The Correlation between Coping Mechanisms and Resilience with Academic Dishonesty in Medical Students

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Abstract: Academic dishonesty is the most common violation of academic integrity. One factor that influences academic dishonesty is self-reliance, which includes coping mechanisms and resilience. This study aims to determine the correlation between coping mechanisms and resilience with academic dishonesty in Medical students. This study was an observational analytic study with a cross-sectional method. The respondents were preclinical stage students in the Faculty of Medicine. This study utilized stratified random sampling with a total sample of 229 students. The data type used in this study was primary data collected using a questionnaire. Data analysis in this study used the Chi-Square test. Based on the results of statistical tests, the majority of coping mechanisms in Medical students was emotion-focused coping faced by 127 (55.5%) students, 182 (79.5%) students had high resilience, and 203 (88.6%) students had low academic dishonesty. Coping mechanism and academic dishonesty obtained a p-value of 0.552, while resilience and academic dishonesty obtained a p-value of 0.003. Thus, it can be concluded that there was no correlation between coping mechanisms and academic dishonesty. However, there was a correlation between resilience and academic dishonesty in Medical students. The implication of this study was the importance of resilience as one of the academic honesty of student characters.

Keywords: academic dishonesty; coping mechanisms; resilience

INTRODUCTION

Students must maintain academic integrity during their education, including honesty, trust, justice, respect, commitment, and courage in fulfilling academic requirements.[1] Academic integrity is an important aspect that must be owned by students, especially those pursuing professional education, such as medicine, nursing, pharmacy, and law, with professional ethics.[2] One of the most common violations of academic integrity is academic dishonesty.[3] Academic dishonesty refers to aspects, such as cheating and plagiarism.[4] Academic dishonesty can harm students, such as dependence on others or certain ways to achieve success. A student, especially a medical student who frequently commits academic dishonesty, is more likely to violate professional discipline than the average doctor.[5]

Research conducted by Angelia in 2019 showed that 45.3% of respondents from 106 health high school students in Padang City had committed cheating.[6] This is also shown from the results of research conducted by Yuliyanto (2016), which showed that 100% of respondents from 70 University of Indonesia vocational program students had committed academic dishonesty.[7] Based on the latest data from the Association of Certified Fraud Examiners, it is known that the most fraud perpetrators in Indonesia are undergraduate level at 73.2%, with a total of 172 cases.[8] The same results of research conducted by Setyawan revealed that as many as 98.3% of vocational engineering students have been involved in academic dishonesty in various aspects, both cheating and plagiarism.[9] To be more specific, research conducted by Nugraha (2020)

explained that around 90% of academic dishonesty committed by students was cheating on coursework, around 82% was helping to provide answers during exams, and 82% related to falsifying bibliographies or citations.[10] Academic dishonesty can be influenced by several factors. According to Beruin, academic dishonesty is caused by two factors: external factors and internal factors.[11] One of the internal factors that influence academic dishonesty is self-reliance.[2] Self-resilience factors are composed of self-efficacy, self-control, and attitudes towards morality.[12] The results of Dewi and Widiasavitri's research in 2019 showed that self-control is a coping mechanism used to manage negative emotions and is a self-adjustment mechanism to achieve self-resilience.[13]

Problems and difficulties that exist in higher education are phenomena that students cannot avoid. Individual responses to problems vary. Some appropriately handle them, and some others inappropriately handle them. Differences in responses can be caused by differences in the way individuals view a problem. Committing academic dishonesty is one form of inappropriate response. Therefore, resilience and coping mechanisms are important factors for students in dealing with problems and difficulties that exist in everyday life, especially in lectures. Based on these problems, this study was conducted to identify if there is a correlation between coping mechanisms and resilience with academic dishonesty in Faculty of Medicine students.

MATERIAL AND METHOD

This study is an observational analytic study. The independent variables in this study are coping mechanisms and resilience, while the dependent variable is academic dishonesty. The research design used in this study was a cross-sectional method, where the data for each variable, both the independent variable and the dependent variable, are collected simultaneously.[14] The population in this study were preclinical stage students in Faculty of Medicine student batches 2, 3, and 4 as many as 434 students. The technique used in the sampling of this study was stratified random sampling techniques according to the educational strata of students at the Faculty of Medicine. Determination of the number of samples used was carried out using the Slovin formula, where 229 samples were needed. The inclusion criteria in this study were preclinical students in Faculty of Medicine student batches 2, 3, and 4, while the exclusion criteria were students who did not fill out the questionnaire completely. This research received ethical clearance from the Research Ethics Committee of the National Development University "Veteran" Jakarta with Number: 4/I/2023/KEPK.

The type of data used in this study was primary data. Data for coping mechanisms were collected using the Ways of Coping Questionnaire by Folkman and Lazarus, which has been modified by Lubis and has been tested for validity and reliability. The coping mechanisms questionnaire was declared valid and reliable with *Cronbach's Alpha* 0.79.[15] In the validity and reliability test that have been conducted by the researcher, there were five items out of 30 statement items that had to be dropped and had a Cronbach's Alpha value of 0.886.

The questionnaire to measure the resilience variable used the Academic Resilience Scale-30 questionnaire by Cassidy, which has been adapted by Kumalasari and proven that 24 items are valid and reliable statements with a Cronbach's Alpha value of 0.891.[16] However, in the validity and reliability tests carried out again by the researcher, there was only one item that needed to be dropped from the 30 statement items and had a Cronbach's Alpha value of 0.913.

Data for the academic dishonesty variable in this study were collected using the Academic Dishonesty Scale measuring instrument by McCabe and Trevino and the Academic Dishonesty Instrument by Iyer and Eastman, which has been adapted and modified by Faradiena and has 20 valid and reliable statement items with a Cronbach's Alpha value of 0.89.[17] Chi-Square test aims to identify whether or not correlation between the independent variable and the dependent variable under study.

RESULT

Respondent Characteristics

Table 1 shows the number and percentage of respondents based on each level of education, gender and age. Based on their educational level, Levels 2 and 3 have a percentage of 34.1%, and Level 4 has a percentage of 31.8%. Based on their gender, respondents who were male amounted to 58 people or 25.3%, and respondents who were female amounted to 171 or 74.7%. Based on their age, a total of 11 people or 4.8%, were 18 years old. A total of 58 people or 25.3% were 19 years old. A total of 77 people or 33.6% were 20 years

old, a total of 62 people or 27.1% were 21 years old, a total of 18 people or 7.9% were 22 years old, a total of 2 people or 0.9% were 23 years old, and there was only 1 person or 0.4% who was 24 years old.

Table 1. Subject Characteristics

Characteristics	Frequency (n)	Percentage (%)
Student Batch		
Level 1	73	31.8%
Level 2	78	34.1%
Level 3	78	34.1%
Gender		
Male	58	25.3%
Female	171	74.7%
Age		
18 years old	11	4.8%
19 years old	58	25.3%
20 years old	77	33.6%
21 years old	62	27.1%
22 years old	18	7.9%
23 years old	2	0.9%
24 years old	1	0.4%

Table 2. Distribution of Coping Mechanisms, Resilience, and Academic Dishonesty

Variable	Frequency (n)	Percentage (%)
Coping Mechanism		
Problem-focused coping	102	44.5%
Emotion-focused coping	127	55.5%
Resilience		
High	182	79.5%
Medium	47	20.5%
Low	0	0%
Academic Dishonesty		
High	0	0%
Medium	26	11.4%
Low	203	88.6%
Total	229	100%

Based on Table 2, it can be seen that most students use emotion-focused coping with a percentage of 55.5% or 127 people. Meanwhile, problem-focused coping gets a percentage of 44.5%, which is 102 people. The most resilience abilities possessed by students are at a high level, with a percentage of 79.5% or 182 people. At the same time, the rest have moderate resilience abilities with a percentage of 20.5%, which is 47 people. The most academic dishonesty behavior owned by students is at a low level, with a percentage of 88.6% or 203 people. At the same time, the rest have moderately dishonest behavior, with a percentage of 11.4%, which is 26 people.

Table 3. Results of Bivariate Analysis of Coping Mechanisms with Students' Academic Dishonesty Behavior

Coping Mechanisms	Academic Dishonesty						P Value
	High		Medium		Low		
	n	%	n	%	n	%	
Problem-focused coping	0	0	13	5.7%	86	40.6%	
Emotion-focused coping	0	0	13	5.7%	114	49.8%	0.552
Total	0	0	26	11.4%	203	88.6%	

Based on Table 3, the Chi-square statistical test results between coping mechanisms and academic dishonesty obtained a P value of 0.552 (P>0.05). This value indicated no correlation between coping mechanisms and academic dishonesty.

Table 4. Results of Bivariate Analysis of Resilience with Students Academic Dishonesty Behavior

Resilience	Academic Dishonesty						P Value
	High		Medium		Low		
	n	%	n	%	n	%	
High	0	0%	15	6.6%	167	72.9%	
Medium	0	0%	11	4.8%	114	15.7%	0.003
Low	0	0%	0	0%	0	0%	
Total	0	0%	26	11.4%	203	88.6%	

Based on Table 4, the Chi-Square statistical test results between resilience and dishonesty obtained a P value of 0.003 (P <0.05). This value indicates that there is a correlation between resilience and academic dishonesty.

DISCUSSION

Based on the statistical test, there was no correlation between coping mechanisms and academic dishonesty. This finding contradicts the previous finding stating coping mechanisms of sharing and learning culture built on caring provided opportunities for neutralizing cheating behaviors.[18,19] Ajnah's research results could strengthen the findings of this study, revealing that coping mechanisms are not related to academic integrity and that coping mechanisms are not related to academic integrity, and academic dishonesty is an aspect of academic integrity.[20] It indicated that academic dishonesty behavior can be influenced by other factors. Based on the results of research conducted by Pramudyastuti, it can be concluded that students' acts of academic dishonesty are usually caused by four main aspects, namely pressure, opportunity, rationalization, and ability.[21] Pressure is the main factor driving academic dishonesty. The aspect of pressure comes from the psychological side, so the way to handle it is quite proactive. The existence of opportunities or weaknesses in the internal control system is one of the causes of academic dishonesty. Rationalization can occur when academic dishonesty is carried out together and continuously so that the thought that the act of academic dishonesty is justified.[21] Wolfe and Hermanson identified that people who commit fraud are not ordinary people. People who commit fraud are not mediocre, but they do have the ability to utilize all available opportunities in reality.[22] According to Evans & Kim, the coping mechanisms used by people and the impact of using these coping mechanisms are influenced by the type of stress or problem faced by a person.[23] According to research conducted by Jalal, emotion-focused coping can reduce academic stress in students.[24]

Unlike the previous results, there is a correlation between resilience and academic dishonesty. It is as stated in previous research conducted by Ahmed and Firdous research, revealing a significant negative correlation between resilience and academic dishonesty, where the higher the resilience is, the lower the cheating on assignments in students will be.[25] The same result is also explained in Zulkarnain, stating that resilience has a role in the occurrence of cheating on assignments in students.[26] The results of this study are in line with research conducted by Beruin, demonstrating that dishonesty is influenced by two factors, which are internal and external factors.[11] Some internal factors that can affect academic dishonesty include laziness, lack of time management, fear of failing, learning capability, motivation, mental health, attitude, and intention. Some students were too lazy to accomplish tasks as they were busy playing with their friends, on social media and disinterested in learning their lessons, hence resorting to acts of academic dishonesty. They also underlined that the idea that "someone else will do" the student's tasks was stated. Individuals who do not struggle to multitask and effectively manage their time, such as a working and married person, are more likely to academic dishonesty. [11,27] The students have a fear of failure, but they lack integrity and commitment, so they are shackled by the false successes gained from integrity and commitment as well as academic dishonesty. On the ability to learn, students are sometimes not prepared enough to face the exam or assignment at hand, thus committing the offense of academic dishonesty. Students do not understand that success lies not only in the result but also in the process. [21] Academic dishonesty was positively associated with a motivation and external goal orientation. It was also negatively linked to intrinsic motivation.[28] An aspect that motivates someone to do academic dishonesty is called intention, which is primarily determined by one's attitude.[11,29] Additionally, it was shown that a student's mental health impacted whether or not they intended to engage in academic dishonesty. Students are more prone to cheat on quizzes, examinations, and even assignments when they are anxious and stressed about the expectations placed on them. [11,30] The

resilience variable in this study is an internal factor that affects academic dishonesty as resilience is a factor that comes from the individual itself.

External factors included peer involvement, academic workload, course adversity, limited teacher assistance, parents' desire, and the use of mobile phones.[11] Peer involvement plays an important role in committing academic dishonesty, for example, when someone allows a friend to copy their exam answers. [11,31] The immense academic workloads that students must complete in a set amount of time were another determining factor of academic dishonesty. Students tend to cheat to reduce their difficulty when faced with difficult material or course adversity. Limited teacher assistance and teachers are claimed to be insensitive to academic problems, that can cause students to fail to understand their lessons. Cheating is the way out to get high scores. In addition, the expectations of parents who want their children to have high-grade achievement influence students to commit acts of academic dishonesty.[11,27,31] The usage of technology, one of which is a mobile phone through various digital applications, fosters opportunities for students to commit academic dishonesty. [11,31]

CONCLUSION

Based on the result of this study, it can be concluded that most of the coping mechanisms used by Medical students were emotion-focused coping. Medical students had high levels of resilience and low levels of academic dishonesty. Furthermore, there was a correlation between resilience and academic dishonesty in Medical students, and there was no correlation between coping mechanisms and academic dishonesty. The result of this study imply the importance of resilience as one of the academic honesty of student characters.

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CONFLICT OF INTEREST

The researcher declares that she has no conflict of interest in conducting this research.

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