
**STUDENT'S MENTAL HEALTH, COPING STRATEGY, AND
EDUCATIONAL IMPACTS DURING THE COVID-19 PANDEMIC IN
INDONESIA**

Dina Sartika¹, Kinanti Rezkia Muttaqin², Muhammad Luthfi Abi Naufal³, Nurunnadiya Savitri⁴,
Rifky Saepul Rachman⁵

¹Faculty of Economics and Business, University of Padjadjaran,
Jalan Dipati Ukur No. 35, Bandung 40132, Indonesia

²Faculty of Economics and Business, University of Padjadjaran,
Jalan Dipati Ukur No. 35, Bandung 40132, Indonesia

³Faculty of Economics and Business, University of Padjadjaran,
Jalan Dipati Ukur No. 35, Bandung 40132, Indonesia

⁴Faculty of Economics and Business, University of Padjadjaran,
Jalan Dipati Ukur No. 35, Bandung 40132, Indonesia

⁵Faculty of Economics and Business, University of Padjadjaran,
Jalan Dipati Ukur No. 35, Bandung 40132, Indonesia

Abstract

Indonesia has been implementing a school from home policy due to Covid-19 pandemic. Given the lack of preparedness, the policy has impacted students' mental well-being which may affect their learning behavior, academic performance, as well as satisfaction and motivation. This study aims to evaluate students' mental health condition, their coping strategy towards Covid-19, and the level of educational impacts. We also attempt to examine the effect of mental health and coping strategy on students' educational impacts. The data was collected through an online survey when the policy was still going. The targeted respondents are the undergraduate students of Faculty of Economics and Business, University of Padjadjaran Bandung, Indonesia. Using convenience and snowball sampling technique, 390 students from five different majors participated in the survey. Data were analyzed using descriptive and verification analyses. Multiple regression analysis was performed to test the hypotheses using SPSS 24 software. Results indicated that students reported a moderate level of mental health, good coping strategy, and severe level of educational impacts. Results also revealed that mental health positively affects students' educational impacts. Moreover, a negative association between coping strategy and educational impacts was confirmed.

Keywords: Coping strategy; covid-19 pandemic; educational impacts; mental health; online learning; students.

1. Introduction

The infectious disease Covid-19 is caused by the most newly identified coronavirus that is continuously spreading throughout the world (World Health Organization, 2020). It is considered as an ongoing pandemic that affects many countries globally and is leading many countries to enforce lockdowns (World Health Organization, 2020). Many countries have ordered stay-at-home restrictions and limit individuals only to leave their house when circumstances are very important or critical, including Indonesia.

The occurrences above change everyone's daily life, and force humans to adapt to new environments (Kanekar & Sharma, 2020). Changes like this can get a different response from each person, both physically and psychologically (Gruber et al., 2020). The widespread of a pandemic and its associated instability has become a stressor that influences individuals' mental wellbeing (Pearson et al., 2014).

Education institutions including universities in Indonesia are officially closed temporarily until an undetermined time and change the way of learning to study-from-home for each of the existing programs and courses. Everyone experienced a transition from face-to-face learning to online delivery learning. Therefore, this makes students face new challenges of different studying methods and processes (Savitsky, Findling, Erel, & Hendel, 2020). These changes also applied to the University of Padjadjaran, Indonesia.

Given that activities and work are carried out in a different way than before the pandemic, everyone feels a significant change, including the college students (Son, Hegde, Smith, Wang, & Sasangohar, 2020). During the Covid-19 pandemic, students' psychological wellbeing has fluctuated greatly, which influences the coping strategies carried out (Nurunnabi et al., 2020).

Research has shown that online delivery learning may have effects on individuals' motivation in doing assignments, and overall poor-quality work (Patricia, 2020). Students also often express complaints about the difficulties of this change (Rahiem, 2020). They are also worried about the decline in the quality of their performance in carrying out activities, including in the terms of learning, or in other words, their academic performance (Rahiem, 2020).

Mental health may decrease as a result of periods of physical distancing and online learning activities, assuming that students' anxiety and stress levels are increasing. The goal of this study is to determine how students perceive their mental health, their coping strategies in the presence of Covid-19, and the educational impacts of the pandemic. Moreover, this paper examines how students' mental health and coping strategy affect their education in terms of learning behavior, academic performance, and school satisfaction and motivation.

Identifying these factors is critically important, where this can be a basis for determining things that must be done in protecting students' well-being and seeing the level of career skills in the era of pandemics. This paper contributes to the advancement of knowledge as the evidence of the effect of Covid-19 on education from Indonesian perspective and as a consideration for policymakers to choose what ought to be taken in order to maintain a strategic distance from an educational crisis.

2. Literature Review

2.1 Mental Health Problems in The Midst of Covid-19 Pandemic

Mental health is one of the elements contained in the concept of health where individuals are able to feel well-being by recognizing themselves and managing their life properly so that they are able to contribute to others (Salman, 2012). Therefore, if people cannot manage their lives properly, there is a possibility that they will experience mental health problems. The mental health outcomes of quarantine and similar prevention strategies have revealed that depression, anxiety disorders, mood disorders, posttraumatic stress symptoms, sleep problems, stigmatization, lack of self-esteem, and low self-control are likely to occur in people who have been physically isolated (Hossain et al., 2020). Prolonged quarantine, fear of disease, boredom and frustration, insufficient supplies, lack of information, and financial loss have all resulted in long-term posttraumatic stress symptoms, disorientation, and rage among the general population (Brooks S K et al., 2020).

The appearance of the Covid-19 has affected people's mental health (Serafini et al., 2020). It is supported by a research conducted in August 2020 by the American Psychologist Association which states that the Covid-19 pandemic is a trigger for complex mental health problems because various phenomena occur such as the emergence of a sense of being threatened, feeling of uncertainty, and many possible losses that people will experience during the Covid-19 pandemic. It was found that depression, anxiety, and stress are mental health problems faced by people due to the Covid-19 pandemic (Salari et al., 2020). Those mental health problems were driven by people's concern about many factors such as their finances, life necessities, education and careers during the Covid-19 pandemic (Baloran, 2020; Duraku & Hoxha, 2020).

2.2 Coping Strategy as a Response of the Covid-19 Pandemic

In maintaining a stable self-condition to dealing with uncertainty and stressful situations, coping strategies are needed to overcome the negative impact of the Covid-19 pandemic. Coping strategies are defined as an individual or group reaction to a condition (Rabenu & Yaniv, 2017). During the Covid-19 pandemic, people paid more attention to their hygiene and health issues in order to avoid the infections. This can be reflected by how often they adhere to health protocols such as washing their hands or wearing masks when going outside (Roy et al., 2020). Some people also seek a lot of information to understand the situation, and these kinds of people tend to have high levels of psychological and social well-being (Capone, Caso, Donizzetti, & Procentese, 2020). Therefore, it is important to learn about the Covid-19 from reliable sources so they will be able to maintain self-control in the face of the Covid-19 pandemic. (Baloran, 2020; Nadeak, Naibaho, & Silalahi, 2020). It has similarity to task-oriented coping strategy where people try to find a way out of various problems that occur with various plans and actions to minimize or even avoid risks that exist (Prentice, Zeidan, & Wang, 2020).

On the other hand, humans as social beings interact with each other in their daily lives. Through these interactions, they can seek social and emotional support by sharing concerns or trying to understand each other based on what they feel during the Covid-19 pandemic (Prentice et al., 2020). During mass traumas, finding methods to cooperate with and value life is a reliable predictor of enhanced psychological well-being and decreased posttraumatic stress symptoms

(Dekel et al., 2016). These types of coping behaviors, known as behavioral activation, are distracting and elicit pleasant feelings (Polizzi et al., 2020). In order to use this kind of strategy, people have to recognize themselves well and have trust in their ability to deal with the situation (Patricia, 2020).

2.3 The Educational Impact in The Midst of Covid-19 Pandemic

During the Covid 19 pandemic, education institutions such schools and colleges were closed in order to stop the Covid-19 virus from spreading that makes students have less opportunities for their growth and development (UNESCO, 2020). Educational institutions ranging from schools to college have to deal with the existing technology. Therefore, they need to develop various digital learning platforms and make maximum use of it as one of the steps to maintain conducive and effective learning activities (Sahu, 2020).

The transition of learning activities due to Covid-19 pandemic made some students feel not satisfied with their learning activities (Bono, Reil, & Hescoc, 2020) and found it is difficult to carry out activities that support their studies such as doing class projects and research observations (Son et al., 2020). The condition is exacerbated by a decrease in student motivation (Bono et al., 2020). This is driven by their environment which is far from where they carry out their studies which usually encourages them to study. However, during the Covid-19 pandemic there are no more schedules to go there. Thus, student loss their educational support environment and become distracted by various non-academic activities (Dutta & Smita, 2020).

Some students also feel many difficulties since they have their own conditions, such as their economic stability, their role in the family, and how they respond to the future (Savitsky et al., 2020). It leads to change in learning behavior, where it becomes difficult for them to concentrate on preparing and doing their studies (Bono et al., 2020) and focus during online learning activities (Duraku & Hoxha, 2020). All of these challenges ultimately affect academic performance in doing assignments, preparing for exams, or even the urge to attend class (Bono et al., 2020). Therefore, if students cannot manage it well, it can negatively affect their academic performance.

2.4 The Effect of Mental Health Problems during Covid-19 Pandemic on Students' Educational Impacts

The policy of closing educational institutions ultimately limited the space for students to move in their daily life, which has disrupted their motivation in the learning process because there's a lack of physical appearance (Dutta & Smita, 2020). At this point, there's a possibility for the students to feel emotional symptoms such as anxiety, stress, and depression (Lan, Long, & Van Hanh, 2020). These factors are characterized by the behavior of students who become less focused on studies, less motivated, and complain about their inability to adjust to the conditions of study amid the Covid-19 pandemic (Dutta & Smita, 2020).

Students feel anxious if they are ultimately unable to complete their studies because they are unable to fulfill every obligation in the learning activities given by the institution (Son et al., 2020). In addition, students also feel stress about how difficult it will be to enter the world of work and have a stable life after completing studies in the midst of the Covid-19 pandemic

conditions (Nurunnabi et al., 2020). The Covid-19 pandemic makes students find it difficult to focus on study because there is a concern that this transition learning process will deteriorate their academic performance due to reduced motivation and difficulty of concentration during studies (Son et al., 2020). Meanwhile, academic performance is an important factor for students in order to optimize the result of completing their studies. The ability to optimize academic performance amidst the difficulties of the Covid-19 pandemic is certainly a hope for all students.

Hypothesis 1: Mental Health positively affects students' educational impacts.

2.5 The Effect of Coping Strategy on Educational Impacts

The transition to online learning because of the Covid-19 pandemic, has caused a lot of difficulties, especially students' mental health. In this stressful situation, seeking social and emotional support through interactions with family, friends and education personnel are considered to help students overcome their worries amidst the pressures of online learning (Nurunnabi et al., 2020; Prentice et al., 2020; Serafini et al., 2020). Those interactions are important to make them figure out a positive rather than negative attitude toward online learning (Patricia, 2020). Students who also think that online learning is easy and useful, tend to be able to overcome online learning positively (Ngampornchai & Adams, 2016). Therefore, accepting the situation where in this case, the transition to online learning, might be beneficial for students (Dhawan, 2020). It can encourage students to develop various ways to overcome problems that arise and improve their ability to adapt to certain situations (Dhawan, 2020). Since there have been no sufficient studies empirically investigating the effect of coping strategy on educational impacts in the age of Covid-19, this study is crucial to be conducted to figure out how to overcome the impact of Covid-19 on the educational aspect. The research framework was described in Figure 1.

Hypothesis 2: Coping Strategy negatively affect students' educational impacts

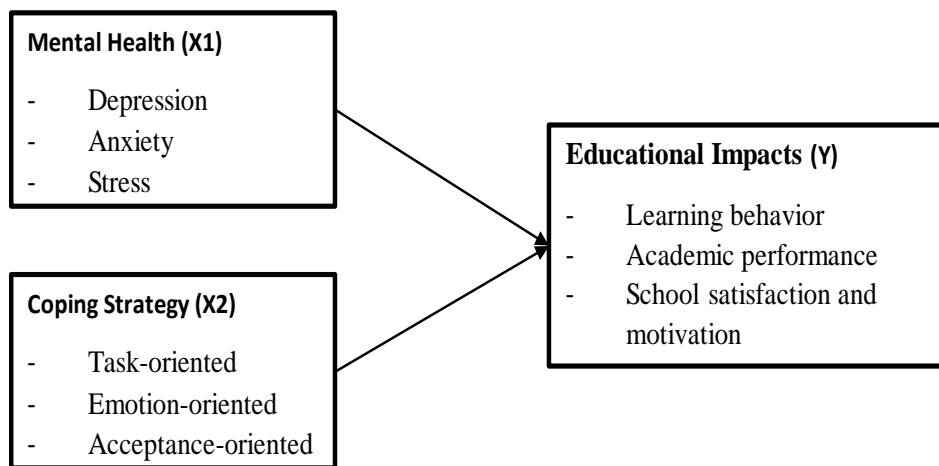


Figure 1. Research Framework

3. Research Methodology

3.1 Data collection procedures

The data was collected through an online survey in October 2020 when the school from home activity was still going. The survey was carried out in Bahasa Indonesia to avoid some misunderstandings of the participants while answering the questions.

3.2 Sample

The targeted respondents are the undergraduate students of the Faculty of Economics and Business, University of Padjadjaran from five different majors such as Accounting, Management, Economics, Digital Business, and Islamic Economics. The total population is 2186 students, thus our targeted sample for this research is 304 respondents (confidence level 95%). Using convenience and snowball sampling technique, 390 students participated in the survey. However, only 358 data could get through the analysis.

3.3 Measures

The questions were divided into four parts. The first part consists of several questions asking respondents' general information such as major, year of study, and gender. The second part of the questions were designed to assess students' mental health which consists of 18 questions (Cronbach's alpha $\alpha=0.886$) measuring depression, anxiety, and stress (Lan et al., 2020). A five-point Likert scale of agree and disagreement was implemented to rate each statement of anxiety (e.g. "During the Covid-19 pandemic, I often feel anxious"), stress (e.g., "During the Covid-19 pandemic, I often find difficulties in controlling my temper"), and depression (e.g., "During the Covid-19 pandemic, I feel like I don't have any hopes to continue my life"). All of the items were valid and can proceed to data analysis.

The third part of the questions were designed to assess coping strategy variables that consist of task-oriented, emotion-oriented, and acceptance-oriented dimensions with Cronbach's alpha value $\alpha=0.746$ (Carver et al., 1989). A five-point Likert scale of agree and disagreement was also implemented to rate each statement of task-oriented (e.g., "During the Covid 19 pandemic, I always wear a mask while going outside"), emotion-oriented (e.g., "I try to get emotional support from my relatives"), and acceptance-oriented (e.g., "During the Covid 19 condition, I keep trying to develop myself"). The validity test indicated that 1 out of 21 items were invalid. As a consequence, the item was excluded from the data set.

The last part of the questions was designed to assess students' educational impacts. The questionnaire consists of 9 statements indicating negative educational impacts in terms of learning behavior, academic performance, and school satisfaction and motivation (Bono et al., 2020). Learning behavior was measured using four items (e.g., "Covid 19 pandemic gives bad influence to my learning ability"), two items of academic performance (e.g., "Covid 19 pandemic gives negative effect to my academic performance"), and three items of satisfaction and motivation (e.g., "Covid 19 pandemic reduces my academic motivation"). The answers were rated using five-point Likert scale of agree and disagreement. All the questions were valid and reliable (Cronbach's alpha $\alpha=0.891$).

3.4 Design Analysis

To answer the research questions, descriptive and verification analyses were conducted. Specifically, multiple regression analysis was performed using SPSS version 24. The regression equation was as follow:

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + e$$

4. Findings and Discussion

The demographic details of the participants are presented in Table 1. Among 358 respondents, the majority of them are women (65,6%) and the rest are men (34,4%). In terms of majors they are undertaking, most of the respondents are Management students (42,5%), followed by Accounting (17,6%), Islamic Economics (15,6%), Economics (15,1%), and Digital Business (9,2%). Moreover, first year (34,6%) and third year (34,4%) students dominated the survey.

Table. 1. Demographic Characteristics of the Respondents

Variable		Frequency	Percent
Gender	Man	123	34,4
	Woman	235	65,6
Major	Management	152	42,5
	Economics	54	15,1
	Accounting	63	17,6
	Islamic Economics	56	15,6
	Digital Business	33	9,2
Year	First Year	124	34,6
	Second Year	75	20,9
	Third Year	123	34,4
	Fourth Year	36	10,1

4.1 Perceived Mental Health, Coping Strategy, and Educational Impacts

Table 2 gives information regarding descriptive statistics of mental health, coping strategy, and educational impacts variables. The sum score displayed in the table becomes the basis for classification of each variable in Table 3. It indicates the level of students’ mental health, their coping strategy toward Covid-19 stressor, and educational impacts due to university closure. Based on the total score of respondents’ self-report, students’ mental health was at a moderate level. They were found under a lot of pressure and anxiety seeing the news and information regarding Covid-19. They perceive it is hard to have positive feeling and initiative to do something during the outbreak. However, they do not lose hope and still have the enthusiasm in doing activities. Even though they do not have serious issues related to physical health, they experienced sleep disorder and emotional control problems.

On the other hand, this study indicates that students implement a good coping strategy toward Covid-19 stressor. It is evidenced by positive actions with regard to task-orientation, emotion-

orientation, and acceptance-orientation. Most of the students execute health protocol and safety instructions such as always wear mask, clean their hands, and keep social distance whenever they have activities outside. The majority of students even prefer to stay at home and avoid the crowd. Furthermore, in reducing or managing emotional distress during the quarantine, the majority of students seek out social support. They share their anxiety to families and close friends. Even though they are physically distanced, they still communicate and maintain relationships with friends and relatives. Another coping strategy that has been implemented by students was acceptance. This study reveals that they accept this stressful moment and deal with the situation. They accept that the pandemic has happened in the first place and search for the optimistic aspects of the situation. Moreover, they try to see it from a different perspective to make it seem more positive. They learn something from this experience and keep developing themselves in the midst of difficulties.

With regard to university closure, the students reported severe educational impacts. They experience several learning disruptions for instance they found it was hard to understand the academic lesson which affects their academic performance. Moreover, they were unable to concentrate when doing the assignment and preparing for the examination. Almost all the students prefer studying on campus with peers rather than doing it alone at home. The absence of social interaction leads to dissatisfaction and demotivation towards school.

Table 2. Descriptive Statistics

	Mental Health	Coping Strategy	Educational Impact
N	358	358	358
Valid			
Missing	0	0	0
Mean	52,62	79,48	34,79
Median	53,00	80,00	35,00
Mode	47 ^a	80	45
Sum	18839	28453	12454

Table 3. Level of Students' Mental Health, Coping Strategy, and Educational Impacts during Covid-19 Pandemic

Mental Health		Coping Strategy		Educational Impact	
Level	Range Score	Level	Range Score	Level	Range Score
Normal	6444 – 11599	Very Bad	7518 – 13532	Normal	3222 - 5799
Mild	11600 – 16755	Bad	13533 – 19546	Mild	5800 - 8377
Moderate	16756 – 21911	Moderate	19547 -25560	Moderate	8378 - 10955
Severe	21912 – 27067	Good	25561 – 31574	Severe	10956 - 13533
Extremely Severe	27068 - 32220	Very Good	31575 – 37590	Extremely Severe	13534 - 16110

4.2 The Effect of Mental Health and Coping Strategy on Educational Impacts

Table 4 shows the result of multiple regression analysis to predict the influence of mental health and coping strategy on students’ educational impacts. It was found that mental health positively affects educational impacts ($\beta=0.387$, $p<0.05$), suggesting an acceptance of Hypothesis 1. On the other hand, coping strategy negatively affects educational impact ($\beta=-0.122$, $p<0.05$) which confirms Hypothesis 2. It means that if students perceive a higher level of mental health problems leads to higher impact on education. On the other hand, if students perform better coping strategy will demonstrate small educational impacts. In addition, as indicated in Table 5, the result of R^2 , the explained variance of mental health and coping strategy on educational impact was 15,6%. It could be determined that mental health and coping strategy were reliable in predicting and interpreting educational impacts.

Table 4. Regression Analysis of Mental Health, Coping Strategy, and Educational Impacts

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
1 (Constant)	31,479	3,777		8,335	
0,000					
Mental Health	0,229	0,029	0,387		7,956
0,000					
CopingStrategy	-0,110	0,044	-0,122		-2,503
0,013					

Table 5. Determination Coefficient

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.401 ^a	0,161	0,156	6,257

a. Predictors: (Constant), Coping Strategy, Mental Health

This study shows that Covid-19 pandemic imposes mental distress on university students. Its massive reporting in the media and the quarantine effect has increased mental health problems of anxiety and stress. This finding verifies previous studies which postulate that Covid-19 pandemic create substantial increase in depression, anxiety and stress (Gruber et al., 2020). Similar results have been found in different sectors for instance healthcare providers (Kanekar & Sharma, 2020), general population (Serafini et al., 2020), and immigrant hospitality workers (Sönmez, Apostolopoulos, Lemke, & Hsieh, 2020). Thus, this study provides more insight on how Covid-19 outbreak leads to mental distress in the education sector.

Furthermore, current study also reveals a severe impact of Covid-19 on education. The adoption of distance learning leads to students' dissatisfaction, demotivation, and learning loss. These negative effects caused by switching from offline to online learning has been found in primary and secondary schools (Di Pietro, Biagi, Costa, Karpiński, & Mazza, 2020) as well as college students in various countries for instance the US, Bangladesh, China, Malaysia, and Morocco (Bono, Reil, & Hescocx, 2020; Patricia, 2020; Savitsky, Findling, Erel, & Hendel, 2020; Nurunnabi et al., 2020; Sundarasan et al., 2020; Dutta & Smita, 2020; Son, Hegde, Smith, Wang, & Sasangohar, 2020; Rahali et al., 2020; Robbins et al., 2020). This study can serve as evidence of the effect of Covid-19 on education from Indonesian perspective.

On the other hand, this study suggests that coping strategy might be a key aspect in reducing the educational impacts. Specifically, positive coping strategy that focus on problem and emotion coping, can help students to cope with mental problems and achieve their desired academic performance. The interventions carried out by schools are also important to help students overcome their concerns about academic performance. The educational institution can take many actions such as reducing course loads, simplifying the examination mechanism, or even adding academic performance assessment factors that are considered to reduce student stress levels (Changwon Son et al., 2020). Moreover, the teaching staff can approach students by engaging them to discussions about their fears in facing online learning and then strive them to figure out a positive rather than negative attitude toward online learning (Patricia, 2020) that can help them manage their academic performance.

5. Conclusion

This study is intended to describe students' mental health during Covid-19 pandemic, how they cope with the situation, and educational impacts. It also examines whether mental health and coping strategy influence students' education.

Results reveal that Covid-19 has spread its effect on students' mental health which is evidenced by moderate self-reported anxiety and stress disorder. Moreover, this study also highlighted some educational impacts as consequences of online learning policy due to Covid-19 pandemic. It includes disrupted learning behavior, deterioration of academic performance, as well as decrease of school satisfaction and motivation. The move from offline to remote learning was likely to affect students negatively who have difficulties in adapting to the new learning situation. Fortunately, students reported good coping strategy. It is indicated by good task-orientation, good emotional and social support, as well as positive acceptance of the situation.

Moreover, this study found a significant effect of mental health and coping strategy on educational impacts. Therefore, we suggest university take proactive action to improve mental health and well-being of the students. University can hire professional counselor to help students overcome stress and anxiety. Any students experiencing feelings or symptoms related to anxiety, stress, and depression should be treated with proper psychological care. Moreover, university should encourage students and staff to keep in touch via any form of social media to get through this difficult times together. To reduce social, emotional, and educational distress among students, support from family, friends, lecturers, and the government is required. In a word, students' safety and well-being should be the highest priority.

6. Limitations and Further Research

A few limitations should be acknowledged in this research. First of all, this study only represents a small group of undergraduate students of Faculty of Economics and Business University of Padjadjaran, Bandung, Indonesia. Thus, the findings were not generalizable to all students. Comparative studies from different schools, universities, or countries would provide more insights. Second, using the method of self-report questionnaire data collection might cause error in the subjectivity of the answer. In the future research, additional in depth interview were suggested to obtain more profound and accurate data and information.

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