



High School Students' Perceptions of Online Learning During The Covid-19 Pandemic on The Aceh Mountains

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ABSTRACT

Keywords:

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High school learning changed from traditional (face-to-face) learning to online learning during the Covid-19 pandemic. Students' perceptions of learning are one of the supporting factors for successful learning, including online learning. The purpose of this study was to determine the perceptions of high school students towards online learning during the Covid-19 pandemic and what learning media they like the most. This online survey research will explore high school students' perceptions of online learning that has taken place, for data discussion to answer research problems, a descriptive approach was used. The research respondents were 592 students from 2 districts in the mountains of Aceh, namely Central Aceh and Bener Meriah. The results showed that high school students gave a poor perception of online learning; the learning media that students liked was the WhatsApp application. Students' loneliness causes this perception. Due to a lack of "social presence", social media as a learning medium is one solution to these problems, students choose social media to build a collaborative learning environment. Social media should be used as a learning medium, to reduce boredom due to lack of learning interaction. From the results of the research found, it appears that there is a need for improvements to the ongoing online learning system.



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A. INTRODUCTION

The Covid-19 pandemic has forced significant changes in all sectors of people's lives. Education is one of the parts that has been badly affected by this pandemic, and many schools have to be temporarily closed (Khan et al., 2021). This pandemic has succeeded in forcing educational institutions' closure and migrating to online learning platforms (Adedoyin & Soykan, 2020). Educational institutions that are still implementing learning convert traditional learning into online learning (Dhawan, 2020). The transfer of learning to online learning is the answer to the outbreak of the Covid-19 pandemic so that education is carried out remotely to maintain joint health and control the spread of the Covid-19 virus (Lassoued et al., 2020). The success of student learning is not only supported by achievement factors and school background, but it is also influenced by the quality of learning, self-confidence and students' perceptions of learning (Page et al., 2017). The existence of online interactions in education increases primary school

students' perceptions of learning (Smith, 2013). Student academic achievement is positively related to students' perceptions of the learning environment (Al-Qahtani, 2015). The mountainous areas in Aceh province, Indonesia, to be precise in Central Aceh district and Bener Meriah district have limitations in supporting factors for implementing online learning. Not all of these regions have a good internet network, even though online learning cannot be carried out without an internet network. One of the inhibiting factors for online learning is cost, and internet access and technical problems. Students' perceptions of online learning during the pandemic will impact the success of learning that students will receive. Especially the perceptions of high school students in mountainous areas with limited internet networks, research has not been found regarding their perceptions.

Online learning is learning that utilizes the use of technology in the learning experience, online learning is described as distance learning that can improve access to education. The use of technology in learning amid this pandemic is absolutely necessary. Online learning is a learning option that can be applied, mainly when the pandemic spreads throughout the world. For this, it is necessary to explore students' perceptions of online learning, given that students' perceptions of learning will affect the success of online learning that takes place. The main elements of online learning are technology and time (synchronous or asynchronous) (Singh & Thurman, 2019). Online learning is defined as a learning bridge between teachers and students through web-based technology (K. Lee, 2017; J. L. Moore et al., 2011; Ryan et al., 2016). The success of learning carried out online begins and ends with interaction (Bernard et al., 2009; Mejia, 2020). Interesting interactive discussion when online learning is associated with student satisfaction (Dyer et al., 2018; R. L. Moore, 2014). Based on this, it can be seen that online learning is inseparable from the interaction factors that take place so that the right interactions that occur will provide learning satisfaction for students. The benefits of online learning can be developing teacher creativity in utilizing multimedia and creating interactions with students (Martin et al., 2018; R. L. Moore, 2015). Indirect online learning will increase teacher creativity and students' ability to adapt to online learning.

Online learning develops in universities; students feel that learning design, motivation, time management, and convenience when using online technology affect online learning experiences. The success of online learning is influenced by students' readiness to use computers / the internet and learning motivation. Student involvement in lessons increases student learning satisfaction, increases learning motivation, reduces alienation and improves student learning outcomes in online learning (Martin & Bolliger, 2018). Student involvement in education is a form of learning interaction. Online learning is currently being carried out in high schools during the pandemic, showing a lack of teaching exchanges created, so it is feared that it will reduce the quality of learning carried out. Support factors for learning are important factors that determine student satisfaction with online learning (S. J. Lee et al., 2011), so that without suboptimal support, especially in terms of the internet, it is feared that the ongoing learning process will also run poorly.

Research conducted by Asiry suggests that students have positive attitudes towards online learning; they think online learning can complement learning and replace traditional education (Asiry, 2017). Bali's research shows that students feel comfortable understanding online because it provides students with opportunities to innovate and use computer technology (Bali & Liu, 2018). In his study, Agarwal states that online classes should be used as a postgraduate learning curriculum; online learning is exciting and fun (Agarwal & Kaushik, 2020). Another study conducted by Rusli showed that 75% of college students agreed to use online learning

(Rusli et al., 2020). The fundamental research conducted above was conducted at the tertiary level, so it is necessary to research student perceptions of online learning at the high school level, especially in mountainous areas in Aceh province with all the shortcomings of supporting online learning facilities. In research conducted at elementary schools, students preferred face-to-face learning to online synchronous learning (Jan, 2020). So this research will describe how students' perceptions of online learning in high schools provide input on online learning suggestions that are likely to continue as long as the pandemic has not ended. This study aimed to determine high school students' perceptions of online learning during the Covid-19 pandemic and what high school students most prefer learning media.

B. METHODS

The data collection method used was an online survey using google form. For data discussion to answer research problems, a descriptive approach was used. A list of questions is made on a google form. The questionnaire link distribution utilizes the group WhatsApp application, then distributed to students throughout the school who are the source of research data. Perception data was collected from 19 schools from 2 districts, namely Central Aceh and Bener Meriah districts. The number of students who became respondents was 592 students. Complete data regarding the school's origin and the number of respondents in each school can be seen in Table 1.

Table 1. Name of School and Number of Respondents

NO	SCHOOL NAME	TOTAL RESPONDENTS
1	School 1	95
2	School 2	8
3	School 3	48
4	School 4	10
5	School 5	3
6	School 6	20
7	School 7	76
8	School 8	78
9	School 9	10
10	School 10	6
11	School 11	26
12	School 12	25
13	School 13	21
14	School 14	27
15	School 15	26
16	School 16	39
17	School 17	53
18	School 18	4
19	School 19	17
TOTAL		592

Questions about student perceptions were compiled as many as 15 questions by adopting a Likert scale, with five answer choices, can be seen in table 3. Student perceptions of online learning. Other questions included in the questionnaire that were distributed were about: supporters of online learning, the most preferred learning, and the most preferred learning media.

C. RESULT AND DISCUSSION

Data on the gender of respondents who filled out a questionnaire that had been distributed were obtained from the data collected. Of the total 592 respondents, 206 were male or 34.8%, and 386 respondents or 65.2% were female. This data shows that there are more female respondents than male respondents. Complete data can be seen in Table 2.

Table 2. Gender of Respondents

Gender	Total	Percentage (%)
Male	206	34,8
Female	386	65,2

To collect students' perceptions of online learning, 15 statements were given. All comments were given answer options in the form of strongly agree (SA), Agree (A), Doubt (D), disagree (DS), and strongly disagree (SD). In the first statement about online learning can replace face-to-face learning, the answer to Disagree is the answer that is mostly given by students, which is 26.5%. In the second statement, online learning is effective; the answer most students give is doubt as much as 32.8%. The statement about me being satisfied with online learning; most students answered disagree with 37.3%. The statement about online learning saves learning time; most students answered disagree with 33.3%. Statement about I enjoy online learning; students answered most disagree with 32.6%. Statement about I am passionate about online learning, students answered disagree the most with 32.3%. Statement about online learning is fun; most students answered disagree with 36%. The statement about I hope to study online, most students answered disagree with 43.4%. Statement about I like online learning, most students answered disagree with 38.3%. The statement about I understand the material during online learning; most students answered disagree with 39.2%. Statement about My score is useful when learning online; students answered most doubt with 35.3%. I understand the material conveyed by the teacher during online learning; most students answered disagree with 37.5%. The statement about online learning is easy to implement; most students answered disagree with 30.9%. Statement about online learning is expensive; most students answered agree with 39%. Statement about online learning is troublesome; students answered most agree with 41.2%. The complete results of students' perceptions answers can be seen in Table 3.

Table 3. Students' Perceptions of Online learning

Question	SA (%)	A (%)	D (%)	DS (%)	SD (%)
Online learning can replace face-to-face learning	12	26,2	22	26,5	13,3
Effective online learning	4,8	23,3	32,8	27,4	11,7
I am satisfied with online learning	3,4	17,9	27	37,3	14,4
Online learning saves study time	5,6	25,5	23,6	33,3	12
I enjoy online learning	4,7	23,8	25,8	32,6	13,1
I am passionate about online learning	4,4	20,9	30,6	32,3	11,8
Online learning is fun	4,2	18,2	28,7	36	12,9
I hope to study online	3,2	12,8	22,3	43,4	18,3
I love online learning	3,2	17,2	25,7	38,3	15,6
I understand the material when learning online	1,4	11,5	28,4	39,2	19,5
My grades are good when studying online	5,1	20,1	35,3	25,7	13,8
I understand the material the teacher delivers during online learning	2,2	7,3	30,7	37,5	22,3
Online learning is easy to implement	3,4	24,5	27,4	30,9	13,8
Online learning is expensive	18,6	39	23,1	16,2	3,1

Online learning is troublesome	21,6	41,2	24,3	10,5	2,4
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To support the online learning process, supporting facilities in laptops, smartphones, and internet connection are needed. These supporting factors were also surveyed regarding their use and availability. For the tools students use when studying online, only 1% of students use laptops, 90% of students use smartphones, and the remaining 9% use laptops and smartphones together. As one of the online learning supporters, Internet connection shows that only 55.6% of students experience a smooth/fast internet connection. In comparison, the remaining 44.4% use an internet connection that is not smooth/fast. Complete data about online learning support can be seen in Table 4.

Table 4. Supporting online learning

Learning Support	Tool	Percentage
Learning facilities	Laptop	1 %
	Smartphone	90 %
	Laptop + smartphone	9 %
Internet connection	Smooth / fast	55,6 %
	Not smooth / Not fast	44,4 %

In the distributed questionnaire, questions were also given which learning students preferred, between face-to-face learning, online learning, or mixed learning (face-to-face and online). From the results of data collection, it was found that face-to-face learning was the most preferred learning with 443 students or 74.8%, then mixed learning (face-to-face and online) as many as 112 students or 18.9%, and online learning as many as 37 students or 6, 3%. Complete data about this can be seen in Table 5.

Table 5. Learning Options Most preferred by students

Learning	Total (Percentage)
Face to face learning	443 (74,8 %)
Online Learning	37 (6,3 %)
Mixed learning (face-to-face and online)	112 (18,9)

As one of the supporting aspects of the teaching and learning process, learning media was also surveyed. What learning media were most liked by students to be used during the learning process. The data collected shows that the WhatsApp application is the most preferred choice by high students in learning, as many as 380 students or 64.2%. The next online learning application that high students most preferred is google classroom chosen by 107 students or 18.1%, then E-learning as much as 3.7% and zoom as much as 3.2%. Other applications are Telegram by 3%, YouTube 2.7%, Instagram 1.5%, Twitter, 0.2%, and Facebook 0.2%. The interesting data is that there are as many as 19 students or 3.2% of students who did not answer the questions about their preferred learning media. Complete data related to learning media preferred by students can be seen in Table 6.

Table 6. Learning Media that students like

Learning Media	Total	Percentage (%)
Whatsapp	380	64,2
Google classroom	107	18,1
E-learning	22	3,7
zoom	19	3,2
Telegram	18	3
Youtube	16	2,7

Instagram	9	1,5
Twitter	1	0,2
Facebook	1	0,2
No answer	19	3,2

The findings show that high school students still prefer face-to-face learning compared to online learning and mixed learning (online and face-to-face). Even so, students still have an interest in online learning. Online learning has provided lonely experiences for students; students also miss face-to-face learning in class, so a teacher is needed who can help strengthen relationships during education (Kaufmann & Vallade, 2020). Face-to-face learning in class provides high motivation and better interest and interaction between people than online learning (Wright, 2017). The implementation of learning that has been going on for nine months, starting from March-December 2020, is a long time for students not to interact as usual at school. Students miss the learning that takes place in the classroom with a lot of interaction between the rest of the students and students and teachers. Reduced learning interactions also lead to reduced student interest and motivation in online learning activities. This can significantly affect students' perceptions of learning.

Overall high school students have a poor perception of online learning; students feel that online learning cannot replace face-to-face learning. Students even doubt that online learning that has been implemented is running effectively. Research conducted by Swan & Shih states that "Social presence" affects students' perceptions of online learning, the presence in online learning is expected by students. Research by Baber suggests that social interaction has a significant effect on online learning effectiveness (Baber, 2021). Changes in learning styles from face-to-face learning to online learning are happening so quickly that without much proper preparation to support this negative perception, high school students expect teachers' presence in online and face-to-face sessions. Reduced "social presence" and social interaction affect students' perceptions of online learning that has taken place.

Students are not satisfied with the online learning that has been taking place and do not feel that online learning can save learning time. Students also think that online learning is troublesome, and students do not expect learning to be done online. Interaction between students contributes to satisfaction and learning outcomes (Goh et al., 2017). Online learning causes reduced interaction between students, which can cause students to be dissatisfied with online learning that is taking place; this dissatisfaction causes students not to expect lessons to be done online. Students' negative perceptions lead to decreased motivation, persistence in learning and learning outcomes (Kauffman, 2015). Negative perceptions of online learning that have taken place cause students to doubt that the value of learning outcomes will be okay. Students feel that online learning is troublesome; this perception is caused by student dissatisfaction with online learning that is taking place. Student satisfaction has a beneficial effect on student performance (Aldholay et al., 2019). Low student satisfaction will also lead to poor performance so that in the end, student learning outcomes will be adversely affected.

The implementation of online learning certainly requires supporting tools. Online technology and convenience affect the success of online learning. The selection of online learning support tools in smartphones and laptops is currently the most appropriate use of online technology to use during distance learning. Not all students get a good internet connection when learning online; this number is quite a lot reaching 44.4%. Internet connection is a determinant of the success of online delivery. With an internet connection that is not smooth,

the teacher's delivery of subject matter will also be disrupted; this will significantly affect the success of learning and students' perceptions of ongoing learning.

The learning media most preferred to be used during online learning in secondary schools utilizes WhatsApp social media. Social media creates a collaborative learning environment that can support learning (Kumi-Yeboah et al., 2020; Nasution et al., 2021). The use of social media in learning is an answer to students' loneliness by trying to create a collaborative learning environment. In contrast, learning is still being carried out without face to face. Also, the learning media used are the google classroom learning application and E-Learning. Google Classroom offers easy access, communicative and interactive, so students feel satisfied when using it (Shaharane et al., 2016). Students show a positive attitude in using google classrooms because of its ease of use and accessibility (Albashtawi & Al Bataineh, 2020). Learning using e-learning applied to the curriculum can increase students' perceptions of learning (Turkyilmaz et al., 2019). Students do not prefer e-teaching / e-learning to face-to-face learning during lockdown (Abbasi et al., 2020). The use of e-learning must emphasize quality because the quality of e-learning affects the satisfaction of its use (Pham et al., 2018). The use of google and e-learning answers the need for appropriate learning media during the lockdown. The use of these two types of applications must prioritize quality aspects to provide a good perception during their service.

D. CONCLUSION AND SUGGESTIONS

Students' perceptions of online learning are at an unfavourable level; students are not satisfied with the online learning taking place; even students doubt that online learning has been effective. Online learning has reduced learning interactions; reduced social interactions have resulted in reduced "social presence". Online learning has a lonely effect on students; this is due to changes in learning interactions. Students' negative perceptions cause a decrease in learning motivation and learning outcomes. Students prefer face-to-face learning to online learning. The learning media that many students like is the Whatsapp social media application, the choice is because social media can create a collaborative learning environment. Social media can reduce the reduction in social interactions as long as learning is done online long distances. On-going online learning is better if improvements are made with an approach that prioritizes the quality of learning interactions so that online learning takes place more optimally.

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