

The Impact of Social Distance Learning to the Students' Stress Level During the Covid 19 Pandemic among in State Senior High School

Ning Iswati¹, Dyah Puji Astuti^{2*}, Dwi Hidayanti¹

¹Undergraduate Study Program in Nursing, Universitas Muhammadiyah Gombong ²Undergraduate Study Program in Midwifery, Universitas Muhammadiyah Gombong Corresponding author's email: dyahpuji090384@gmail.com

ABSTRACT

The Covid-19 pandemic has affected all aspects of life, including education. Presently, educational institutions should implement distance learning to reduce risks of the Covid-19 transmission. Teachers and students are required to implement learning methods using the internet without face-to-face interactions. As a result, schools provide more online assignments to students. Online learning during the Covid-19 pandemic has caused students to experience various pressures, leading to stress and anxiety. This study aimed to determine the correlation between online learning system and students' stress level during the Covid-19 pandemic among students of grades 1, 2, and 3 in the State Senior High School of Kejobong, Purbalingga Regency. This study employed a correlational design with a cross-sectional approach. The samples were 96 students recruited using a random sampling technique. The online learning system questionnaire and Depression on Anxiety Stress Scale (DASS) were used for data collection. The majority of respondents, amounted to 51 (53.1%), considered that the online learning system applied at the school was still less. Normal and mild stress levels were mostly experienced by the respondents, as many as 48 (50%) and 44 (45.8%), respectively. A bivariate analysis using the Spearman-rank test showed a negative correlation between online learning system and students' stress levels. There was a negative correlation between online learning systems and stress levels among students. It is recommended to evaluate the online learning system that has been conducted at the school and involve more effective learning methods so that students can gain optimal learning experiences during the pandemic.

Keywords: Social Distance Learning; Stress Levels; Kejobong Purbalingga Regency

1. INTRODUCTION

The learning process at schools is the best instrument of the public policy to increase students' knowledge and skills. Most students think of school as a place to meet and interact with their peers or everyone in the school environment. In schools, students can improve their socialization skills and awareness of social class. However, the Covid-19 pandemic has caused learning activities in schools to be temporarily closed.

Based on the Decree of the Indonesian Ministry of Education and Culture number 36962/MPK.A/HK/2020, all teaching and learning activities at schools and colleges should be conducted online to prevent the progression and transmission of the Covid-19 virus. Online learning is the learning process that is carried out by utilizing the internet network accessibility, connectivity, flexibility,

and ability to bring up various learning interactions. In other words, online learning is the learning method that is conducted using internet-connected applications. These applications may include WhatsApp Group, Zoom Meeting, Google Meet, Google Classroom, and others.

One of the government's efforts to deal with the pandemic is to close the educational institutions temporarily. However, every policy always has risks, and in the education sector, the emergence of new policies has a significant impact on the quality of learning in schools. In addition, the school closing makes it difficult for teachers to assess students. To overcome this issue, real actions should be taken by various parties, namely by providing supporting facilities for online learning.

Although online learning has been widely practiced in developed countries, it is a new thing for Indonesian education. Online learning has some advantages and disadvantages. For example, the learning activities can be carried out anytime and anywhere; online learning also allows students to obtain more information from various resources.

However, online learning also has some issues. According to Morgan, it is difficult for some regional areas to conduct online learning due to inadequate internet networks. In addition, spending additional costs on internet quota is a new problem for families with low economic status. Some of these problems will undoubtedly cause stress for students.

Educators are required to be able to modify learning methods in the midst of online learning due to the Covid-19 pandemic since schools and educators are the main keys in to the success of online learning. Yet, the implementation of online learning is considered less than optimal as educators have not been able to carry out digital learning [3] [4].

As mentioned earlier, an online learning system has advantages and disadvantages. One of the consequences of doing online learning is the lack of students' understanding of the concept of the lessons. In face-to-face learning, students will receive an explanation in advance about the concepts and learning objectives; in the next step, students will learn about understanding and development of the subject matters. Such steps as found in face-to-face learning cannot be carried out optimally in online learning.

The changes in the educational settings during the Covid-19 pandemic have put pressure on academia. The application of learning at home policy adds to the anxiety and pressure of some students. Students feel stressed because they have a lot of tasks from the teachers during the online learning; they also have less understanding of the materials when compared to face-to-face learning. The tasks given by the teacher were considered burdensome as they are not only a lot, but the work time is short, resulting in confusion, pressure, and stress. According to Jain and Robin (2012), students can experience academic stress due to assignments, exams, and the many mandatory activities that they should do.

The existing problems in online learning are congruent with a study by Purwanto et al. [2], which reported some barriers in implementing online teaching and learning programs that students, teachers, and parents experienced. Some of these barriers included the limited knowledge of technology, limited cost for internet quota, communication related to student progress that should be carried out periodically in the midst of busy parents and teachers, no time limit for working hours, student assistance amid busy parents, and others.

A preliminary study was conducted by distributing seven questions in the form of a Google Form to the students where this study took place using WhatsApp messages. The results showed that ten students had difficulties in understanding school materials online and doing assignments, as well as feeling burdened or pressured with school assignments. Furthermore, students stated they got angry easily due to trivial things as a result of online learning. They were also easily offended by other people's words, found it challenging to rest, and often felt panic when experiencing a lousy internet connection during online learning. In contrast, the other four students mentioned they could understand the situation during the pandemic and were more accepting of the current situation. Accordingly, this study aimed to determine the correlation between online learning system and stress level during the Covid-19 pandemic among students of grades 1, 2, and 3 in the State Senior High School 1 of Kejobong, Purbalingga Regency.

2. METHOD

This study was conducted using a quantitative correlational design with a cross-sectional approach. The population was all students of the State Senior High School 1 of Kejobong, Purbalingga Regency in June-July 2021, amounting to 640 students.

A random sampling technique was applied to recruit respondents from 18 classes, in which 4 to 6 respondents from each class were recruited. The inclusion criteria included: (1) high school students of grades 1, 2, and 3 of the academic year 2020/2021, (2) students who underwent online learning, and (3) students who were willing to be respondents. Meanwhile, the exclusion criteria included: (1) students who were sick, and (2) students who did not attend the school lessons. The researcher asked the class leader for assistance to record representatives from each class. The data collection was carried out within one week.

This study used two questionnaires, namely the DASS (Depression on Anxiety Stress Scale) to measure students' stress levels and the online learning questionnaire. The collected data were processed using statistical software. A univariate analysis was used to determine the frequency distribution of the age, gender, class, major, effectiveness of online learning, and stress levels. The bivariate analysis using the Spearman-rank test was employed to determine the stress levels during the COVID-19 pandemic among students in grades 1, 2, and 3.

3. RESULT AND DISCUSSION

Table 1 Characteristics of the respondents

No	Characteristics	Frequency (f)	Percentage (%)
1	Gender		
	Male	40	41.7
	Female	56	58.3
	Total	96	100
2	Grade		
	Grade 1	37	38.5
	Grade 2	37	38.5
	Grade 3	22	22.9
	Total	96	100
3	Major		
	Natural science	44	45.8
	Social science	52	54.2
	Total	96	100
4	Age (years)		
	15	17	17.7
	16	25	26
	17	35	36.5
	18	19	19.8
	Total	96	100
5	Online learning system		
	Less	51	53.1
	Sufficient	45	46.9
	Total	96	100
6	Stress level		
	Normal	48	50
	Mild	44	45.8
	Moderate	4	4.2
	Total	96	100

Table 1 shows that the majority of respondents were female (58.3%), being in the first and second grades (38.5%), and were from social science majors (54.2%). Furthermore, most of them were 17 years old (36.5%). Concerning the implementation of online learning system

at school, the majority of students, amounting to 51 (53.1%), perceived that the implementation was still less. In addition, most students experienced normal stress as many as 48 (50%) and mild stress as many as 44 (45.8%).

Table 2 The Frequency Distribution of Stress Levels by Gender

Gender		Stress Level				
	No	Normal		ild	Moderate	
	f	%	f	%	f	%
Male	18	37.5	19	43.2	3	75
Female	30	62.5	25	56.8	1	25
Total	48	100	44	100	4	100

Table 2 shows that most female students experienced normal stress and mild stress as many as 30 (62.5%) and 25 (56.8%), respectively. In contrast, most male students

experienced moderate stress with a total frequency of 3 (75%).

N. Iswati et al.

Table 3 The Frequency I	Distribution	of Stress	Levels by	/ Grades
--------------------------------	--------------	-----------	-----------	----------

			Stress	s Level			
Grade	No	Normal		Mild		Moderate	
	f	%	f	%	f	%	
Grade 1	10	20.8	26	59.1	1	25	
Grade 2	21	43.8	13	29.5	3	75	
Grade 3	17	35.4	5	11.4	-	-	
Total	48	100	44	100	4	100	

Table 3 shows that students of grade 2 mostly experienced normal stress with a total frequency of 21 (43.8%) students. Meanwhile, mild stress and moderate

stress levels were mostly experienced by students of grade 1 with a total frequency of 26 (59.1%) and grade 2 with a total frequency of 3 (75%), respectively.

Table 4 The Frequency Distribution of Stress Levels by Study Majors

			Stress	s Level			
Major	No	Normal		Mild		Moderate	
	f	%	f	%	f	%	
Natural science	29	69.4	12	27.3	3	75	
Social science	19	39.6	32	72.7	1	25	
Total	48	100	44	100	4	100	

Table 4 depicts that normal stress was mostly experienced by students of the natural science major with a total frequency of 29 (69.4%). Meanwhile, mild stress

and moderate stress were mostly experienced by the students of the social studies major with a total frequency of 32 (72.7%) and 3 (75%), respectively.

Table 5 The Frequency Distribution of Stress Levels by Age

			Stress	s Level			
Age	No	Normal		Mild		Moderate	
	f	%	f	%	f	%	
15	5	10.4	10	22.7	2	50	
16	11	22.9	13	29.5	1	25	
17	18	37.5	16	36.4	1	25	
18	14	29.2	5	11.4	-	-	
Total	48	100	44	100	4	100	

Table 5 shows that most students aged 17 years old experienced normal stress with a total frequency of 18 (37.5%). Furthermore, mild and moderate stress were

mostly experienced by students aged 17 and 15 with a total frequency of 16 (36.4%) and 2 (50%), respectively.

Table 6 Frequency Distribution of Stress Levels Based on The Online Learning System

Online learning system Stress Le			s Level			
	Normal		Mild		Moderate	
	f	%	f	%	f	%
Less	17	35.4	31	70.5	3	75
Sufficient	31	64.6	13	29.5	1	25
Total	48	100	44	100	4	100

Table 6 shows that normal stress was mostly experienced by students who considered online learning at a sufficient category with a frequency of 31 (64.4%). Meanwhile, mild stress and moderate stress levels were

mostly experienced by students who perceived online learning as a less category with a total frequency of 31 (70.5%) and 3 (75%), respectively.

Table 7 The Correlation between Online Learning System and Stress Levels

			Online learning system	Stress levels
		Correlation Coefficient	1.000	-0.352**
	Online learning system	Sig. (2-tailed)	•	0.000
C		N	96	96
Spearman's rho	Tingkat Stress	Correlation Coefficient	-0.352**	1.000
		Sig. (2-tailed)	0.000	
		N	96	96

^{**} Correlation is significant at the 0.01 level (2-tailed).

The result of the Spearman rank correlation test with a significance level of 0.05 (5%) showed a negative correlation between the online learning system and students' stress levels with r = -0.352, indicating a low correlation. The correlation direction was negative, meaning that when the online learning system is low, the higher the risk of stress would be. In this study, it could be concluded that there was a significant negative correlation between the online learning system and students' stress levels. It means that poor online learning systems can increase the level of stress among students. This situation can be caused by several factors, such as boredom while studying, the lack of places to discuss with friends, and the increased number of tasks given during the online learning process.

The results of this study are congruent with a study by Sadikin and Hamidah, which found that the level of stress tends to be high in students who attended schools with online media; it could occur due to some factors, including lack of teacher-student or student-student interactions, students are reluctant to ask teachers online, or students may feel that they do not understand the learning material that is carried out without face-to-face interaction [1]. The significant decrease in social interaction during the pandemic can be another cause of stress for students. The boredom that students experience while studying from home is also a problem. During online learning, students have many tasks from their teachers that should be completed within a short time; this situation becomes a problem and obstacle for students that can finally trigger stress.

4. CONCLUSION

Most students considered that the online learning systems applied at the school in this study was still less with a frequency of 51 respondents (53.1%).

The stress levels mostly experienced by the students in this study were normal stress as many as 48 respondents (50%) and mild stress as many as 44 respondents (45.8%).

There was a negative correlation between online learning systems and students' stress levels, indicating that the less quality of online learning systems, the higher the stress levels that the students would experience.

REFERENCES

- [1] A. Sadikin dan A. Hamidah, "Pembelajaran Daring di Tengah Wabah Covid-19," Jurnal Ilmiah Pendidikan Biologi, vol. Vol 6 No 02, 2020.
- [2] A. Purwanto dan e. a., "Studi Eksploratif Dampak Pandemi COVID-19 Terhadap Proses Pembelajaran Online di Sekolah Dasar," Edu Psycouns Journal, vol. Vol 2 No 1, 2020.
- [3] Hasanah, U., Ludiana, Immawati, & PH, L. (2020). Gambaran Psikologis Mahasiswa Dalam Proses Pembelajaran Selama Pandemi Covid-19. Jurnal Keperawatan Jiwa, 8(3).
- [4] Hasanah, dkk. 2020. Analisis Aktivitas Belajar Daring Mahasiswa Pada Pandemi Covid-19. Jurnal Pendidikan. Volume 1 No.1.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

