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Students' Perceptions and Stress Levels Following Online Learning

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Abstract. The spread of the COVID-19 disease has made the government issue an online learning process policy to break the virus spread chain. Online learning is a new learning method, and students are not used to it. They are struggling to understand the learning concept and do not understand how to use the supporting applications of online learning. If the students keep feeling anxious and distressed, they will be stressed out. This study was conducted to determine students' perception of online learning and their stress level during the COVID-19 pandemic at Senior Highschool 3 Sibolga (*SMA Negeri 3 Sibolga*). This study used a descriptive quantitative research design and univariate analysis. Samples were obtained using the Probability Sampling method, which is Simple Random Sampling. By using the method, 86 respondents were obtained. The instrument research is questionnaires on the perception of online learning. The results showed that 51 students (59.3%) perceived online learning negatively. In contrast, 35 students (40.7%) perceived online learning positively. In terms of stress level, 75 students (87.2%) have moderate stress, 3 students (3.5%) have mild stress, and 8 students (9.3%) have heavy stress. The study results recommend that community health centers provide education and guidance to the students on dealing with stress during online learning at school.

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1. Introduction

Countries worldwide are currently experiencing an outbreak of COVID-19 (Corona Virus Disease) which occurred at the end of 2019. This case initially occurred in Wuhan, Hubei Province, China. On December 31, 2019, the WHO China Country Office reported that someone had pneumonia, but the etiology was unknown. On January 7, 2020, China finally identified pneumonia as a new type of coronavirus (Susilo et al., 2020). Coronavirus is a contagious disease and can spread through direct contact and droplets from patients who are positive for COVID-19. This Corona is a new type of virus, and no vaccines and drugs have yet been found to cure COVID-19 patients, thus making this virus spread very quickly so that it takes a large number of victims in a relatively short time. Finally, on March 11, 2020, WHO announced that COVID-19 had become a global disease outbreak (Pandemic) (Kemenkes, 2020).

The impact of the expanding COVID-19 spread has prompted the government to issue policies to break the virus spread chain. One of the policies is related to education. According to the Ministry of Education and Culture circular letter Number 4 of 2020 point 2 on implementing education policies in the emergency period of the Corona Virus Disease (COVID-19) spread, the learning process would be conducted at home. Students do not need to go to school or campus. They must study at home using the Online method (*metode Daring*).

Online learning is a learning system carried out without meeting face-to-face in the same place. This means that learning can be done anywhere using a platform to help the teaching and learning process. It also covers long distances (Sourial et al., 2018). However, online learning is a new learning method for most students. So, there are many obstacles to implementing it. Students must have communication tools such as mobile phones or laptops as a medium for online learning. They should have a stable network and internet quota to support the learning process. However, not all students or their families have these communication tools. So many students have difficulty following the learning process with this online method. Parents are also affected by this online learning method. They are struggling to buy or fulfill the needs of these communication tools (Prawantia & Sumarni, 2020).

The research results of Hadi (2020) regarding students' perceptions of online learning during the COVID-19 pandemic found that students were not used to online learning. Students have difficulty understanding the learning concept and do not understand how to use applications that support the online learning process, such as ZOOM, Google Meet, Google Class Room, Whatsapp, etc. Uneven internet access in several areas is also an obstacle in implementing this online learning (Hadi, 2020).

Positive perceptions in dealing with the COVID-19 pandemic and the implementation of online learning will not make students feel pressured or stressed. However, suppose students have negative perceptions because they cannot adapt to online learning methods, it will impact the

student's feelings, physical, and surrounding reactions. According to Andiarna and Kusumawati's (2020) research, online learning affects students' academic stress. Stress occurs because the face-to-face learning process changes rapidly to online learning (Andiarna & Kusumawati, 2020).

Research on this title will be carried out in the yellow zone. An area with a low risk of spreading COVID-19. SMA Negeri 3 Sibolga is one of the schools that conduct online learning in Sibolga. During online learning, it was found that the students' grades were decreasing. Students should be more active and try to improve their knowledge in learning. Yet, some students quit school because of the online learning system. Thus, the authors are interested in researching "Perceptions of Online Learning and Students' Stress Levels during the COVID-19 Pandemic at SMA Negeri 3 Sibolga."

2. Research Methods

This research carried out a descriptive research design with a quantitative approach. Descriptive quantitative research analyses the data by describing or identifying the collected data. This study was conducted at SMA Negeri 3 Sibolga in June 2021, with a total population of 636. The samples were taken using the Slovin formula, which obtained 86 students.

Simple random sampling is used to withdraw the individuals, which means sampling was conducted randomly regardless of population level. The researcher conducted a drawing on the numbered paper. Then, the researcher took the drawing paper as many as the samples to be studied. The drawing number will be matched with the list of student names. In addition, the research was conducted after the class XII students had finished their final exams. So, only class X and XI students who were still participating in learning activities.

The appropriate time to do the research was when the students took semester exams because the school conducted face-to-face exams while still paying attention to the existing health protocols. Human resource teachers helped by gathering the drawn students and handing out research questionnaires. There were approximately 15 students in the room while still paying attention to the health protocols, such as wearing a mask and keeping the distance. The students willing to become respondents would sign the informed consent sheet. The researcher will guide the respondents and explain the questionnaires to be filled.

The research instrument used is the online learning perception questionnaire which has 15 statements to determine students' perceptions of positive or negative online learning taken from the research of Zuriati and Briando (2020) and modified it according to what will be studied in this study. The questionnaire consists of 5 questions on teaching materials, 5 questions on learning atmosphere or environment, and 5 questions on students' interaction. The stress level questionnaire used a generally standardized Perceived Stress Scale (PSS-10), compiled by Sholden Cohen (Zuriati & Briando, 2020). It consists of 10 questions, including 6 negative questions and 4 positive questions to determine the stress level of the samples, whether the stress is mild, moderate, or severe.

The online learning perception questionnaire used in this study has been validated. The questionnaire was declared to have passed the validity test with a value of 1.00. At the same time, the stress level questionnaire has a Cronbach Alpha coefficient on the PSS original scale of 0.80. The reliability test of the questionnaire has been carried out by distributing questionnaires on online learning perceptions and stress levels to 30 respondents outside SMA Negeri 3 Sibolga students who will be the research sample. The reliability test result of the online learning perception questionnaire was 0.877. At the same time, the reliability test result of the stress level questionnaire was 0.713.

After the data is collected, data processing is carried out through editing, coding, scoring, and entry into Microsoft Excel and SPSS. Next, the researcher performed data analysis with univariate analysis, explaining or describing each research variable. Data can be presented in frequency distribution tables and percentages (Notoatmodjo, 2012).

3. Research Results

The results showed that students who became respondents were aged 16 years old (35 students, 40.7%), 15 years old (23 students, 26.7%), and 17 years old (28 students, 32.6%). Most respondents are female, with 47 students (54.7%), while male students are 39 students (45.3%). X class has 44 students (51.2%), and XI class has 42 students (48.8%) who participated as respondents.

Table 1 Frequency distribution of respondent characteristics (n=86)

No	Chararcteristic	Frequency (f)	Percentage (%)
1.	**Age**		
	15 years old	23	26,7
	16 years old	35	40.7
	17 years old	28	32,6
2.	**Sex**		
	Male	39	45,3
	Female	47	54,7
3.	**Class**		
	X	44	51,2
	XI	42	48,8

The results in Table 2 show that 51 students (59.3%) have a negative perception of online learning, while 35 students (40.7%) have a positive perception of online learning. The research data can be seen in the table below.

Table 2 Frequency distribution of online learning perceptions among students of SMA Negeri 3 Sibolga (n=86)

Perception of Online Learning	Frequency (f)	Percentage (%)
Negative	51	59,3
Positive	35	40,7
Total	86	100

The results obtained show that the stress levels of SMA Negeri 3 Sibolga students during the

COVID-19 pandemic are mostly moderate (75 students, 87.2%), mild (3 students, 3.5%), and severe (8 students, 9.3%).

Table 3 Frequency distribution of student stress levels at SMA Negeri 3 Sibolga (n=86)

Stress Level	Frequency (f)	Percentage (%)
Mild	3	3,5
Moderate	75	87,2
Severe	8	9,3
Total	86	100

4. Discussion

The filled questionnaires show that students are not satisfied or unhappy with the online learning method (37.2%) and are also unhappy with the online learning materials (45.3%). Students felt that it is better to study at school than at home (58.1%). Respondents did not agree with the statement that students were more courageous and confident during online learning (38.4%). They agreed that it was difficult to interact with other students during online learning (57%). The respondents answered neutral (41.9%, 36 students) and did not agree (32.6%, 28 students) to the statement in the questionnaire that is "Teacher always answers my question eloquently and correctly during online learning." The research results align with Muntazhimah et al. (2020)'s research. The research shows that most students did not satisfy with online learning. Among the causes are the learning materials are difficult to understand, lack of student cooperation, electricity and internet connection issues, and unable to focus during the learning activity (Muntazhimah et al., 2020). Amelia and Darussyamsu (2020) research also obtained students' negative responses to the statement that learning at home is better than at school. 78 students did not agree with that statement (Amelia & Darussyamsu, 2020).

Agung et al.'s (2020) research show that most students are actively involved in online learning. However, that does not mean they are enthusiastic. Most students (66.7%) are not enthusiastic about online learning, while 33.3% are enthusiastic. Data on students' perceptions of assignments revealed that 57.5% said that the assignments burdened them. While 42.5% of students thought the meeting was fun, they could not stand the marathon tasks (Agung et al., 2020). Online learning is considered compensation for a fun learning and teaching activity during this pandemic. Nevertheless, the many tasks burdened them because all the teachers gave them assignments.

Respondent characteristic demography, that is, sex, can influence the differences in student perceptions of each study. There are different perceptions between male and female students about online learning. This statement aligns with Rahmaniati and Bulkani's (2020) research. Their research showed that commonly male students would have a positive perception of online learning compared to female students. The different perception related to sex is thought to be influenced by an internal factor: the ability to focus is different between one and another. Men tend to have better emotional development than women. One with emotional maturity will act wiser, easily adapt, be impartial, independent, care about morals and ethics, be empathetic, creative, and love challenges (Rahmaniati & Bulkani, 2020).

The research's result on stress levels aligns with Purba (2020) research. Her research showed that most students have moderate-level stress. Of 88 respondents, 30 students (34%) have moderate-level stress (Purba, 2020). AlAteeq et al.'s (2020) research also aligns with this research. In general, 55% of students have moderate-level stress, and 30.2% have severe-level stress. More than half of the samples experiencing stress are often nervous, upset, and unable to overcome the accumulated distress (AlAteeq et al., 2020). Stress is likely to occur and worsen due to a lack of interpersonal communication during social distancing. Thus, coping with online learning may be a challenge for students. It includes students' ability to overcome technology issues, stabilized internet connection, and resources in their house to facilitate online learning.

With moderate-level stress, students commonly will be grumpy and unfocused, which affects the learning capacity and the direction of learning interaction that students follow. Students will be dizzy, delayed in completing assignments, and experiencing sleep deprivation. If the students experience continuous and immense moderate-level academic stress, it will increase their disease risk (Aryani, 2016).

In terms of research limitations, the research questionnaire has a drawback. The researcher had not used the newest version (PSS-14) and used the previous version (PSS-10) to measure the stress level. The researcher also did not identify the respondents' neutral answers on the perception of the online learning questionnaire in depth.

4. Conclusions and suggestions

It can be concluded that most respondents negatively perceive online learning. Most students do not satisfy with online learning. Among the causes are that learning materials are difficult to understand, lack of student cooperation, electricity and internet connection issues, and inability to focus during the learning activity.

The research suggested that nursing care such as community health centers could cooperate with schools to provide education and health service on stress during the pandemic to the students who conduct online learning. The researcher realized that this research still has many drawbacks because the researcher did not provide education about stress to the students. Hopefully, future researchers can provide additional education related to online learning during the COVID-19 pandemic.

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