

---

## THE EFFECT OF OFFLINE AND ONLINE LEARNING SYSTEM ON ELEMENTARY SCHOOL STUDENTS' STRESS LEVELS DURING A PANDEMIC

Siti Masyithoh\*, Sindi Lestari

Syarif Hidayatullah State Islamic University of Jakarta, Indonesia

E-mail: [siti.masyithoh@uinjkt.ac.id](mailto:siti.masyithoh@uinjkt.ac.id)

---

Received: 07<sup>th</sup> February 2022; Revised: 28<sup>th</sup> March 2022; Accepted: 28<sup>th</sup> June 2022

---

### Abstract

The entry of the Covid-19 virus into Indonesia has a direct impact, especially in the education sector. The most felt impact is the implementation of the learning process from home with or without using the internet network. Learning using the internet is known as online learning while learning without using the internet is known as offline learning. This study aims to determine the difference in stress levels of students who use offline learning systems and students who use online learning systems during a pandemic. This study uses a quantitative method with an experimental design of posttest only control group design.. This research was conducted at SDIT Nurul Amal with a total sample of 52 students with details of 36 students using the offline learning system and 16 students using the online learning system. Data collection was carried out using an instrument in the form of a student stress questionnaire with a Likert scale model containing 59 items with a valid value ( $\alpha = 0.279$ ). Data analysis used Independent Sample t-Test. The results of this study indicate that there are differences in the stress level of students who use offline learning systems and students who use online learning systems as indicated by the value of t count = 10.03 with  $p = 0.039$  ( $p < 0.05$ ) and the value of Sig. 2 (tailed) 0.00 (Sig. 2 tailed  $< 0.05$ ). This shows that there are differences in the stress levels of students who use offline learning systems and students who use online learning systems.

**Keywords:** offline and online learning system; elementary school; stress levels during a pandemic

### Abstrak

Masuknya virus Covid-19 ke Indonesia berdampak langsung terutama pada sektor pendidikan. Dampak yang paling dirasakan adalah pelaksanaan proses belajar dari rumah dengan atau tanpa menggunakan jaringan internet. Pembelajaran dengan menggunakan internet disebut pembelajaran online sedangkan pembelajaran tanpa menggunakan internet disebut pembelajaran offline. Penelitian ini bertujuan untuk mengetahui perbedaan tingkat stres siswa yang menggunakan sistem pembelajaran offline dan siswa yang menggunakan sistem pembelajaran online pada masa pandemi. Penelitian ini menggunakan metode kuantitatif dengan desain eksperimen posttest only control group design. Penelitian ini dilakukan di SDIT Nurul Amal dengan jumlah sampel 52 siswa dengan rincian 36 siswa menggunakan sistem pembelajaran offline dan 16 siswa menggunakan pembelajaran online. Sistem pengumpulan data dilakukan dengan menggunakan instrumen berupa angket stres siswa dengan model skala Likert yang berisi 59 item dengan nilai valid ( $\alpha = 0,279$ ). Analisis data menggunakan Independent Sample t-Test. Hasil penelitian ini menunjukkan bahwa terdapat perbedaan tingkat stres siswa yang menggunakan sistem pembelajaran offline dan siswa yang menggunakan sistem pembelajaran online yang ditunjukkan dengan nilai t hitung = 10,03 dengan  $p = 0,039$  ( $p < 0,05$ ) dan nilai dari Sig. 2 (berekor) 0,00 (Sig. 2 berekor  $< 0,05$ ). Hal ini menunjukkan bahwa terdapat perbedaan tingkat stres siswa yang menggunakan sistem pembelajaran offline dan siswa yang menggunakan sistem pembelajaran online.

**Kata kunci:** sistem pembelajaran offline dan online; sekolah dasar; tingkat stres selama pandemi

**How to Cite:** Masyithoh, S., Sindi, L. (2022). The Effect of Offline and Online Learning System on Elementary School Students' Stress Levels During a Pandemic. *TARBIYA: Journal of Education in Muslim Society*, 9(2), 63-76. doi:10.15408/tjems.v9i1. 24690.

---

\*Corresponding author

## Introduction

Covid-19 is a disease caused by infection with the new coronavirus or SARS-CoV-2 which comes from the corona family. The rapid spread and transmission of this virus throughout the world have made the World Health Organization (WHO) designate Covid-19 as a global pandemic (Azanella, 2020). The Coronavirus or Covid-19 was first discovered in Wuhan, China at the end of 2019, and so far, more than 200 countries in the world have reported cases of being exposed to the coronavirus, Indonesia is no exception. The President of the Republic of Indonesia, Joko Widodo, announced the first two confirmed cases of coronavirus in Indonesia on Monday 4, June 2020. From then on, there have been 1,024,298 confirmed positive patients, 28,855 confirmed died patients and 831,330 patients have recovered from the disease as of January 27, 2021. (Covid Task Force, 2020).

The spread of Covid-19 has brought a direct indirect impacts on state sectors in Indonesia and elsewhere. Due to the covid-19 pandemic, a growing number of different countries have already begun to apply travel restrictions in response to the transmission of covid-19. On the education sector, for example, travel restrictions has resulted in school closures. According to data from the United Nations Educational, Scientific and Cultural Organization (UNESCO), there are at least 290.5 million students worldwide whose learning activities have been disrupted due to school closures. School closures are affecting their education. However, this is done solely to break the chain of transmission of Covid-19 so that it does not spread further (Yulistiani, 2020).

Given the rapid spread of the Covid-19 Virus, the Government has changed the learning system implemented into distance education. This change is regulated in *Peraturan Pemerintah Nomor 66 Tahun 2010* concerning amendments *Peraturan Pemerintah Nomor 17 Tahun 2010* concerning Management and Implementation of Education which states that Distance Education is education in which students are separated from educators and learning uses communication technology, information, and other media. Distance education is a solution when learning cannot be done face-to-face. In *Undang-Undang Nomor 20 Tahun 2003 Pasal 31 Ayat 2*, it is explained that distance education has the function of providing educational services to community groups who cannot attend face-to-face or regular education. Pangondian et al. (2019) state that e-learning and online learning tools are effective for the teaching and learning process.

With the Covid-19 pandemic, the Ministry of Education and Culture took action by issuing Circular Letter Number 4 of 2020 concerning the Implementation of Education Policies in the Emergency Period for the Spread of Corona Virus Disease (Covid-19), one of which stated that the learning process was carried out from home (BDR) (Kemendikbud, 2020). In the Secretary General's Circular Number 15 of 2020 concerning Guidelines for Organizing Learning from Home in an Emergency Period for the Spread of Corona Virus Disease (Covid-19), the method of implementing BDR is divided into two, namely distance learning within the network (online) and distance learning outside the network (offline). The implementation of online learning is using gadgets or laptops through several portals and online learning applications. While the implementation of offline learning is using television, radio, self-study modules, worksheets, teaching materials, teaching aids, and other learning media from objects in the surrounding environment.

Distance learning has its impact on students. Purwanto et al in his research explains that the distance learning method makes students need time to adapt and they face new changes that will indirectly affect their learning absorption (2020: 5). However, SDIT Nurul Amal, which is located in Pondok Cabe, Pamulang District, South Tangerang City, as one of the educational units in Indonesia affected by the Covid-19 Pandemic, has started implementing distance learning since December 2020. The implementation of distance learning at SDIT Nurul Amal applies two distance learning systems, namely online and offline methods. Offline learning, carried out face to face directly between teachers and students, with a limited number of students and a shorter time. The school packs and organizes the distribution of student study schedules, to maintain a distance and avoid crowds. The majority of students who take part in offline learning are due to not having adequate facilities, lack of gadgets, and lack of qualified internet access. However, not all students conduct distance learning offline, some other students carry out online learning. This is because some parents are worried about the safety of their children if they continue to carry out face-to-face learning at school in the midst of Covid-19 pandemic.

The implementation of two distance learning systems uses two different learning methods and each has a different impact. In the offline distance learning system, schools must consider many things; one of which is the availability of sanitation and hygiene facilities such as clean and proper toilets, handwashing facilities with soap with running water or hand sanitizer, disinfectants, readiness to apply mandatory masks, and a body temperature measuring device (thermogenic) (Kemendikbud, 2020). In addition to this, in the implementation of offline distance learning, teachers get ready for various direct teaching needs and prepare themselves to look cheerful and enthusiastic.

As for the online distance learning system, it requires different preparation. The implementation of online learning also requires adequate facilities. The government and schools must formulate an effective online learning system so that learning can still be carried out properly. Teachers play a role so that learning is carried out actively, innovatively, creatively, and efficiently (Ramdhani, 2021). In this case, the role of parents is needed, especially for lower-grade elementary school students. Parents are the first teachers in the house. In online learning, the teacher packages learning in such a way, so that students can follow the lesson well. In this era, many platforms can be used to carry out online learning. The government itself has collaborated with 12 online learning applications that can be accessed for free, such as Rumah Belajar, Meja Kita, I can do, IndonesiaX, and others (Adit, 2020). However, the implementation of online learning does not only involve the presence of teachers and parents, the learning environment also greatly affects the effectiveness of students in learning. In the article written by Fauzan (2021), it is stated that there are at least three components that contribute to the successful implementation of distance learning which include the presence of parents as companions in learning, educators, and the environment. These three components will determine the success of the implementation of online learning.

During online learning, not a few students complain about the many assignments given by the teacher. Students are required to be able to complete assignments from various subjects in a short time. Students who receive too many assignments may feel depressed and even stressed during online learning. This is in line with the results of research conducted by Salsabila et al which stated that learning stress factors during the covid-19 pandemic were in the form of lack of

understanding of the material, a lot of assignments, declining grades, a tiring and boring learning system, limited internet access, and internet networks, individual internal factors, and social factors other (2021: 59).

The difference between these two learning systems, which require students to adapt, is an environmental uncertainty that can be a potential source of stress (Amelia, 2020:16). Online learning systems that make students unfocused, decreased concentration, and make students feel confused are indicators of stress in students. Stress is a condition that can happen to all people, both children and adults. Stress is a situation that occurs because of the gap between individual conditions and environmental conditions. The individual interprets it as a negative thing. He is unable to deal with it and causes feelings of suppression, inhibition, or threat to his desires. These feelings appear in the form of psychological or physical disorders (Ibung, 2018: XI).

The level of stress felt by each student is different. In his research in 2020, Palupi stated that the average stress level of large grade elementary school students was higher than the average stress level of small grade elementary school students. The difference in stress levels also occurred in schools that implement Full-day and Half-day regulation. This is evidenced in the research of Agatha Kristi Pramudika Sari and Irfan Fajrul Falah in 2018, which stated that there were differences in stress levels experienced by students. Students who attended full-day schools tended to have higher stress levels than students who attended half-day schools.

The difference in the learning system used during distance learning has a different impact on each student. In contrast to the previous studies which highlighted the impact of online and offline learning on students' academic achievement, this study aimed to explore on children's stress levels. This was the background for researchers to find out the difference in stress levels caused by offline and online learning during a pandemic.

The term stress is not foreign to hear in life. Stress is a condition that can be experienced by all people. Be it adults, teens, or children. In general, stress is the body's reaction to situations that cause pressure, change, emotional tension, and others (Sunaryo, 2004: 215). Aryani (2016: 9) says that stress is a condition that demands individual response patterns because it disrupts their balance. According to Mahmud and Uyun (2016: 56), stress is a condition of disruption or imbalance in the state of the body due to psychological pressure. Stress that occurs in the school or educational environment is usually referred to as academic stress (Sinaga in Barseli, 2017:144). Academic stress is caused by academic stressors. Students experience stress due to the learning process or things related to learning activities such as pressure to go to class, study time, cheating, lots of assignments, or getting test scores. In another sense, academic stress that is often experienced by students is a condition or condition in the form of physical, mental, or emotional disorders due to a mismatch between environmental demands and the abilities of students so that students increasingly feel burdened with various pressures and demands at school (Palupi, 2020: 20).

Based on several understandings according to the experts described above, it can be concluded that stress is a body reaction that occurs in a situation or condition that can disrupt the body's balance. It can be in the form of physical, mental, spiritual, intellectual or emotional disturbances that occur due to pressure from the surrounding environment exceeds the abilities that exist in students. In this case, the pressure that is the main cause is the changes and

differences in the learning system: offline learning systems and online learning systems that are felt by students. The body reactions experienced by students in running the offline learning system and the body reactions experienced by students in running the online learning system can disrupt the body's balance.

In today's era, stress has become an attribute of modern life that can occur anywhere, whether at school, work, family, or anywhere. Stress can also happen to anyone, including children, teenagers, adults, or the elderly (Jannah, 2021: 133). Stress or psychological pressure will arise when a person is in an unpleasant/crisis condition. A person can express in various ways, one way is through emotional expressions such as crying in children aged 0-3 years or other non-adaptive behavior such as aggressive or tantrums (Indasari, 2020: 4).

Often a person feels tired, anxious, and has difficulty remembering or forgets easily, this is an early indicator that a person is experiencing stress which is included in the physical symptoms of stress which will then appear as emotional symptoms in the form of anxiety. Musradinur (2016: 185) also says that someone who is stressed will show signs of being tired easily, having headaches, losing appetite, forgetting easily, being confused, and nervous.

In carrying out learning, students also have a large enough opportunity to be attacked by stress. Farmiatno (2010:116) says students will show some behaviors when they start to get stressed, such as being silent when facing assignments or schoolwork, often daydreaming, lack of concentration, being grumpy with people around them, not having an appetite or eating not enthusiastically, fast bored in doing something, and tends to withdraw from friends who are considered smarter than himself. Stress can interfere with student academic achievement. Demakis and McAdams (Sindhu, 2016)) found that undergraduate students who reported increased levels of stress had more significant physical health problems and lowered satisfaction with academic achievement compared to those who reported lower levels of stress.

The Covid-19 pandemic has given a new face to the world of education in Indonesia. At this time, learning in the network (online) is becoming widely known and implemented. The Covid-19 pandemic has become a momentum for the transition of the learning system, from conventional learning to online learning. In addition to online learning, there are also many substitute terms which are usually known as e-learning, virtual learning, computer-mediated learning, web-based learning, and distance learning (Sanjaya, 2020:52). This distance learning process relies on the use of technology as a means of knowledge transfer or virtual learning (Gusty, 2020:16).

According to Gilang (2020: 19), online learning is an activity carried out by teachers and students through internet media. These activities are in the form of all activities carried out in the learning process, be it learning activities, teaching, or collecting assignments. According to Pohan (2002:2), online learning is learning that takes place in a network where teachers and those being taught do not meet face-to-face. Online learning can be done anywhere and anytime, depending on the availability of tools or facilities used. In another study, Handarini (2020: 498) argues that online learning is a learning system that is carried out without direct face-to-face interaction but uses various platforms that can help the teaching and learning process. Online learning is learning integrated by computer technology and the internet (Shabrina et al., 2021). Patrick & Powell (Setyawan, 2019: 23) state "online learning has the potential to transform teaching and learning

by redesigning traditional classroom instructional approaches, personalizing instruction, and improving the quality of the learning experience".

From the definitions above, it can be concluded that online learning is a learning system carried out through internet media using various available platforms, where there is no direct interaction or face-to-face. So that learning can penetrate space and time because it can be done anywhere and anytime.

Offline is an antonym of online or online. In Kamus Besar Bahasa Indonesia (KBBI)/ Big Indonesian Dictionary of the Ministry of Education and Culture, offline is an acronym for outside the network(an); disconnected from the computer network. According to Ambarita, et al (2020: 5) offline learning is an activity that is carried out without utilizing the internet or internet access. The offline learning system is defined as learning that uses media outside the internet, for example, television, radio, or face to face. If a student does an assignment and sends the assignment directly to his teacher and does not connect it to the internet network, then that is an example of offline activity.

In the current pandemic conditions, one of the alternative options that teachers can use if there is no internet access is the teacher conducting face-to-face visits by visiting students in their respective homes directly without using the internet. Both learning systems, both online and offline, must still be carried out in the midst of the Covid-19 pandemic so that students can still study even from home.

Based on the explanation above, the offline learning system referred to in this study is a learning system that uses media outside the internet or without the help of an internet network to carry out learning. In other words, students learn at school and face to face with the teacher.

## Method

This research was quantitative research using experimental methods. The experimental design used in this study was a posttest-only control group design, aimed to determine the level of stress between groups of students who study online and groups of students who study offline.

This research was conducted in August 2021 until the end of the semester 2021/2022 academic year at SDIT Nurul Amal, Pondok Cabe, Pamulang, South Tangerang, Banten. The population used was 209 students of class V and VI SDIT Nurul Amal with a sample of 52 people through the use of the Random Sampling technique. The instrument used in this study was a student stress level questionnaire.

## Validity and Reliability Test

### Validity Test

Before the research instrument is used, it must be tested for validity. The validity test is used to test and ensure that the research instruments used are valid, precise, and accurate. The results of the study can be said to be valid if there are similarities between the data collected and the data that occurs in the object under study (Sugiyono, 2019: 175). A validity test can be done using SPSS help or manually with the Product Moment formula.

From the results of the instrument validity test using SPSS with the determination of  $r$  count  $> r$  table. With the number of 50 people as respondents, the significance value of 0.05 was 0.279. From the table above, it can be concluded that of the 60 question items, there are 56 valid questions and 4 invalid questions.

### Reliability Test

The reliability test can be determined using the Cronbach Alpha formula. In this study, the researcher used SPSS to calculate the reliability value. The following are the results of the reliability test of 56 items that are already valid from the total of 60 items.

Tabel 1. Questionnaire Reliability Test Results

<i>Reliability Statistics</i>	
Cronbach's Alpha	N of Items
0,964	56

From the table 1 of processing results of the questionnaire reliability test, it shows a value of 0.964 which can be concluded that the questionnaire instrument used is reliable.

## Results and Discussion

### Research Results

#### Offline Learning System

Based on the results of research on students with offline learning systems, the average value (mean) was 111.39 from a sample (N) of 36 students with a median value of 115, a mode (mode) of 115, and a standard deviation of 16,291. . The highest value was 141 and the lowest value was 68 with a range of 73 and a standard error of 2,715.

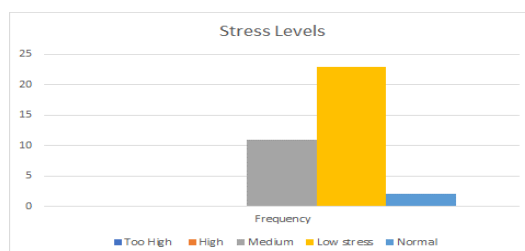
Based on the description of the data above, the researchers made a frequency distribution to figure out and categorize students' stress levels by taking into account the ideal mean an ideal standard deviation, which can be detailed in the table 2.

Table 2. Frequency Distribution of Student Stress Questionnaire Scores with Offline Learning System

No	Interval	Criteria	Frequency Absolute	Relative (%)	Cumulative
1	$X \geq 191,75$	Too High	0	0	0
2	$162,25 \leq X < 191,75$	High	0	0	0
3	$132,75 \leq X < 162,25$	Medium	11	30,56	11
4	$103,25 \leq X < 132,75$	Low stress	23	63,89	34
5	$X < 103,25$	Normal	2	5,56	36
Jumlah			36	100 (%)	

Based on the frequency distribution of the students' stress questionnaire scores above, a histogram graph can be made as follows figure 1.

Figure 1. Histogram Graph of Students' Stress Levels with Offline Learning System



Based on the frequency distribution table and histogram graph above, it can be concluded that 2 students with a percentage of 5.56% have a normal stress level, 23 students with a percentage of 63.89% have a mild stress level, and 11 students with a percentage of 30.56% have a moderate level of stress. Based on the data and explanations above, it can be concluded that students with offline learning systems for grades V and VI at SDIT Nurul Amal on average have mild stress levels.

### Online Learning System

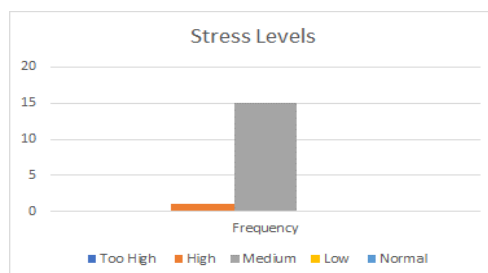
Based on the results of research on students with online learning systems, the average score (mean) was 150.69 from a sample (N) of 16 students with a median value of 149, mode (mode) 160, and standard deviation of 11.300. The highest value was 182 and the lowest value was 134 with a range of 48 and a standard error of 2.825.

Based on the description of the data above, the researchers made a frequency distribution to figure out and categorize students' stress levels by taking into account the ideal mean an ideal standard deviation, which can be detailed in the table 3.

Table 3. Frequency Distribution of Student Stress Questionnaire Scores with Offline Learning System

No	Interval	Criteria	Frequency Absolute	Relative (%)	Cumulative
1	$X \geq 191,75$	Too High	0	0	0
2	$162,25 \leq X < 191,75$	High	1	6,25	1
3	$132,75 \leq X < 162,25$	Medium	15	93,75	16
4	$103,25 \leq X < 132,75$	Low	0	0	16
5	$X < 103,25$	Normal	0	0	16
Jumlah			16	100%	

Figure 2. Histogram Graph of Students' Stress Levels with Online Learning System



Based on the frequency distribution table 3 and histogram figure 2, it can be concluded that 15 students with a percentage of 93.75% had moderate stress levels, and 1 student with a percentage of 6.25% had severe stress levels. Based on the data and explanation above, it can be



concluded that students with the online learning system for grades V and VI at SDIT Nurul Amal on average have a moderate level of stress.

### Normality Test

The normality test was conducted to determine the significance of the data being normally distributed or not. In this study, researchers used the Kolmogorov Smirnov technique to test for normality. The basis for decision making in this technique is if the significance (P) > 0.05, it can be interpreted that the research data is normally distributed. However, if the significance (P) < 0.05, it can be interpreted that the data is not normally distributed. Researchers used the IBM SPSS statistics 26 to calculate the Kolmogorov Smirnov normality test. The results of the calculation of the normality test of the stress variable can be seen in the following table 4.

Table 4. Normality Test Results of Student Stress Questionnaire

<i>Tests of Normality</i>		<i>Kolmogorov-Smirnov<sup>a</sup></i>		
		Statistic	df	Sig.
Learning System	Stress			
	Offline	,124	36	,175
	Online	,142	16	,200*

\*. This is a lower bound of the true significance.  
a. Lilliefors Significance Correction

From the table 4, in the Kolmogorov-Smirnov column, it can be seen that the significance value of the stress variable in the offline learning system is (p) = 0.175, and in the online learning system (P) = 0.200\*, this indicates that the variable is normally distributed because the value is normal. Significance (P) is more than 0.05 (> 0.05); it can be concluded that the student stress variable is normally distributed.

### Hypothesis Test

After testing the prerequisites in the form of a normality test, the researcher tested the hypothesis. This hypothesis test is conducted to determine whether the researcher's hypothesis was accepted or rejected. To test the hypothesis, the researcher used an independent sample t-test or an unpaired t-test to determine whether there was a difference in the average stress level of students with offline learning systems and students with online learning systems. To test the hypothesis, the researcher calculated using IBM SPSS Statistics 26. The results of testing the hypothesis are presented in the table 5.

Based on table 5 of the results of the stress level hypothesis test above, it can be seen in Levene's Test for Equality of Variances column for testing the similarity of variance between the two groups. If the significance value of Levene's test is less than 0.05 (P < 0.05), then Levene's test value is significant, or it can be interpreted that the variance of the two groups is different. On the other hand, if the significance value is greater than 0.05 (P > 0.05), it can be interpreted that the variance of the two groups is the same or not significant. The function of Levene's test value is to direct the researcher for the t-value. If Levene's test value is significant or less than 0.05, the t-value is in the second row (Equal Variance not assumed). On the other hand, if the t value is not significant or greater than 0.05, then t value is in the first line (Equal Variance assumed).

Table 5. Independent Sample t Test

		<i>Levene's Test for Equality of Variances</i>		<i>t-test for Equality of Means</i>							
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
Stres	Equal variances assumed	4,473	0,039	-8,737	50	0,000	-39,299	4,498	-48,333	-30,265	
	Equal variances not assumed			-10,03	40,646	0,000	-39,299	3,918	-47,214	-31,383	

From the hypothesis test result column, the t value 0.039 was smaller than 0.05 ( $P < 0.05$ ), this showed that Levene's test value is significant, meaning that the variances of the two data are different. Therefore, researchers elucidated the results of hypothesis testing in the second row or the Equal Variance not assumed column. Thus, it can be seen that the value of Sig. (2 tailed) in the second line was 0.000. Based on the theory of decision-making, it can be seen that when the significance value is less than 0.05 ( $P < 0.05$ ), then  $H_0$  is rejected. The value of 0.000 was smaller than 0.05 ( $0.000 < 0.05$ ); then it can be concluded that  $H_0$  is rejected and  $H_1$  is accepted, meaning that there are differences in the stress level of students with offline learning systems and students with online learning systems.

### Discussions

This study aims to find out whether there are differences in stress levels between students with offline learning systems and students with online learning systems in grades V and VI SDIT Nurul Amal. Based on the analysis of the prerequisite test in the form of a normality test using the Kolmogorov-Smirnov test, student stress level data is normally distributed. Thus, researchers can carry out the next step: testing the hypothesis using the independent sample t-test to find out whether there is a difference between the stress levels of students with offline learning systems and students with online learning systems.

After analyzing the data, the results showed that the average stress level of students with offline learning was at a mild stress level of 63.89% and 30.56% had a moderate stress level. While students who carry out online learning have a higher stress level where 93.75% of students have moderate stress levels and 6.25% have heavy stress levels. Therefore, it can be concluded that students with the offline learning system for grades V and VI at SDIT Nurul Amal have a mild level of stress on average, and students with online learning system grades V and VI at SDIT Nurul Amal have a moderate level of stress on average. The results of this study are in line with research conducted by Santika and Daulay wherein online learning 87.2% of students have moderate levels of stress, 3.5% of students have mild stress levels, and 9.3% of students have heavy stress levels (2021:48).

## Differences in Student Stress Levels with Offline Learning Systems and Student Stress Levels with Online Learning Systems

From the results in points 1 and 2, it is explained that the average stress level of students with offline learning system has a mild stress level, while the average stress level of students with online learning system has a moderate level of stress. The level of stress experienced by each individual is different, as well as the use of different learning systems, causing different levels of stress in students. Various factors can cause the stress felt by students; one of the factors is environmental demand that is higher than individual abilities or vice versa. Individual demands are higher than environmental conditions (Sari, 2018: 143). The online learning system carried out by students is a new thing for them. The unpreparedness of students in participating in learning, which requires them to learn online or through applications on computers or devices, can be an environmental demand which leads to stress on students who are with online learning system. This is also supported by Musradinur (2016: 194) who says that one of the sources of stress is due to the Development of Science and Technology (IPTEK) because of the demand to always be updated with the times that make individuals compete to know new things.

In addition, another cause of the stress level of students with online learning systems is higher than students with offline learning systems is an imbalance of activities or excessive activities, so that individuals do not have enough time to recover themselves. In addition, closeness to family or loved ones will decrease as a result of the dense activities carried out by individuals (Sukadiyanto, 2010: 62). This is following the findings of the researcher at the time of observing before conducting the study. There is one student in grade 6A who is taking online lessons in the *Zoom* room complaining about too many assignments. This can be a trigger for the emergence of stress felt by students who carry out online learning systems.

The results of this study explain that the average stress level of children is in the mild category in offline learning. This reinforces previous research which states that the effectiveness of online education is not good because students find it difficult to adjust to online education modes and offline education modes remain the most preferred mode of education (Singh et al., 2021). This is in line with the research results of Valentino et al. (2022) which state that 60% of parents choose offline learning.

The results of this study are also in line with research conducted by Agatha Kristi Pramudika Sari and Irfan Fajrul Falah (2018) who explained that students in full-day school have higher stress levels than students in half-day school. This can be caused by the time spent by students in full-day school schools which is quite long, so students easily feel bored and students have little free time due to the density of activities at school. This can also happen to students with online learning systems who are relatively bored. Hence students who use online learning systems have a higher risk of stress levels.

## CONCLUSION

Based on the results of the research, data analysis, and discussion described in the previous chapter, the t-count value 8.737 and the significance value 0.000 show that there is a difference in the average stress level of students who use offline learning systems and the average stress level

of students who use online learning systemat SDIT Nurul Amal. In the results of students with offline learning system, there are 2 students with 5.56% having normal stress levels, 23 students with 63.89% having mild stress levels, and 11 students with 30.56% having moderate stress levels. Meanwhile, there are 15 students with 93.75% having moderate stress levels, and 1 student with 6.25% having severe stress levels in the results of students with online learning system. This clearly shows that there is a difference in the average stress level of students withoffline learning systems and students withonline learning systems. This difference occurs because online learning is more likely to cause boredom in addition to other causes, such as the absence of social interaction between students, poorly understood of teachers' explanation, piles of tasks, and the emergence of network constraints, such as network instability, limited internet access, and so on. Therefore, when online learning still has to be done, especially in elementary schools, the government needs to help reduce stress-causing factors such as providing training for teachers related to an effective and enjoyable online learning process, providing internet data assistance, and providing assistance to students how to deal with stress through health centers or related agencies.

## References

- Adit, Albertus. "12 Aplikasi Pembelajaran Daring Kerjasama Kemendikbud, Gratis!", <https://edukasi.kompas.com/read/2020/03/22/123204571/12-aplikasi-pembelajaran-daring-kerjasama-kemendikbud-gratis?page=all>, 04 Februari 2021.
- Ambarita, Jenri, Jarwati, dan Dina Kurnia Restianti. *Pembelajaran Luring*. Jawa Barat: Penerbit Adab. 2020.
- Amelia, Reski. *Faktor Stres dan Cara Mengatasi*. Gowa: Pustaka Taman Ilmu. 2020.
- Aryani, Farida. *Stres Belajar: Suatu Pendekatan dan Intervensi Konseling*. Sulawesi Tengah: Edukasi Mitra Grafika. 2016.
- Azanella, Luthfia Ayu. "Virus Corona: Penyebab, Gejala, Pencegahan, dan Kapan Harus Segera ke Dokter", <https://amp.kompas.com/tren/read/2020/03/31/1620006665/virus-corona--penyebab-gejala-pencegahan-dan-kapan-harus-segera-ke-dokter>, 18 April 2020.
- Barseli, Mufadhal dan Ifdil Ifdil. "Konsep Stres Akademik Siswa". *Jurnal Konselng dan Pendidikan*. Vol. 5. No. 3. 2017.
- Fauzan. "Pembelajaran Tatap Muka di Tengah Menguatnya Kasus Pandemi Covid-19", <https://www.rmolbanten.com/read/2021/06/09/23645/Pembelajaran-Tatap-Muka-Di-Tengah-Menguatnya-Kasus-Pandemi-Covid-19->, 09 Juni 2021.
- Formiatno, Lucas. *Belajar Mendengarkan (Menjadi Guru & Orangtua Sejati)*. Yogyakarta: Penerbit Pustaka Anggrek. 2010.
- Gilang , R. K. *Pelaksanaan Pembelajaran Daring di Era Covid-19*. Banyumas: Penerbit Lutfi Gilang. 2020.
- Gulö, W. *Metodologi Penelitian*. Jakarta: Grasindo. 2010.

- Gusty, Sri et al. *Belajar Mandiri: Pembelajaran Daring di Tengah Covid-19*. t.t.m: Yayasan Kita Menulis. 2020.
- Handarini, Oktafia Ika. "Pembelajaran Daring Sebagai Upaya Study From Home (SFH) Selama Pandemi Covid-19", *Jurnal Pendidikan Administrasi Perkantoran (JPAP)*, 8, 2020.
- Hidayat, Aziz Alimul. *Menyusun Instrumen Penelitian & Uji Validitas-Reliabilitas*. Surabaya: Health Books Publishing. 2021.
- Ibung, Dian. *Stres pada Anak*. Jakarta: PT Elex Media Komputindo. 2008.
- Indasari, Saskia Rosita. *Buku Saku Dukungan Psikososial Bagi Guru & Siswa Tangguh di Masa Pandemi Covid-19*. Tangerang Selatan: Wahana Visi Indonesia. 2020.
- Jannah, Riazul, dkk. "Tingkat Stres Mahasiswa Mengikuti Pembelajaran Daring Pada Masa Pandemi Covid-19". *Jurnal Riset dan Pengabdian Masyarakat*. Vol. 1. No. 1. 2021.
- Kementerian Pendidikan dan Kebudayaan, "Menyiapkan Pembelajaran di Masa Pandemi: Tantangan dan Peluang", <https://spab.kemdikbud.go.id/wp-content/uploads/2020/07/Menyiapkan-Pembelajaran-di-Masa-Pandemi-1.pdf>, 24 Februari 2021.
- Mahmud, R. dan Z. Uyun, "Studi Deskriptif Mengenai Pola Stres Pada Mahasiswa Praktikum", *Jurnal Indigenou: Jurnal Ilmiah Psikologi*, 1, 2016.
- Musradinur. "Stres dan Cara Mengatasinya Dalam Perspektif Psikologi". *Jurnal Edukasi*. Vol. 2. No. 2. 2016.
- Palupi, Tri Nathalia, "Tingkat Stres Pada Siswa-Siswi Sekolah Dasar Dalam Menjalankan Proses Belajar di Rumah Selama Pandemi Covid-19", *JP3SDM*, 9, 2020.
- P, Sindhu, "Impact of Stress on Academic Achievement among Engineering Students", *The International Journal of Indian Psychology* Volume 4, Issue 1, 2016.
- Pangondian, R. A., Santosa, P. I., & Nugroho, E. (2019). "Faktor-faktor yang mempengaruhi kesuksesan pembelajaran daring dalam revolusi industri 4.0. Seminar Nasional Teknologi Komputer & Sains (SAINTEKS)". <http://prosiding.seminar-id.com/index.php/sainteks/article/view/122>.
- Pengelola web kemdikbud, "Mendikbud Terbitkan SE tentang Pelaksanaan Pendidikan dalam Masa Darurat Covid-19", <https://www.kemdikbud.go.id/main/blog/2020/03/mendikbud-terbitkan-se-tentang-pelaksanaan-pendidikan-dalam-masa-darurat-covid19>, 24 Februari 2021.
- Pengelola Web Kemdikbud, "Pemerintah Daerah Diberikan Kewenangan Penuh Tentukan Izin Pembelajaran Tatap Muka", diakses dari <https://www.kemdikbud.go.id/main/blog/2020/11/pemerintah-daerah-diberikan-kewenangan-penuh-tentukan-izin-pembelajaran-tatap-muka>, 30 Juni 2021.
- Pohan, Albert Efendi. *Konsep Pembelajaran Daring Berbasis Pendekatan Ilmiah*. Jawa Tengah: Penerbit CV. Sarnu Untung. 2002.

- Purwanto, Agus et al. *Studi Eksploratif Dampak Pandemi COVID-19 Terhadap Proses Pembelajaran Online di Sekolah Dasar*. EduPsyCouns Journal 19 Februari 2020 Volume 2 Nomor 1 ISSN Online : 2716-4446. 2020.
- Ramdhani, Fazri Julia et al., “*Humanizing Islamic Religious Education in Bali During the Covid-19 Pandemic*”, TARBIYA: Journal of Education in Muslim Society Vol. 8 No. 1 2021.
- Salsabila, Qorri ‘Ainan et al. *The Effect of the Covid-19 Pandemic on Stress Learning*. Pedagogie, Vol. 2. No. 2 Juli 2021, 59 – 76.
- Sanjaya, Ridwan. *21 Refleksi Pembelajaran Daring di Masa Darurat*. Semarang: Universitas Katolik Soegijapranata. 2020.
- Santika, Dewi Ririn and Daulay, Wardiyah. *Students' Perceptions and Stress Levels Following Online Learning*. CARING: Indonesian Journal of Nursing Science (IJNS) Vol. 3 No. 1 Tahun 2021 Hal. 48-54.
- Sari, Agatha Kristi Pramudika dan Irfan Fajrul Falah, “*Perbedaan Stres Level Siswa Sekolah Dasar Antara Full-Day dan Hal-Day School di Kabupaten Kuningan*”, Jurnal Ilmiah Educater, 4, 2018.
- Satuan Tugas Penanganan COVID-19. <https://covid19.go.id/>. 28 Januari 2021.
- Setyawan, Harits, *Blended Method: Online-Offline Teaching And Learning, On Students' Reading Achievement*. English Education: Jurnal Tadris Bahasa Inggris Vol 12 (1) 2019 22-33.
- Singh, Padmalini et al., “*A Comparative Study on Effectiveness of Online and Offline Learning in Higher Education*”, International Journal of Tourism & Hospitality in Asia Pasific (IJTHAP) Vol. 4 No. 3, 102-114, October, 2021.
- Soeli, Yuniar M. dkk.. “*Tingkat Stres Siswa Pada Sekolah yang Menerapkan Sistem Full Day School*”, Jambura Nursing Journal, 3, 2021.
- Shabrina, Rifda et al., “*Students' Responses to Adapted Online Tahsin Quran Learning during the COVID-19 Pandemic*”, TARBIYA: Journal of Education in Muslim Society, 8(1), 2021, 57-65.
- Sugiyono. *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: ALFABETA. 2019.
- Sukadiyanto. “*Stres dan Cara Mengurangnya*”. Cakrawala pendidikan. No. 1. 2010.
- Sunaryo. *Psikologi Untuk Keperawatan*. Jakarta: Penerbit Buku Kedokteran EGC. 2004.
- Valentino et al., “*Online And Offline Learning Comparison In The New Normal Era, Online And Offline Learning Comparison In The New Normal*”, International Journal of Educational Research & Social Sciences Vol. 3 No. 5 (2022): October 2022.
- Yulistiani, Farida. “*Imbas Pandemi Virus Corona Bagi Dunia Pendidikan Indonesia dan Global*”, <https://www.google.com/amp/s/m.kumparan.com/amp/kumparansains/imbaspandemivirus-corona-bagi-dunia-pendidikan-indonesia-dan-global-1t5YVXRYAbo>, 18 April 2020.