

Jurnal Pengabdian Masyarakat Putri Hijau	Vol. 3 No. 1	Edition: Desember 2022 – Maret 2023
	<a href="http://ejournal.delihusada.ac.id/index.php/JPMPh">http://ejournal.delihusada.ac.id/index.php/JPMPh</a>	
Received :05 Desember 2022	Revised: 17 Desember 2022	Accepted: 18 Desember 2022

## **HUBUNGAN STRES DENGAN PRESTASI BELAJAR ONLINE SELAMA COVID-19 PADA SISWA KELAS XI SMA NEGERI 1 KABUPATEN DELI TUA KABUPATEN DELI TUA KABUPATEN DELI SERDANG TAHUN 2021**

### **The Relationship Between Stress And Online Learning Achievement During Covid-19 In Class XI Students At SMA Negeri 1 Deli Tua District Deli Tua District Deli Serdang District Year 2021**

**Mona Fitri Gurusinga, Afrilius Simanjuntak**

Deli Husada Deli Tua Institute of Health

e-mail : [monafitrigurusinga@gmail.com](mailto:monafitrigurusinga@gmail.com), [simanjuntakafrius@gmail.com](mailto:simanjuntakafrius@gmail.com)

#### **Abstract**

*Stress is a psychological response to various stressors that can occur in every individual, including high school students. Stress can be one of the factors that can affect a person's learning achievement. During the Covid-19 pandemic, students were directed to take part in the online learning process, which caused most students to get various kinds of stressors that caused stress to have an impact on learning achievement. Learning achievement is an indicator of student learning outcomes obtained from teaching and learning activities carried out. This study aims to determine the relationship between stress and student achievement in class XI at SMA N 1 Deli Tua. This study uses a cross-sectional research design which was conducted in January 2021 at SMA N 1 Deli Tua. The sample of this study amounted to 71 students who have different stress level criteria. Stress level data was collected using the standard DASS-42 questionnaire, and learning achievement data used a documentation technique, namely the recap of the average value of semester 2 report. The data were analyzed using the chi-square test. The results of the study with the chi-square test obtained  $p$  value =  $0.001 < 0.05$ , so  $H_a$  is accepted, which means that there is a significant relationship between stress and student achievement in class XI at SMA N 1 Deli Tua. The conclusion of this study shows that there is a significant relationship between stress and online learning achievement results during Covid-19 in class XI MIA students at SMA Negeri 1 Deli Tua in 2021.*

**Keywords:** *Stress, academic achievement, online, high school students*

#### **1. PRELIMINARY**

*Corona virus disease*2019 or also called Covid-19 is currently an ongoing disease outbreak spreading to almost all countries in the world including Indonesia. This disease is caused by a new type of severe acute respiratory syndrome corona virus called SARS-CoV. Almost all countries in the world have experienced an outbreak of the virus, including Indonesia. one of the cities.

Those exposed to Covid-19 are the city of Deli Serdang, especially Deli Tua Regency. Data on the number of cases was quite high, namely 3,338 cases, 179 people died, and 2,794 people recovered. (WHO). Regarding these conditions, a response was received from the Ministry of Education and Culture (Kemendikbud) which led to the issuance of the study from home scenario from March 2020 until an undetermined time.

Deli Tua District is one of the areas that entered the red zone. However, the implementation of the learning process is carried out online as determined by the Ministry of Education and Culture. SMA Negeri 1 Deli Tua is one of the high schools and above that has implemented online learning since the beginning of March 2020. All students take part in the learning process through mobile device communication media in order to achieve the desired results. Students study online

from their respective homes in accordance with the procedures set by the school starting from attendance, understanding, and timely completion of assignments so as to get learning achievement results as expected.

Stress is a psychological response in the form of emotional changes that can be caused by various stressors. Psychological responses to stressors that occur in each individual vary and have different impacts.

Stress has both positive and negative impacts on students. Stress is divided into two, namely, eustress, stress that has a good impact such as healthy individuals and positive thinking, and that which is the opposite is called distress. (Lestari, 2015).

Someone who is experiencing stress is difficult to concentrate. This feeling of difficulty concentrating will reduce the quality of student learning so that it has an impact on learning achievement results. As for stress in children, it can occur when the child experiences a burden that is considered too heavy.

Based on this background, this study aims to determine the relationship between class XI student stress and learning achievement during the Covid-19 pandemic especially students of class XI at SMA Negeri 1 Deli Tua.

## 2. RESEARCH METHODS

The type of research used in this study is research with a cross-sectional approach. The data collection process was carried out at SMA N 1 Deli Tua. The population in this study were all 249 students of class XI MIA. Samples were taken by purposive sampling with the Slovin formula and obtained a total sample of 71 people.

To measure the level of stress in students using the Depression Anxiety Stress Scale (DASS) questionnaire with stress levels ranging from mild, moderate, severe and very severe stress, while for learning achievement the score recording technique was used with very good, good, moderate, bad categories. in accordance with the Regulation of the Minister of Education and Culture No. 104 of 2014. The data analysis used is univariate statistics and bivariate statistics. The test used is the chi square test. The two variables tested are said to have a relationship if the p-value is less than the degree of error ( $\alpha$ ) = 0.05 (Notoatmodjo, 2010).

## 3. RESULTS AND DISCUSSION

### Characteristics of Respondents

**Table 1. Frequency Distribution of Respondent Characteristics by Gender**

	<b>Total</b>	<b>71</b>	<b>100</b>
<b>Religion</b>	Islam	49	69.0
	Christian Protestant	21	29.6
	Buddha	1	1,4
	<b>Total</b>	<b>71</b>	<b>100</b>
	<b>Parents' job</b>	ASN	21
Private employees		16	22.5
Self-employed		22	31.0
Laborer		12	16.9
<b>Total</b>		<b>71</b>	<b>100</b>

Based on table 1, shows that the frequency of 71 respondents based on gender is the majority female with a total of 43 students (60.4%) and the minority is male with a total of 28 students (39.4%). Based on the age of the majority aged 16 years with a total of 45 students (63.4%) and a minority aged 17 years with a total of 26 students (36.6%). Based on religion, the majority are Muslim with a total of 49 students (69.0%) and a minority of Buddhists with a total of 1 student

(1.4%). Based on the parents' occupation, the majority worked in the private sector with a total of 22 students (31.0%) and a minority worked in the labor sector with a total of 12 students (16.9%). The results of research conducted by Fitri (2013) stated that there was no significant relationship between gender, both male and female, on natural stress levels.

Based on age, there were 45 people aged 16 years and 26 people aged 17 years. According to Monks (1999) the developmental process that goes through middle adolescence (15-18 years) teenagers really need friends. At this stage adolescents are in a state of confusion because they are still unsure what to do choose which one, sensitive or caring, crowded or alone, optimistic and so on.

Based on religion, there are 49 people of Islam and a minority of Buddhists 1 person. Multicollinearity test results by Anggraeni (2011) show a VIF value of 1.001. This means that the data on religiosity and stress variables are not multicollinearity or multicollinearity does not occur. So, it is known that the variables of religiosity and stress have no relationship between each other.

## Univariate analysis

### a. Stress Level

**Table 2.** Frequency Distribution of Respondent Characteristics Based on Stress Level

No	Criteria	<i>f</i>	%
1	Light	43	60.6
2	Currently	20	28.2
3	Heavy	8	11.2
<b>Total</b>		<b>71</b>	<b>100</b>

Based on table 2 shows that 60.6% of students experience mild stress, 28.2% of students experience moderate stress, 11.2% of students experience severe stress. This shows that the majority of stress conditions experienced by class XI MIA students in SMA N 1 Deli Tua is in the mild category. That is, respondents with mild stress are more than respondents with moderate and severe stress.

This is in line with research conducted by As. R. M, et.al (2020) in 146 students of Al Kautsar Elementary School, Surabaya City, it was found that on average the students experienced moderate stress. And also supported by Jatira's research results (2021) showing that first, online learning during the Covid 19 pandemic caused students to experience stressed. Second, the habit of online learning causes students to become bored and lazy because of some of the disturbances that may occur in the habit of online learning.

Research conducted by Acep Roni Hamdani and Asep Priatna (2020) regarding full online learning as a result of Covid-19 said that online is less effective, because there has not been maximum preparation in terms of regulation, implementers in the field, and also students. as well as various supporting infrastructure for online learning, the learning effectiveness level is around 66.97%, it is necessary to increase it again so that learning is more effective in order to improve the quality of learning and student learning outcomes. Based on the results of a survey conducted by Kompas Research and Development, as many as 28.3% of students experience stress if this system lasts a long time (Mediana, 2020).

Based on this statement, it can be said that stress has different factors that cause stress and if someone experiences stress, it will affect all daily activities will be hampered, one of which is the learning process.

## b. Learning Achievement Results

**Table 3.** Frequency Distribution of Respondent Characteristics Based on Learning Achievement Results

No	Criteria	<i>f</i>	%
1	Very good	0	0
2	Well	6	8.5
3	Pretty good	58	81.6
4	Bad	7	9.9
<b>Total</b>		<b>71</b>	<b>100</b>

Based on table 3 shows that 8.5% of students have results in learning achievement good category, 81.6% of students have good learning achievement results, 9.9% of students have poor learning achievement results. This shows that the majority of class XI MIA students at SMA N 1 Deli Tua have a fairly good condition of learning achievement results, and it also shows that there are no students who have a very good grade condition.

According to Wahab, (2015) the factors that influence learning achievement are as follows: (1) The influence of education and learning superior; (2) Development and measurement of the brain, and (3) emotional intelligence (intelligence). As for a student's learning achievement can be influenced by various things but can be classified into two main factors, namely first internal factors and second external factors.

Learning achievement is the result achieved by students after studying for a certain time, in this case at the end of each semester. Learning outcomes are student achievement as a whole which is an indicator of competence and degree of behavior change (Nuchiyah, 2007).

Based on some of the statements above, it can be concluded that the results of learning achievement can be caused by several factors including environmental factors and psychological factors. The Covid-19 pandemic situation has resulted in all learning activities being modified to be online which can trigger several factors that can affect learning achievement results.

## Bivariate Analysis

### The Relationship between Stress Levels and Learning Achievement Results

**Table 4.** Frequency Distribution of the Relationship between Stress Levels and Learning Achievement Results

Characteristics k	Indicator	<i>f</i>	%
<b>Gender</b>	Man	28	39.4
	Woman	43	60.
	<b>Total</b>	<b>71</b>	<b>100</b>
<b>Age</b>	16 years	45	63.4
	17 years	26	36.6

This research shows that on average, 39 people (55%) have a mild stress level with good academic achievement. The results of bivariate analysis in this study using Chi Square, obtained  $p\text{Value} = 0.001$  ( $p < 0.05$ ) meaning that there is a significant relationship between stress levels and student achievement at SMA N 1 Deli Tua.

The results of this study are in accordance with research conducted by As. R. M, et.al (2020) from the analysis of research data, it was found that the correlation value between learning stress

and learning achievement was 0.163 with a p of 0.488. This shows that there is a significant correlation between learning stress and learning achievement. This means that the higher the learning stress, the lower the learning achievement of full day school students at SD Surabaya and vice versa, the lower the learning stress, the higher the learning achievement of full day school students at SD Surabaya.

This is supported by the results of research conducted by

Omomiet. al. (2014) on 100 high school students in Lagos State, stated that stress is related to learning achievement and stress has a negative effect on learning achievement. The results of this study are also in accordance with those conducted by Khanet. al. (2013) on 150 students from different universities in Islamabad, mentioned both stress-related to learning achievement. Students with high levels of stress have less learning achievement, because stress can hinder the ability to learn.

The results of another study conducted by Sihombing (2016) from the results of bivariate analysis using Chi-Square, obtained  $p\text{Value} = 0.587$  ( $P < 0.05$ ) meaning that there is no relationship between stress levels and student achievement results.

is a psychological symptom that we often encounter in everyday life where every individual must have experienced it. One of the main behavioral symptoms of stress is a decrease in one's learning achievement and productivity. Learning has more to do with mental activity, in other words, psychological factors do have a very decisive role in the learning process and its results (Rahmi, 2013). The many factors that influence student achievement include physical, psychological, and learning stressors which are sources of stress so that students can fall into stressful conditions which will greatly affect the learning process, thus impacting student achievement (Kusumaningrum, 2010).

Based on this explanation, it can be concluded that stress is related to one's learning achievement if the factors are influencing stress gives symptoms that can react to individuals so it will affect the learning process so that it has an impact on student achievement.

#### **4. CONCLUSION**

Based on the results of research that has been conducted on 71 respondents, namely class XI MIA students at SMA N 1 Deli Tua, that there is a significant relationship between stress and online learning achievement during Covid-19 in class XI MIA students at SMA Negeri 1 Deli Tua in 2021 .

#### **5. SUGGESTION**

##### a) For the School

Researchers suggest that schools should modify online learning methods during the Covid-19 pandemic which can reduce stress and improve student learning outcomes.

##### b) For the Department of Education

Researchers suggest that the education office should prepare a new strategy in face-to-face plans in order to reduce the risk of decreasing the quality of education.

#### **BIBLIOGRAPHY**

Acep Roni Hamdani and Asep Priatna. effectiveness implementation online learning (full online) during the Covid-19 pandemic at the elementary school level in Subang Regency.

Didactic : PGSD STKIP Subang Scientific Journal, Vol.VI (1) (2020), p. 1-9

- AS, RM, Irmayanti, N., & Zuroida, A. (2020). The Relationship Between Learning Stress and Student Achievement in Full Day School at Al Kautsar Elementary School, Surabaya. *Psikowipa (Psychology of Wijaya Putra)*, 1(1), 1-14.
- Crawford, JR, & Henry, JD (2003). The Depression Anxiety Stress Scales (DASS): Normative data and latent structure in a large non-clinical sample. *British journal of clinical psychology*, 42(2), 111-131.
- Ministry of Education and Culture. (2016). *Assessment Guide for Middle Schools*. Directorate of Basic Education Development. Jakarta: Directorate General of Elementary Education, Ministry of Education and Culture.
- Khanets. al. (2013). Effect of Perceived Academic Stress on Student Performance. *FWU Journal of Social Sciences*, 7(2): 146- 151.
- Kusumaningrum, Andi Tri (2010). *The Effect of Stressors and Learning Methods on Learning Achievement in Midwifery Diploma III Students at Stikes Muhammadiyah Lamongan*, Sebelas Maret University. thesis.
- sustainable. (2015). *Collection of Theories for Health Research Library Studies*. Yogyakarta: Nuha Medika.
- mediana. (2020, March 16). Preventing Covid-19 Transmission, 58 Campuses Start Online Lectures. Retrieved from COMPASS: <https://kompas.id/baca/gratis-access/2020/03/16/prevent-transmission-covid-19-58-kampus-start-kuliah-daring>
- Nuchiyah, Nunu (2007). *Influence Leadership School and Teacher Teaching Performance Against Achievement Study Student*. [http://eprints-uns-ac-id10370/1/15444210\\_8201002\\_3886451.pdf](http://eprints-uns-ac-id10370/1/15444210_8201002_3886451.pdf).
- Omomiet. al. (2014). Perceived Impact of Stress On The Academic Achievement of Biology Students in Education District IV, Lagos State. *European Journal of Psychological Studies*, 3(3): 85- 92.
- Rahmi, Nuzulul (2013). *Correlation between Stress Levels and Learning Achievement of Level II Students of D-III Development Program Banda Aceh Midwifery Department of Health Polytechnic Ministry of Health.NADTA.2011/2013*. [http://respository.unand.ac.id/17345/1/krip\\_nur%27aini](http://respository.unand.ac.id/17345/1/krip_nur%27aini).
- Sihombing, AIP, Atmawidjaja, R., & Siahaan, JM (2016). THE RELATIONSHIP BETWEEN STRESS LEVEL AND LEARNING ACHIEVEMENT OF SEMESTER III STUDENTS OF METHODIST 1 SMA MEDAN, 2016. *METHODA SCIENTIFIC MAGAZINE*, 6(1), 29-34.
- Wahab, Rohmalina. (2015). *Learning Psychology*. Jakarta: RajawaliPers.
- WHO.(2020). [https://covid19.who.int/?gclid=CjwKCAjwoZWHBhBgEiwAiMN66eMYkP27O3kdI-8GZ\\_9sgWqHPDzK01C8uatw8Uu3 miD9UXS AIiahhoC5JEQAvD BwE](https://covid19.who.int/?gclid=CjwKCAjwoZWHBhBgEiwAiMN66eMYkP27O3kdI-8GZ_9sgWqHPDzK01C8uatw8Uu3 miD9UXS AIiahhoC5JEQAvD BwE).