review of empirical research. *Journal of Business Ethics*, 17: 683-700.
- Forté, A. (2004). Business ethics: A study of the moral reasoning of selected business managers and the influence of organizational ethical climate. *Journal of Business Ethics*, 51, 167-173.
- Gino, F. (2015). Understanding ordinary unethical behavior: why people who value morality act immorally. *Current Opinion in Behavioral Sciences*, 3, 107-111.
- Guo, X. (2011). Understanding student plagiarism: an empirical study in accounting education. *Accounting Education*, 20(1), 17-37.
- Henseler, J., Ringle, C. M., & Sinkovics, R. R. (2009). The use of partial least squares path modelling in international marketing. *Advances in International Marketing*, 20, 277-319.
- Jung, I. (2009). Ethical judgments and behaviors: Applying a multidimensional ethics scale to measuring ICT ethics of college students. *Computers & Education*, 53, 940-949.
- Kohlberg, L. (1984). The psychology of moral development: The nature and validity of moral stages (Essays on moral development, Volume 2). San Francisco, US; Cambridge, UK: Harper & Row.
- Harding, T.S., Passow, H. J., Carpenter, D. D., & Finelli, C. J. (2003). Paper presented in the 33rd ASEE/IEEE Frontiers in Education Conference. November 5-8, 2003, Boulder, CO.
- Lewellyn, P. G., & Rodriguez, L.C. (2015). Does academic dishonesty relate to fraud theory? A comparative analysis. *American International Journal of Contemporary Research*, 5(3), 1-6.
- Liyanarachi, G. & Newdick, C. (2009). The impact of moral reasoning and retaliation on whistleblowing: New Zealand evidence. *Journal of Business Ethics*, 89(1), 37-57.
- Mazar, N., Amir, O., & Ariely, D. (2008). The dishonesty of honest people: A theory of self-concept maintenance. *Journal of Marketing Research*, 45(6), 633-644.
- McCabe, D., & Trevino, L. K. (1997). Individual and contextual influences on academic dishonesty: A Multicampus investigation. *Research in Higher Education*, 38(3), 379-396.
- McCabe, D., Butterfield, K. D., & Trevino, L. K. (2001). Cheating in academic institutions: a decade of research. *Ethics and Behavior*, 11(3), 219-232.
- _____. (2006). Academic dishonesty in graduate business programs: prevalence, causes, and proposed action. *Academy of Management Learning & Education*, 5(3), 294-305.
- McPhail, K. & D. Walters, (2009). *Accounting and Business Ethics: An Introduction*. London and New York: Routledge.
- Michaels, J. W & Miethe, T. D. (1989). Applying theories of deviance to academic cheating. *Social Science Quarterly*, 70(4), 870-885.
- Nonis, S. & Swift, C. O. (2001). An examination of the relationship between academic dishonesty and workplace dishonesty: A multicampus investigation. *Journal of Education for Business*, 77(2), 69-77.
- Rest, J. R. (1979). *Development in judging moral issues*. Minneapolis, US: University of Minnesota Press.
- Rest, J. R. (2000). A Neo-Kohlbergian approach to morality research. *Journal of Moral Education*, 29(4), 381-396.

- Scanlon, P. M., & Neumann, D. R. (2002). Internet plagiarism among college students. *Journal of College Student Development*, 43(3),374-385.
- Smith, K. J., Davy, J. A., Rosenberg, D. L. & Haight, G. T. (2002). A structural modeling investigation of the influence of demographic and attitudinal factors and in-class deterrents on cheating behavior among accounting majors. *Journal of Accounting Education*, 20(1), 45-65.
- Winardi, R. D., Mustikarini, A., & Anggraeni, M. A (2017). Academic dishonesty among accounting students: Some Indonesian Evidence. *Jurnal Akuntansi dan Keuangan Indonesia*, 14(2), 142-164
- Welton, R. E., Davis, J. R., & LaGroune, M. (1994). Promoting the moral development of accounting graduate students. *Accounting Education*, 3(1), 35-50.
- West, T., Ravenscroft, S. P., & Shrader, C. B. (2004). Cheating and moral judgment in the college classroom: A natural experiment. *Journal of Business Ethics*, 54, 173-183.