

## Response and Impact of the Covid-19 Pandemic on Mathematics Education Students

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### **Abstract**

*Large Scale Social Restrictions (PSBB) due to the outbreak of the Covid-19 pandemic have raised significant problems for the world of education. The impact received by students is very large, especially mathematics education students. Subjects that are known to be difficult need to be studied properly by students. So that it creates psychological pressure on individual students. The method used in this research is data collection through interviews and questionnaires. This study aims to determine the impact of government-issued policies, namely online learning.*

**Keywords:** Covid-19, Mathematics Students, Psychological Stress;

## **INTRODUCTION**

This paper specifically examines the pressure that comes from the enactment of a government policy related to the PSBB (Large Scale Social Restrictions) on Mathematics Education Students at the PGRI Madiun University. Especially for the mathematics education students of the PGRI Madiun University class of 2019. Discussing the PSBB requires an explanation related to Corona Virus Diseases 2019, also known as Covid-19. Early in 2020, the world was in an uproar with the emergence of a new disease in the form of a mysterious pneumonia which was caused by a new virus that was included in the type of corona virus which had the name SARS-CoV-2 or Novel coronavirus (2019-nCoV). (Isbaniah & et al, 2020) Coronavirus (CoV) is a large family of viruses that cause illness ranging from mild to severe symptoms. This virus causes a disease known as the corona virus diseases 2019 (Covid-19) which was officially named and published on 11 February 2020.

This disease was first entered in Indonesia in March 2020, it is suspected of having a positive case of Covid-19 in the Depok area. After these cases there was a significant increase in cases in the Jabodetabek area so that it became a red zone. With the emergence of the Covid-19 disease in Indonesia, it has an impact on all sectors. Mainly the education sector. (Argaheni, 2020) The National Disaster Management Agency (BNPB) issued decree number 13 A regarding the determination of the emergency period due to the corona virus. Based on this designation, the Ministry of Education and Culture (Kemendikbud) issued a Circular from the Minister of Education and Culture Number: 36962 / MPK.A / HK / 2020 dated 17 March 2020 regarding online learning and working from home in the context of Preventing the Spread of Corona Virus Disease ( COVID-19)

Education, which is the main pillar of national development and the learning process at its core, has become disrupted by self-government policies. Policies that are basically aimed both at breaking the chain of the spread of Covid-19, including learning carried out online (in a network) or distance learning. In fact, it has a big impact, especially students of mathematics education and as a sample are students of the 3rd semester of mathematics education at PGRI Madiun University.

This online learning requires every 3rd semester student of mathematics education at PGRI Madiun University to be able to understand the material. Mathematics, which in fact is a subject at the lowest level of education to the highest level, is known as a difficult subject by many people should be understood as much as possible by students of mathematics education as well and deeply. Mathematics education students are required to properly master these subjects.

However, online learning has a lot of problems with an unstable network in the region and mathematics courses that are known to be difficult to understand. This raises problems related to the psychological metal of the 3rd semester students of PGRI Madiun University mathematics education, including excessive fear when online learning begins and difficulty adapting to normal lectures.

Research on covid and its effects on education has been carried out, such as: Guidelines for Preparedness for Novel Coronavirus Infection (Isbaniah & et al, 2020), Problems of Education Policy Amid Pandemic and Its Impact on the Learning Process in Indonesia (Saleh, 2020) . Impact of Covid-19 on Education in Indonesia: Schools, Skills, and the Learning Process (Impact of Covid-19 on Education in Indonesia :, 2020). Student Perceptions of Online Lectures as a Learning Facility During the Covid-19 Quarantine Period (Zhafira SM., Ertika SE., & Chairiyaton, 2020).

From previous research, there is research related to online during the Covid-19 period, namely " Student Perceptions of Online Lectures as a Learning Facility during the Covid-19 Quarantine Period" (Zhafira SM., Ertika SE., & Chairiyaton, 2020). This research is aimed at students' perceptions about Teuku Umar University's online applications and methods. Meanwhile, this manuscript focuses on the suggestions that arise in the 3rd semester students of the PGRI Madiun University. This research is intended or aims to describe the problems experienced by mathematics education students in carrying out lectures online. This article is hoped to be able to stimulate the resolution of this matter.

Therefore, this paper specifically examines the psychological pressure of mathematics education students, especially for mathematics students of the 2019 class of PGRI Madiun University during the Covid-19 Pandemic. (Isbaniah & et al, 2020) Coronavirus (CoV) is a large family of viruses that cause illness ranging from mild to severe symptoms. There are at least two types of coronavirus that are known to cause diseases that can cause severe symptoms such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). The novel coronavirus (2019-nCoV) is a new type of virus that has never been previously identified in humans. Coronaviruses are zoonotic (transmitted between animals and humans). Research states that SARS-CoV is transmitted from civet cats to humans and MERS-CoV from camels to humans. Several coronaviruses are known to circulate in animals but have not been shown to infect humans

This virus first appeared in Wuhan, Hubei Province, China. And this incident is related to the local seafood market because the patient had the first activity in the market. This virus was discovered at the end of 2019. The spread of Covid-19 has proven to be very fast and terrible, the spread of this virus can be through the air when someone sneezes. This virus attacks the lungs of

the sufferer. So that it can result in death caused by damage to human lungs. Psychological pressure is the pressure that appears on individuals related to their psychology. This pressure arises because of stimuli from the outside environment. The outbreak of the Covid-19 pandemic caused the government to make a policy including the PSBB (Large-Scale Social Restrictions), with the main point of implementation, namely by replacing the learning system that was changed to online (on the internet). This policy has a significant impact on students and other students because of the potential to put more pressure on students.

## **METHOD**

The research was carried out directly with possible sources and strengthened using a questionnaire via google form. Aims to break the chain of spreading covid-19 and comply with government regulations. The implementation of this research was carried out in September-October 2020 with interviews and strengthened using the google form media. The targets and subjects of this study were students of the PGRI Madiun University mathematics education class 2019 class a and b. Identification of problems, limiting problems, establishing research focus, collecting data, processing data.

## **RESULTS AND DISCUSSION**

### **Result**

The purpose of this study was to collect information about the impact of the Covid-19 pandemic on the psychological state of the 2019 class of mathematics education students at PGRI Madiun University by implementing an online learning process policy. The results of the research are in the form of an answer to the questions presented to respondents. The following is a quote from the respondent's answer. Based on the opinions of respondents, it shows that students consider online lectures difficult, with the results of data collection stored 70% think online lectures are difficult, 20% think that they are not bad, and 10% are not. From the results of interviews and questionnaires it shows that students find online lectures difficult due to the absence of face-to-face contact with the lecturer so that students find it difficult to learn by themselves, especially because mathematics is a subject that is considered difficult by many people, the lack of even signal causes frequent disconnections during lectures. And the survey results show that there are some respondents who think online lectures are not difficult because online lectures provide a lot of free time to be creative and relax without any time restrictions. Of the total respondents, there are 80% who think that lecturing online or online creates psychological pressure for them, and 20% of them think "No" Based on the data collected, most respondents think that there is pressure when lecturing online triggers emotional instability, dizziness due to inadequate networking. and the difficulty of mathematics if it is not explained directly by the lecturer (offline).

### **Discussion**

In the learning process in the era of the Covid-19 pandemic, it is recommended by the government to carry out online learning (in the network). This aims to break the chain of the extremely fast spread of Covid-19. However, this policy raises several difficult problems, especially for mathematics education students. Online or indirect face-to-face learning is much more difficult in the delivery of material from lecturers to students. Of the 20 student respondents from PGRI Madiun University class 2019 classes A and B showed results where 70% of students found it difficult, 20% thought it was quite difficult, and 10% did not find it difficult. Those who said it was difficult because mathematics was a difficult subject, especially because it did not meet face to face with the lecturers. Those who stated that they did not find it difficult argued that online lectures provided space for creation and work. So that here we can see that online lectures make it more difficult for mathematics education students.

Learning online in the Covid-19 pandemic era is certainly not easy to do. Even online learning can be said to be difficult. It is evident from 20 respondents that 80% stated that online lectures for mathematics education students gave them psychological pressure and 20% said they were not. The psychological pressures they received include the lack of emotional stability due to the lack of stability in the network, the fear of not being able to follow the material from the lecturers.

## CONCLUSIONS AND SUGGESTIONS

Online lectures are considered by students of mathematics in August 2019 to be difficult, even though they are not fully 100% but have reached 80% and are classified as large values. This is due to problems, namely: (1) Mathematics courses are considered difficult to do self-study (2) the network is not as stable, the existing problems give rise to a feeling of depression in students, as evidenced by the emergence of symptoms in the form of unstable emotions, giddy with fear of assignment deadlines.

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