



Exploring the Coping Strategies to Maintain Students' Mental Health

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Abstract. Indonesia still needs to be wholly separated from the Covid-19 pandemic, which has had a changing impact on all community activities, one of which is students. All students must conduct lectures with two systems, namely synchronous and asynchronous. Stress, anxiety, and depression arise when students must adjust to the learning system during a pandemic. Students need coping strategies to overcome mental health problems that occur in them. The purpose of this study was to determine whether there is an effect of coping strategies on the mental health of students or not. The research method used is the associative quantitative method. Respondents in this study were students of the English Education Study Program, Faculty of Language and Arts class 2019 to 2021, totalling 174 students. The study results explain that coping strategies affect students' mental health. The most widely used coping strategy is the approach aspect. This study implies that to maintain good mental health during a pandemic, students must develop coping strategies to solve existing problems.

Keywords: coping strategies · mental health · online learning · students

1 Introduction

Currently, the world still needs to be separated from the Covid-19 virus where this virus spreads quickly and makes the whole community restless. The Covid-19 virus has significantly impacted every aspect or area of people's lives in Indonesia. The fields affected by Covid-19 are work, the country's economy, education, and others. Based on the policy from the government in circular letter Number 4 of 2020 regarding the Implementation of Educational Policies during the Emergency Period for the Spread of Corona Virus Disease (Covid-19), students need to do online learning [1]. That learning system is a teaching and learning system without face-to-face meetings between teachers and students. Instead, the teaching and learning process is carried out using the internet network and utilizing available platforms such as Google Classroom, Zoom Meeting, Google Meet, and other online platforms. The teaching and learning system issued by the government during this pandemic is called distance learning. Distance learning applies to all types of school levels, from Kindergarten, Elementary School, Junior High School, and High School to Higher Education.

Universities throughout Indonesia currently implement two teaching and learning systems: synchronous and asynchronous. A learning system like this certainly has a

positive and negative impact on students. In asynchronous learning, the lecturer conducts the online teaching and learning process and utilizes the available learning media. Besides that, the lecturer also gives online assignments to students.

During online learning, students should be able to create or feel a comfortable atmosphere and flexible time because they learn in their own homes. However, during this pandemic, students felt pressure or stress during online learning. Students get problems like a lack of understanding of learning materials and a large amount of news about the Covid virus, which makes students anxious. The difficulty of students enjoying free time and feelings of fear are the main factors causing depression, stress and anxiety in students [2].

Based on the preliminary study results, the average student experienced many distractions during their online lectures during the pandemic. Things like this can happen because the tasks are beyond students' ability, causing students' mental health to be disturbed. Not only from lecture problems, problems in their families or environment can also trigger mental health disorders. They feel bored because of their reduced social activities with their friends. Students find it challenging to do the assignments given by the lecturer because they do not understand their subject matter. There is a short deadline for collecting the assignments, so students feel anxious, afraid, bored, and stressed. This incident can make students mentally unhealthy. The disturbances experienced by these students can also have an impact on their physical health.

Increased spread of invalid news (hoaxes), stress caused by academic demands, unskilled technological capabilities, and giving excessive and piled-up assignments can worsen the situation of implementing distance learning and affect student stress levels [3]. According to the 2018 National Basic Health Research Report, the prevalence of mental and emotional disorders in the population aged 15 years in DKI Jakarta Province is 10.1%, which is higher than the national prevalence of mental-emotional disorders of 9.8% [4].

In addition, data from the Central Statistics Agency Survey in 2022 also explained that the mental health condition of young people during the implementation of the Emergency Community Activity Restrictions was the worst. The results of a BPS survey prove that the age group of 17 to 30 years often feels anxious as much as 24.7%, irritable 24.7%, and fears excessively 16% [5]. These data illustrate that the mental health of young people in Indonesia, especially students, is experiencing problems. When students experience stress or pressure, of course, this will disrupt the learning process. Therefore, students will take the initiative to reduce and solve the stress problems they experience by using their respective coping strategies to return to their activities properly. Stress experienced by an individual can be reduced or overcome by a strategy called a coping strategy. Coping is a process when individuals try to deal with the stress they face through cognitive and behavioural changes to gain a sense of security within themselves [6]. Coping strategy is a specific process accompanied by an effort to constantly change behaviour to regulate and control external and internal demands and pressures that burden and exceed the individual's resilience ability [7]. Sullivan classifies coping strategies into three types: approach strategies, avoidance strategies, and social support strategies [8]. This study aimed to determine whether there is an influence between coping strategies and students' mental health.

2 Methods

The research method is a method or stage used to conduct research, from data collection to data analysis. This study uses a quantitative approach with associative research methods. Associative research aims to determine an influence between one variable and another. The population in this study was Universitas Negeri Jakarta students' class 2019 to 2021 who attended online lectures during the Covid-19 pandemic.

In selecting the sample, the technique used for sampling is the multistage random sampling technique. Multistage random sampling is a technique constructed from a simple random sampling method through several stages of random sampling [9]. Multistage random sampling is a sampling technique in which the selection of sample members is carried out in stages. In this study, the first stage was randomly selecting a sample of faculties at Universitas Negeri Jakarta. The results obtained were from the Faculty of Languages and Arts. The second stage was randomly selecting a sample of the study programs in the Faculty of Languages and Arts. The results obtained were the English Education Study Program. Then select the students using stratified random sampling, totaling 174 students consisting of second, third, and fourth-year students.

In this study, researchers collected data by distributing questionnaires containing statements related to coping strategies and students' mental health and distributed them through Google forms. The instrument used to measure respondents' mental health in this study is the Depression Anxiety Stress Scale 21 (DASS-21), developed by and contains 20 statements [10]. The instrument used to see the coping strategies applied by the respondents is the Academic Coping Strategies Scale (ACSS) which contains 52 statements [8]. The data analyze with several testing processes, namely descriptive analysis, prerequisite testing, and hypothesis testing. The prerequisite test consists of a normality test and a linearity test. The hypothesis testing using simple linear regression.

3 Result and Discussion

3.1 Respondent Demographic Data

3.2 Normality Test

The normality test aims to determine whether each variable's population distribution of each variable is normal. The normality test can be done using the Lilliefors test as follows:

$$L_0 = \max|F(z_i) - S(z_i)|$$

$$z_i = \frac{(X_i - \bar{X})}{s}$$

Based on the results of data processing, the value of Sig. of $0.200 > 0.05$, it can be concluded that the research data comes from normal population distribution.

Table 1. Respondent Characteristic

Variable	Category	Frequency	
		N	%
Gender	Men	49	28
	Women	125	72
	Total	174	100
Birth Order	Only child	6	3
	First child	43	25
	Middle child	48	25
	Youngest child	77	44
	Total	174	100
Age	19 years old	67	38
	20 years old	61	35
	21 years old	43	25
	22 years old	3	2
	Total	174	100
Class	2019	44	25
	2020	53	31
	2021	77	44
	Total	174	100
Choice of Study	By their self	153	88
Program	Parent's choice	18	10
	Friend's choice	3	2
	Total	174	100
Disease history	Depression	3	2
	Anxiety	5	3
	ADHD	1	1
	Panic symptoms No	3	2
	history	162	92
Total	174	100	
Living with	Main family	168	97
	Big family	6	3
	Total	174	100
Father's last	Elementary school	3	2

(continued)

Table 1. (continued)

Variable	Category	Frequency	
		N	%
education	Junior high school	4	2
	Senior high school	70	40
	Diploma	16	9
	Bachelor	81	47
	Total	174	100
Mother's last	Elementary school	5	3
Education	Junior high school	12	7
	Senior high school	101	57
	Diploma	15	9
	Bachelor	41	24
	Total	174	100
Parent's income	<Rp1,500,000	11	6
	Rp1,500,000-	111	64
	Rp3,500,000		
	>Rp3,500,000	52	30
	Total	174	100

3.3 Linearity Test

A linearity test aims to determine whether the relationship between the independent and dependent variables is linear or non-linear. Linearity testing can be done with the following steps:

$$F = \frac{MS(b)}{MS(w)}$$

Description:

MS(b) = Mean square of between groups

MS(w) = Mean square of within groups

F = F Value

Based on the sig value, the deviation from linearity shows $0.097 > 0.05$ means that the regression equation of the coping strategy variable on the mental health variable has a linear relationship.

3.4 Correlation Test

The correlation Test is an analytical process that aims to see or measure how strong the relationship between the independent and dependent variables is. Furthermore, this study

obtained a coefficient value of $0.000 < 0.05$, meaning there is a significant relationship between the variables of coping strategies and mental health. Furthermore, the correlation coefficient value is 0.470, so there is a positive relationship between coping strategies and mental health with a moderate level of closeness.

3.5 Coefficient of Determination

The coefficient of determination is a coefficient that shows the amount of variation caused by the independent variable. In this study, the coefficient of determination R square = 0.221, which means that coping strategies have an effect of 22.1%; other factors influence the rest.

3.6 Regression Equation Test

The simple regression equation test is an equation model to describe the effect/relationship between the X variable and the Y variable. For example, the regression equation $Y = 27,155 + 0.234X$ means that for every increase in coping strategies of one unit, the mental health variable will increase by 0.234 at a constant of 27.155.

3.7 Regression Significance Test

The regression significance test aims to see whether there is an influence between coping strategies and students' mental health. In this study, F-count (b/a) = 48.690 with p-value = $0.000 < 0.05$ rejected H_0 , meaning that coping strategies affect mental health.

3.8 Discussion

Based on Table 1, the respondents involved in this study consist of 125 women (72%) and 49 men (28%). According to [11], gender has no relationship with stress levels. However, each person's ability influences the ability to deal with stress [11].

Then, the respondent's position in a family can be known based on the birth order, and the birth order is the eldest, middle, youngest, or single. Therefore, a child's birth order can affect the problem-solving process. In this study, the respondent with the last or youngest birth order is the respondent group with the highest number of respondents than the other respondent groups, with a total of 77 respondents (44%).

Table 1 shows that the ages of the respondents involved in this study are 19 to 22. This age is the age of entering the stage of late adolescence and towards early adulthood. Along with increasing age, the problems faced also increase [12].

Based on Table 1, each class has a different number of students, namely, the 2019 class with 44 students (29%), the 2020 class with 53 students (31%), and the 2021 class with 77 students (44. %). Class of 2019, 2020, and 2021 students are the class who underwent distance lectures during the Covid-19 Pandemic.

To enter university, the student can choose the study program by themselves or follow the choice of parents or friends. Based on Table 1, more respondents chose English Education study programs of their own choice.

A person's history of illness or hereditary diseases can affect mental health conditions. Prolonged illness can cause stress and cause depression [13]. Based on Table 1, most of the respondents in this study had no history of the disease.

The family is an environment that has a vital role in solving problem student face during the Covid-19 pandemic. Table 1 shows that most students live with their main families, which 168 respondents (97%). With a family, students can tell the problems they are experiencing [12].

Based on Table 1, most of the respondents' fathers' last education in this study was bachelor's degree, namely 81 people (47%), and most of the respondents' mothers' last education was senior high school, namely 101 people (57%).

The respondents' parental income and family economic conditions significantly affect students' mental health, and the available material support can also affect the existing problem-solving process [7]. For example, from Table 1, the average parental income of the respondents in this study is Rp1,500,000- Rp3,500,000.

Then based on the results of the regression significance test, coping strategies affect students' mental health. Coping strategies affect students' mental health by 22.1%, and other factors influence the rest. Other factors that affect mental health during the pandemic are online learning, time spent staring at screens, consumption of news from the media, communication with parents, family form, use of social media, social isolation, vulnerability individual, family, and social youth [14]. In addition, research conducted by [15] explained that environmental factors affected mental health during a pandemic. Conditions related to environmental factors during the pandemic are information on the number of Covid-19 patients, implementation of activity restriction policies, and information on confirmed Covid-19 patients in the home environment.

Coping strategy is a specific process accompanied by an effort to constantly change behaviour to regulate and control external and internal demands and pressures that burden and exceed the individual's resilience ability [7]. During the Covid-19 pandemic, students experienced various problems stemming from their lectures, and these problems caused students' mental health. A good coping strategy is needed to solve the existing problems because the higher the coping strategy, the better the students' mental health. Coping strategies aim to overcome situations and demands to be pressing, challenging, and burdensome and exceed their resources [6]. Coping stress can be done in various ways, depending on how high-low stress they experience and what kind of stress coping strategies they prefer to apply when stress hits [16].

In this study, students' coping strategies consist of three dimensions: approach, avoidance, and social support. Of the three dimensions of this coping strategy, respondents mostly use the approach strategy with the highest percentage of 89.7%. This result is in line with research conducted by Umar in 2021 that states students tend to use approach coping strategies in dealing with online learning. When students have difficulty, they will look for strategies for solving problems called approach strategies [17]. Coping strategy with approach aspects explains that the student thinks carefully about the experiencing problems and decides carefully about the coping strategies to overcome these problems. The difference between this study's results and previous studies' results is that there is an influence between coping strategies and students' mental health. In contrast, previous research only looked at forms of coping carried out by students or explaining conditions.

4 Conclusion and Recommendation

This research concludes that coping strategies affect students' mental health during online learning. In addition, the most widely used coping strategy by respondents in this study is a coping strategy with an approaching aspect where respondents think about solutions to their problems.

Based on this research, there is an impact of having low coping strategy abilities. If the student has a low ability for coping strategies, they cannot resolve the mental health experiencing problems and deal with existing problems. For this reason, all students can develop their coping strategy skills and be open with family or relatives to talk about their problems.

Parents need to assist their children in solving their problems so they can maintain their mental health. In addition, students can improve their problem-solving skills by studying the problem. For further research, it is necessary to conduct more in-depth research related to the forms of student coping strategies during online learning.

The results of this study contribute to knowledge regarding the importance of maintaining students' mental health during a pandemic. This research provides knowledge about coping strategies for addressing student mental health problems. Based on the results of this study, we suggest that students improve their coping skills to solve the problems they are facing to create a state of good mental health. For parents, we suggest paying more attention to students' mental health conditions and not putting excessive pressure on students. This research only discusses the influence of coping strategies on students' mental health. It is necessary to do more about other factors that affect student mental health and the impact of coping strategies used by students.

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References

1. I. A. Nafrin, "Perkembangan Pendidikan Indonesia di Masa Pandemi Covid-19," *EDUKATIF J. Ilmu Pendidik.*, vol. 3, no. 2, pp. 456–462, 2021.
2. M. P. Yanti and N. R. Nurwulan, "Pengaruh Pembelajaran Daring Pada Depresi, Stres, Dan Kecemasan Mahasiswa," *J. Muara Pendidik.*, vol. 6, no. 1, pp. 58–63, 2021, <https://doi.org/10.52060/mp.v6i1.520>.
3. J. Bonaria, "Gangguan Kesehatan Mental Yang Disebabkan Oleh Pendidikan Jarak Jauh Terhadap Mahasiswa Selama Pandemi Covid- 19," *J. Med. Hutama*, vol. 3, no. 01 Oktober, p. 7, 2021, [Online]. Available: <http://www.jurnalmedikahutama.com/index.php/JMH/article/view/307>.
4. Kementerian Kesehatan, "Laporan Nasional Riskesdas 2018," Jakarta, 2019. <https://doi.org/10.12688/f1000research.46544.1>.
5. Badan Pusat Statistik, "Survei BPS : Mental Anak Muda Paling Buruk Selama PPKM Darurat," Jakarta, 2022.
6. L. N. Fauzi, S. A. Susanti, and M. K. Wardani, "Strategi Coping Stres Mahasiswa Selama Pembelajaran Daring," pp. 253–286, 2021.

7. A. Putriana, "Kecemasan Dan Strategi Coping Pada Wanita Korban Kekerasan Dalam Pacaran," *Psikoborneo J. Ilm. Psikol.*, vol. 6, no. 3, pp. 453–461, 2018, [Online]. Available: <http://e-journals.unmul.ac.id/index.php/psikoneo/article/view/4663>.
8. J. R. Sullivan, "Preliminary psychometric data for the Academic Coping Strategies Scale," *Assess. Eff. Interv.*, vol. 35, no. 2, pp. 114–127, 2010, <https://doi.org/10.1177/1534508408327609>.
9. P. Sari, L. I. Kesuma, and A. Rifai, "Implementasi Metode Multistage Random Sampling untuk Aplikasi Quick Count pada Pilkada Kota Palembang Berbasis Java Mobile," *J. Ilmu Komput. dan Teknol. Inf.*, vol. 1, no. 1, pp. 10–15, 2021.
10. T. P. S. Oei, S. Sawang, Y. W. Goh, and F. Mukhtar, "Using the Depression Anxiety Stress Scale 21 (DASS-21) across cultures," *International Journal of Psychology*, vol. 48, no. 6. Taylor & Francis, pp. 1018–1029, 2013, <https://doi.org/10.1080/00207594.2012.755535>.
11. I. Suwartika, A. Nurdin, and E. Ruhmadi, "Analisis Faktor Yang Berhubungan Dengan Tingkat Stress Akademik Mahasiswa Reguler Program Studi D Iii Keperawatan Cirebon Poltekkes Kemenkes Tasikmalaya," *Soedirman J. Nursing*, vol. 9, no. 3, pp. 173–189, 2014, [Online]. Available: <http://jks.fikes.unsoed.ac.id/index.php/jks/article/viewFile/612/337>.
12. N. Agustiningasih, "Gambaran Stress Akademik dan Strategi Koping Pada Mahasiswa Keperawatan," *J. Ners dan Kebidanan (Journal Ners Midwifery)*, vol. 6, no. 2, pp. 241–250, 2019, <https://doi.org/10.26699/jnk.v6i2.art.p241-250>.
13. A. Dirgayunita, "Depresi: Ciri, Penyebab dan Penangannya," *J. An-Nafs Kaji. Penelit. Psikol.*, vol. 1, no. 1, pp. 1–14, 2016, <https://doi.org/10.33367/psi.v1i1.235>.
14. S. A. Melina and C. K. Herbawani, "Faktor- Faktor yang Mempengaruhi Kesehatan Mental Remaja Selama Pandemi Covid-19 : Tinjauan Literatur," *Media Kesehat. Masy. Indones.*, vol. 21, no. 4, pp. 286–291, 2022, <https://doi.org/10.14710/mkmi.21.4.286-291>.
15. K. Indriyanti, Y. A. Lestari, and I. Indah, "ANALISIS FAKTOR YANG MEMPENGARUHI KESEHATAN MENTAL DI MASA PANDEMI COVID-19 PADA MASYARAKAT Program Studi Kebidanan , STIKES Dian Husada Mojokerto , email : PENDAHULUAN sektor baik perdagangan , informal maupun pariwisata mengalami WHO China Country Offic," vol. 13, pp. 71–79, 2022.
16. N. Hanifah, H. Lutfia, U. Ramadhia, and R. S. Purna, "Strategi Coping Stress Saat Kuliah Darling Pada Mahasiswa Psikologi Angkatan 2019 Universitas Andalas," *J. Psikol. Tabularasa*, vol. 15, no. 1, pp. 29–43, 2020.
17. N. F. Umar, A. Siring, F. Aryani, S. Latif, and A. Harum, "Different Academic Coping Strategies Facing Online Learning During Covid-19 Pandemic Among the Students In Counselling Department," *Indones. J. Educ. Stud.*, vol. 24, no. 1, pp. 35–50, 2021.

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