

Supporting and Inhibiting Factors for Online Learning in the Covid-19 Period in Elementary School Teachers

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ABSTRACT

The Covid-19 pandemic in Indonesia has caused major changes, especially for the education system. Indonesia's learning system which has been implemented face-to-face for a long time has turned into an online learning system. The fact, the sudden changes of the learning system cannot run smoothly. Various factors can support and inhibit the implementation of online learning. Based on these findings, this research was conducted to determine the amount of supporting and inhibiting criteria as online learning factors. The research design used a descriptive research design. The number of samples was 79 people from a total population of 99 people using the proportional random sampling technique. The data collection method of this research used a non-test method by distributing closed-ended questionnaires. The data analysis method used a descriptive statistical analysis method by finding the percentage and the mean (average). Based on the data analysis, it was found that the supporting factors for online learning were 77.27% with high criteria and 64.01% of the inhibiting factors with high criteria. The supporting factors for teachers in online learning are adequate facilities and infrastructure, the teacher readiness in planning the online learning process, the teacher proficiency in the use of technology, and the communication between teachers and parents, while the inhibiting factors of online learning are teacher difficulties in delivering material and the interactions between teachers and students are difficult to implement.

Keywords: Supporting Factors, Inhibiting Factors, Online Learning, Teacher, Covid-19

1. INTRODUCTION

Covid-19, which began to appear at the end of 2019, is still a serious threat to the world. Covid-19 which stands for coronavirus disease 2019 has been declared a pandemic by the world health organization or WHO [1]. This virus causes symptoms of respiratory system disorders such as coughing, fever and shortness of breath. The incubation period for this virus averages 5-6 days to 14 days [2]. The virus, which was detected for the first time in an animal market in Wuhan City, China, has spread to almost all parts of the world, including Indonesia in early March 2020. The number of victims infected with this virus has increased and has caused the government to move quickly to reduce the number of cases of victims infected. The policy to change the face-to-face learning system to online learning is one of the steps to prevent the spread of Covid-19 in the school environment [3]. In addition, the application of this online learning system policy is carried out so that students continue to have their rights to acquire knowledge [4].

[5] learning carried out online involves more technology. The availability of electronic devices and internet connections in online learning can connect teachers and students who are not in the same place to be able to interact with each other [6]. Interaction between students and various learning resources can be created even though they are physically far away [7]. Pictures, videos, audios and documents that have been designed by the teacher to be as attractive as possible so that they can be used by students as learning resources to help students understand the material [8]. The learning material is presented in an attractive manner so that the achievement of learning objectives can occur [9]. This is in line with Dewantara & Nurgiansah [10] with the presentation of learning resources that are designed as attractive as possible to prevent boredom in the learning process. Various applications such as google classroom, zoom and WhatsApp group can be used by teachers and students to be able to interact during the online learning process [11]. Online learning that uses technology in learning causes student learning resources not only to come from teachers, but also from the internet [12]. Creating

effective online learning requires readiness on the part of teachers, parents and students themselves to be able to adapt to these changes [13]. Thus, the needs of teachers can be met with assistance from the school, while the need for facilities and infrastructure as well as student supervision while studying at home can be assisted by parents [14]. So from this explanation it can be concluded that online learning is a process of interaction between teachers and students which is dominated by various technologies as a means of connecting.

Online learning has the advantage of being able to connect teachers and students who are far away to still be able to interact even if they don't meet in person [6]. Santika [15] online learning that can be done at any time and does not bring together students and teachers directly so that it can be done at home. This of course can support the government's goal to stop the spread of Covid-19 in Indonesia, especially in school environments. In addition, the implementation of online learning can make students more enthusiastic in learning, because students can do learning outdoors so they can feel a new learning atmosphere during the online learning process [16].

However, this application of learning has several drawbacks. Online learning can cause students to become easily bored and less concentrated because it is not supported by the environment around students [6]. Facilities and infrastructure that have a fairly important role in online learning are still not fulfilled, the high cost of purchasing quotas, the stability of the internet network is a deficiency in online learning [17].

In a lesson there is a teacher who has an important role in the learning process, because the teacher plays a role in managing the learning process so that students can understand the material and achieve learning objectives. Teachers have an important role to serve students by creating a good learning system to be able to create a quality generation of the nation [18]. It is hoped that an effective learning can be created by the teacher so that it can increase students' curiosity and creativity [19]. The teacher is a person who is at the forefront of providing examples, guiding, teaching, motivating and assessing the learning process that has been implemented in students [6].

The teacher as one of the people who plays a role in the learning process, experiences the impact of the change from face-to-face learning systems to online learning. The positive impact of online learning that is felt by teachers is that teachers can develop their creativity in making various learning media and interactive quizzes to help teachers in the learning process [20].

The fluency in the online learning process is certainly influenced by various factors that support and hinder the implementation of online learning. The results of research conducted at SD N Baros Kencana CBM found

the fact that the supporting factors for online learning in teachers are cellphones and the teacher's quota is adequate and the stability of the network connection, while the inhibiting factor for online learning is cellphones which are not owned by all students and busy parents. at work [6]. This is supported by Rahmawati et al. [21] which states that the readiness of cellphones, laptops, network connections, internet quotas and textbooks can support the online learning process, while the teacher's difficulty in delivering material, lack of student interest and enthusiasm and the economic condition of students become obstacles to online learning. Teacher readiness in planning the online learning process, adequate facilities and teacher expertise in the use of technology are supporting factors in online learning, while the inhibiting factors for online learning are decreased student motivation, lack of parental assistance when students study at home, poor parental understanding. regarding learning material [22]. The supporting factors for online learning are the adequacy of electronic devices and internet quota as well as a stable internet network [23]. Other than that, Winarti [24] supporting factors for online learning are the available infrastructure and communication between teachers and parents. Interactions between teachers and students that are difficult to implement are inhibiting factors for online learning [25].

Table 1. Indicators of Supporting Factors and Barriers to Online Learning

Variable	Aspect	Indicator
Supporting Factors and Learning Barriers Online	Supporting factors	Adequate facilities and infrastructure
		Teachers' readiness in planning the online learning process
		Teachers' proficiency in the use of technology
		Establishing communication between teachers and parents
	Obstacle factor	The difficulty of the teacher in delivering the material
		The interaction between teachers and students is difficult

(Source: [6][21][22][23][24][25])

Supporting factors can help the smooth running of online learning, but there are also inhibiting factors from online learning that can become a problem if not resolved. In previous studies, only examined the supporting and inhibiting factors of online learning, while in this study, besides aiming to determine the supporting and inhibiting factors for online learning in teachers, it also aims to determine how much the criteria for supporting and inhibiting factors affect online learning and solutions that can be done to resolve the issue. By knowing the supporting and inhibiting factors of online learning and how much these criteria affect

online learning, it is hoped that in the future it can further optimize the implementation of online learning.

2. METHODS

The research carried out was descriptive research and included non-experimental research. This study aims to describe the information obtained based on the circumstances when this research was carried out [26]. This research was conducted on teachers with a total population of 99 people. The technique used in sampling is proportional random sampling by taking samples in each region proportionally and randomly so as to provide equal opportunity for each subject in each region to become the research sample. From a total population of 99 people, a total sample of 79 people was obtained. The data collection method used in this research is the non-test method. There are several types of non-test methods such as the method of observation, interviews, questionnaires (questionnaire), inventory, sociometry, and document recording [27]. In this study, data collection was carried out by giving a questionnaire to the research subjects. Before being given to respondents, the validity of the questionnaire was first tested. In this study, using the content validity test developed by Gregory. The Gregory content validity technique still uses expert judgment but the results of the assessment have been quantified [28]. The data analysis method used in this research is descriptive statistical analysis obtained from the results of quantitative data. Descriptive statistical analysis is a way of processing data with various descriptive statistical formulas to get a conclusion [27]. In this study, the descriptive statistical analysis used was the percentage and the mean. From these calculations, the results are obtained in the form of a percentage which will then be described through the categories contained in the following criteria table.

Table 2. Percentage Criteria

Criteria	Percentage
Very high	82% -100%
High	63% -81%
Low	44% -62%
Very low	25% -43%

Source: [29]

3. RESULTS AND DISCUSSION

Based on the questionnaire distributed via google form, the results and discussion of research were obtained based on the 2 aspects studied, namely supporting and inhibiting factors.

In the first aspect, the supporting factors for online learning consist of 4 indicators with 12 positive statement items and 8 negative statement items. The result of the average percentage obtained was 77.27% with high criteria.

Table 3. Supporting Factor Calculation Results

Indicator	Percentage Average	Criteria
Adequate Facilities and Infrastructure	72.15%	High
Teacher Readiness in Planning the Online Learning Process	82.15%	Very high
Teacher Proficiency in the Use of Technology	76.27%	High
Establishing Communication between Teachers and Parents	78.54%	High
Average Supporting Factors	77.27%	High

Based on the results of the calculation, it is known that the indicators of adequate facilities and infrastructure get an average percentage of 72.15% with high criteria, the indicator of teacher readiness in planning the online learning process gets an average percentage of 82.15% with very high criteria, indicators of teacher proficiency in the use of technology obtained a mean percentage of 76.27% with high criteria and indicators of established communication between teachers and parents obtaining a mean percentage of 78.27% with high criteria.

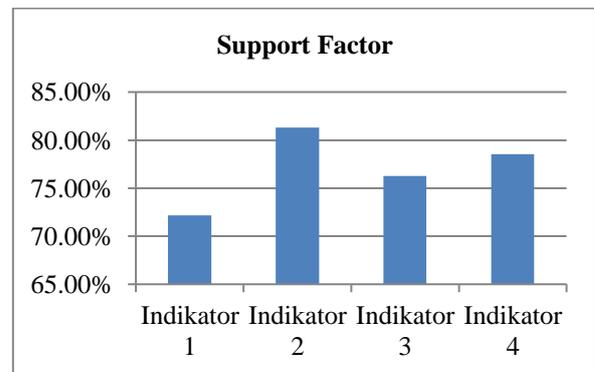


Figure 1. Graph of Supporting Factors Mean Percentage Histogram

The second aspect examined was the inhibiting factor in online learning. The inhibiting factors for online learning consist of 2 indicators with 10 positive statements. The result of the average percentage obtained was 64.01% with high criteria.

Table 4. Inhibiting Factor Calculation Results

Indicator	Percentage Average	Criteria
Teacher Difficulties in Delivering the Material	64.18%	High
Interaction between Teachers and Students is Difficult to Implement	63.86%	High
Average Inhibiting Factor	64.01%	High

Based on the results of these calculations, the indicator of the difficulty of the teacher in delivering the material obtained a mean percentage of 64.18% with high criteria and the interaction between teachers and students was difficult to carry out, obtaining an average percentage of 63.86% and including high criteria.

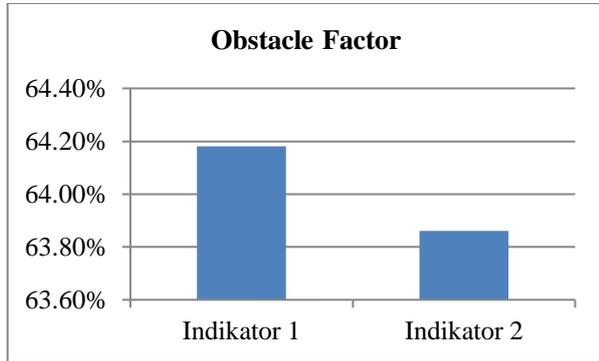


Figure 2. Graph of the Average Percentage of Inhibiting Factors Histogram

The first finding from the research results showed that the average percentage of supporting factors for online learning in elementary school teachers was 77.27% with high criteria obtained from the calculation of 4 indicators, namely adequate facilities and infrastructure, teacher readiness in planning the online learning process, teacher proficiency in the use of technology and the establishment of communication between teachers and parents. Technology is more involved in the online learning process [5]. This is supported by Purwanto et al. [30] The teacher's proficiency in the use of technology can determine the quality of the online learning process carried out by the teacher.

The second finding from the results of the study, the inhibiting factor obtained an average percentage of 64.01% with high criteria obtained from 2 indicators, namely the difficulty of the teacher in delivering the material and the interaction between teacher and student is difficult to implement. This is in accordance with the opinion Harahap et al. [31] one of the problems that occur in online learning is the lack of clarity and detail in the explanation given by the teacher so that it can lead to different understandings. Other than that, [32] the results showed that 79% of students are in negative criteria in the aspects of interaction that occur in the online learning process. From the results of this study, the inhibiting factors for learning in online learning are in high criteria so this must of course be considered by various parties who have authority in the world of education.

The solution that teachers can do to overcome these inhibiting factors is to simplify the material to be simpler and to combine online learning asynchronously and synchronously. In general, teachers carry out learning asynchronously by sending material in the form of videos, reading texts and applications on WhatsApp or google classroom. However, the asynchronous delivery

of material makes it difficult for teachers to explain the material so that it can make it difficult for students to understand the material and cause differences in student understanding, so that the asynchronous delivery of material can be combined synchronously through zoom and google meet. Synchronous delivery of material can complement the explanation when the material is delivered asynchronously [33]. In a study conducted at SD Muhammadiyah 18 Surabaya, it was found that learning at the school ran quite effectively by implementing synchronous learning once a day and asynchronous learning on the other day. Teachers can also communicate individually or divide students into groups when zooming and google meet with students so that it is easier for teachers to monitor and understanding students will be easier because students can concentrate more so that learning can be more optimal. All efforts carried out by the teacher, of course, require support from parents and students themselves, especially for students in grades I to III who need assistance from parents in using gadgets. [11] learning can be more effective if the collaboration between teachers, students and parents can be well established in the learning process so that learning objectives can be achieved.

4. CONCLUSION

The conclusions obtained based on the exposure to the results of the research and discussion are that the supporting and inhibiting factors of online learning are at high criteria. The supporting factors for teachers in online learning are adequate facilities and infrastructure, the readiness of teachers in planning the online learning process, the proficiency of teachers in the use of technology and communication between teachers and parents, while the inhibiting factor for online learning is the difficulty of teachers in delivering material and interactions between teachers and students are difficult to implement. The solution that can be done to overcome the inhibiting factors of online learning is that the teacher can summarize the material to be simpler and can combine the implementation of online learning asynchronously with synchronous [33].

Suggestions that can be conveyed based on the research results are addressed to teachers, school principals and other researchers in order to be able to increase the supporting factors in online learning and minimize the inhibiting factors for online learning so that learning can be even better.

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