

ORIGINAL RESEARCH

**RELATIONSHIP OF ONLINE LEARNING WITH LEVEL STRESS ELEMENTARY SCHOOL CHILDREN FOR TIME COVID-19 PANDEMIC IN ELEMENTARY SCHOOL**

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Article Info	Abstract
<p>Article History: Received: 25 December 2023 Revised: 30 December 2023 Accepted: 03 January 2023</p> <p>Keywords: Online Learning, Stress Level, children</p> <p>Corresponding Author: Mien Mien : Nursing Study Program STIKes Karya Kesehatan, Indonesia</p> <p>Email: <a href="mailto:Mienmien345@gmail.com">Mienmien345@gmail.com</a></p>	<p><b>Background:</b> The sudden shift to online learning due to the Covid-19 pandemic significantly impacted the educational landscape, especially for elementary school children. This study focused on understanding how this transition influenced the stress levels experienced by students at SDN 78 Kendari.</p> <p><b>Purpose:</b> to investigate the correlation between online learning and the stress levels experienced by elementary school children amidst the Covid-19 pandemic, specifically at SDN 78 Kendari.</p> <p><b>Methods:</b> A correlation research design was employed, targeting students in grades 4-6, totaling a population of 204 individuals at SDN 78 Kendari. The study utilized a purposive sampling technique to select a sample size of 67 participants. Statistical analysis was carried out using the Spearman's rho test to establish the relationship between online learning and stress levels.</p> <p><b>Results:</b> The findings revealed a significant relationship between online learning and stress levels at SDN 78 Kendari, denoted by a P-Value of 0.048. The statistical analysis demonstrated a negative coefficient number of -0.242. This negative correlation implies that increased engagement in online learning is associated with higher levels of stress among the students.</p> <p><b>Conclusion:</b> The outcomes of this study indicate a noteworthy association between the frequency of online learning and elevated stress levels among elementary school children at SDN 78 Kendari. These findings emphasize the importance of considering the psychological impact of online education on young learners, urging the implementation of supportive measures to mitigate stress during remote learning situations.</p>

**Background**

*Corona virus* are part of the main pathogens and will generally attack the human respiratory system (Lestari & Bahar, 2020). Based on further information obtained from the United Nations Education, Scientific and Cultural Organization (UNESCO), to date there are a total of 39 countries that have terminated schools with the number of affected students reaching 421,388,462 children (Purwanto et al., 2020). Since the World Health Organization (WHO) declared Covid-19 as endemic worldwide, life in Indonesia has changed fundamentally in the health, economic, and surprisingly the same also affects the education system in Indonesia (Fatmawati et al., 2021).

In accordance with the decision given by the Minister of Education and Culture of the Republic of Indonesia on March 24, 2020 regarding the Implementation of Educational

Policies in the Emergency Period for the Spread of Covid-19 which explains that the learning framework will be carried out from home through online or distance learning as stated in Circular No. 4 Year 2020(Sari et al., 2021). Changes in the learning framework are followed by demands for developmental tasks, which will unmistakably subject elementary school students to academic stress (Fatmawati et al., 2021).

In Indonesia, it has been shocked by the information of a child who ended his life due to stress because the teaching and learning process is carried out from home using online media. Found in 3 cases in October a child died, ending his life due to difficulties in online learning (Zoahira & Purnamasari, 2023). The main case, happened to a 15-year-old junior high school student in Tarakan, North Kalimantan who ended his life by hanging himself in his room due to difficult online learning and not being able to complete the homework that had accumulated during online learning. The next case in which a 17-year-old high school student (Smp) committed suicide by drinking grass poison to death in Gowa, South Sulawesi (Sari et al., 2021).

The Indonesian Child Protection Commission (KPAI) has received 51 reports from several regions stating that children experience stress and fatigue due to homework given to them every day from different teachers simultaneously with limited time. This can cause psychological and physical health problems in children that will affect their development. Witherington said that at the age of 9-12 years now have the quality of improving behavior which at this stage is a process of self-knowledge accompanied by comparing oneself with others. If the cycle is directionless, children will have difficulty adjusting to their current circumstances. so therefore,(Sari et al., 2021)

Online learning not only has a negative impact but also has a positive impact during the learning process. This can be seen from the various advantages and disadvantages of distance learning. Distance learning has disadvantages such as: inadequate networks, internet quotas that are quite expensive, limited learning media facilities, lack of student understanding of learning materials, and students' lack of interest and enthusiasm for learning. While the advantages of distance learning such as: learning is more practical and relaxed, students get new experiences, the delivery of learning is faster and can be done anywhere and anytime(Sari et al., 2021).

From the results of the initial survey, 10 children at SDN 78 Kendari, namely 8 girls and 2 boys, used the Depression Anxiety Stress Scales (DASS) which consisted of 14 questions. The results of 10 children there were 2 children who did not experience stress (normal), 1 child experienced mild stress, 4 children experienced moderate stress and there were 3 children experienced severe stress. On average they complain of feeling stressed because of the piled up tasks, lack of understanding of the learning provided, economic limitations to buy internet data, bored distance learning and limiting children to play with their friends and meet teachers at school.

## Method

This research utilizes a cross-sectional correlational design to investigate the relationship between online learning and the stress levels among elementary school children at SDN 78 Kendari during the Covid-19 pandemic, conducted during June-July 2021. Inclusion Criteria, Elementary school students in grades 4-6 at SDN 78 Kendari, Participants willing to participate in the study and provide informed consent., Students who have experienced online learning during the Covid-19 pandemic and Exclusion Criteria, Students with existing diagnosed mental health conditions affecting stress perception, Participants unwilling to participate or provide informed consent.

## Instrument

1. **Online Learning Assessment:** An established questionnaire measuring students' online learning experiences, covering aspects such as frequency, duration, and perceived effectiveness of online learning activities. The validity of this instrument was determined through content validity, ensuring that the questions effectively capture relevant facets of online learning. Reliability was assessed using internal consistency methods like Cronbach's alpha, achieving a value of 0.85, indicating high reliability.
2. **Stress Level Evaluation:** A validated stress assessment scale tailored for elementary school children, assessing stressors related to the pandemic, academic pressure, and emotional well-being. The validity of this scale was confirmed through construct validity, comparing its outcomes with other established stress measurement tools, demonstrating a significant correlation. Reliability was measured using test-retest reliability over a two-week interval, achieving a reliability coefficient of 0.78.

## Results

### Online learning

The following is table 1 Distribution of frequency and percentage based on the characteristics of respondents

Characteristics of Respondents	N	%
<b>Age (years)</b>		
9 years	9	11.8
10 years	23	30.3
11 years old	27	35.5
12 years old	5	6.6
13 years old	2	2.6
14 years	1	1.3
<b>Class</b>		
4	23	30.2
5	16	22.3
6	27	35.4
<b>Gender</b>		
Man	28	36.8
Woman	39	51.3

Based on the results of this study, it shows that the students in grades 4-6 at SD Negeri 78 Kendari who are the samples in this study are the majority aged 11 years 27 people (35.5%),

the majority are female 39 people (51.3%), coming from in class 4 there are 23 people (30.2%), class 5 is 16 people (22.3%) and class 6 is 27 people (35.4 %).

**Research variable**

**The following is table 2 Distribution of frequency and percentage based on the characteristics of respondents**

Variable	n	median	Set. dev	Min	Max
Online Learning	67	3.00	0.504	2	4
Stress Level	67	22.00	5,424	6	31

Based on table 2, it is known that the midpoint value of online learning is 3.00 and the stress level is 22.00, the lowest value of online learning is 2 while the highest is 4 and the lowest stress level is 6 and the highest value is 31.

**Normality test**

Based on the results of the normality test, it is known that the significance value of online learning is 0.000 and the stress level is 0.018 <0.05, it can be concluded that the residual value is not normally distributed.

**Spearman's Test**

**The following is table 3 Results of Spearman Correlation Analysis:**

	Stress Level		
	n	p-value	r
Online Learning	76	0.048	-0.424

The results showed that there was a relationship between online learning and stress levels at SD Negeri 78 Kendari with a P-Value of 0.048. The statistical test results show that the coefficient number is negative, namely -0.242, meaning that the more often online learning is done, the higher the stress level.

**Discussion**

**Online learning**

Based on the analysis of the research results, it shows that the minimum value is 2 and the maximum is 4, therefore the results show online learning is often used (1-2x/day) as a medium for the teaching and learning process with lesson lengths >2-3 hours/day. Online learning is a learning system that is not done face-to-face, but utilizes a stage that can help the learning and teaching process that is carried out even though the distance is far. The motivation behind online learning is to provide quality learning administration in a large and open organization to reach an ever-increasing interest in learning spaces.(Ulfah Hamidatus Shofiah, 2020).

These results are in accordance with previous research showing that the redundancy of remote program implementation until May 2020 is that the most students have entered the distance program many times by 55.7% and <12 times by 44.3%. This survey shows that although conversations use a distance program system with e-learning, lectures are still conducted face-to-face from several lecturers. Researchers assume that the online learning method will provide benefits where educators and students become better prepared to use learning applications, the implementation of learning becomes simpler and can be done anywhere. However, students' adaptation to using online learning has clearly also

encountered inconveniences, for example students who are not accustomed to using internet media because so far the learning framework has been carried out in schools, students are accustomed to being at school to work together with their friends, and meet face-to-face.

### **Stress level**

Based on the results of the study, it showed that the minimum score was 6 and the maximum value was 31. According to the results of research conducted at SD Negeri 78 Kendari in grade 4-6 students, the results of the stress level questionnaire showed that the majority stated that they were easily angry because of small/trivial things in the category of sometimes - sometimes 40 students (59.7%), and 3 students I am impatient in the never category, namely 3 students (4.5%). Stress is the body's reaction to a subtle disturbance in the normal functioning of the body, which can absolutely affect the individual, especially physically, mentally, scientifically, socially and spiritually.(Adrian et al., 2021). Psychological indications of someone experiencing stress, including: feeling always worried and anxious, irritable and irritated, cranky, very weak, hesitant to exercise, reduced capacity and work performance, feelings of fear, excessive narcissism, loss of closeness, disconnection from meetings , and fear(Sukadiyanto, 2020).

These results are in line with other studies showing that there are differences in stress levels in large and small grade elementary school students. This is in accordance with the hypothesis put forward that there are differences in feelings of anxiety between large and small elementary school students. The stress level of large grade elementary school students is higher than that of primary class students with the average value of large grade elementary school students is 31.79 while small grade school students are 29.67 with a normal difference of 2.11(Palupi, 2020). These results are in line with the research entitled "Stress Levels in Students who study with Online Media at Madrasah Aliyah Negeri 2 Medan Model" research The results of this study indicate that most of the students in this review are in the moderate pressure classification, especially 30 students (34%) of 88 students. students, experienced the most mild pressure above 22 students (25%), then, at that time, the major and normal pressure was 18 students (20,5). According to the results of the researchers who did it, it was found that the online media used were Google meet, What Sapp, zoom and YouTube by class XI students of Madrasah Aliyah Negeri 2 Model Medan.(Purba, 2020).

Researchers assume that generally the level of stress will occur in students who take classes with online media because there is no cooperation between students and teachers or between students, this is because students are hesitant to ask the teacher directly or students may feel they do not understand learning by online. The drastic decline in social cooperation can also be a reason for stress for students. The fatigue that students feel during the distance learning process is a problem for students. This happens because there is a lot of additional work in a short time for students where this becomes an obstacle for students which can trigger stress on students.

### **Relationship between online learning and stress levels.**

The results showed that there was a relationship between online learning and stress levels at the State Elementary School 78 Kendari with a significant value or sig (tailed) of 0.048, it was concluded that the sig (tailed) value of  $0.048 < 0.05$ . The results of statistical tests show that the coefficient number is negative, namely -0.242 so that the relationship between the two variables is not unidirectional, so it can be interpreted that the more often online learning is carried out, the stress level will be more binding. This is in accordance with previous research which stated that respondents experienced moderate stress levels, above 27 students or (38.57%). Meanwhile, 20 students (28.57%) experienced extreme stress, and 23 students (32.86%) experienced mild stress. Web-based retrieval during the Covid-19 period is also causing tension for students. This can be seen in the delivery of the largest ordinary incentive

for learning answers in number 19 which is related to difficulties in understanding the material in online-based conversations(Kartika Sari, 2020).

Achieving student learning outcomes is influenced by pressure, but there are other things that also affect, especially learning inspiration(Amirudin & Rangga, 2019). The condition of one's learning outcomes will cause students to become less enthusiastic in learning. One type of pressure is scientific (academic) pressure. Furthermore, if someone faces pressure, there will be a sense of laziness in learning(Adrian et al., 2021). This is in accordance with research which shows that students experience immersion in learning due to several unique elements, including media or material that is less interesting so that the introduction of material during the learning process is repeated. The amount of work given is accompanied by material planning without explanation. This causes students to confuse the material. Then, that's when sleepiness arises, loss of energy, stress, sleep disturbances, material fatigue during the pandemic(Pawicara & Conilie, 2020).

Obstacles seen by elementary school students such as non-existent networks and quotas that run out, school assignments that must be done as well, and assignments given every day. The different learning demands that students have to complete cause them to experience academic stress. Students' failure to adjust to these conditions puts them under stress(Palupi, 2020). Researchers assume that the achievement of student learning outcomes is not only influenced by pressure, but there are other things that also influence, especially learning inspiration. Unfavorable conditions in a person will cause students to become apathetic and not enthusiastic in carrying out activities. So it takes motivation to learn from both parents who can encourage someone to be motivated in learning.

### **Research Limitations**

The limitations of this study are that the research time is not in accordance with the previous planning due to the Covid-19 pandemic, so it takes a long time, and also requires quite a lot of time to be able to hold meetings with respondents.

### **Conclusion**

Online learning for elementary school children during the COVID-19 pandemic at 78 public elementary schools in Kendari showed the median value was 3.00, with an average score of 3.33, the minimum score was 2 and the maximum score was 4. The stress level of elementary school children during the covid-19 pandemic at SDN 78 Kendari the median value was 22.70, with an average value of 22.70, the minimum value was 6 and the maximum value was 31. There is a (mean) relationship between online learning variables and stress levels in Elementary school children during the COVID-19 pandemic at 78 Kendari public elementary schools showed a correlation coefficient value of -0.0242, meaning that the strength of the relationship was very weak with a non-unidirectional nature. This means that the more often online learning is done, the higher the stress level will be.

### **Conflict of Interests**

There is no conflict of interest in this research.

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