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Teacher and Parent Perceptions of Student's Learning Loss in Post-Pandemic Science Learning

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Abstract: This study aims to see how teachers and parents perceive learning loss of students after the pandemic, especially in junior high school science lessons. The research method uses a qualitative approach with the qualitative data analysis model used is Miles and Huberman, includes data collection, data reduction, data display, and conclusion. The study result that students have started to forget the atmosphere of brave learning, but habits such as wanting to easily get lesson results are still carried over to this day. Parents also feel that their children have revived their interest, motivation and learning outcomes when compared to the pandemic two years ago. The existence of online learning has an impact on learning, especially interest, motivation, and student learning outcomes. This impact has even caused learning loss for students until after the pandemic. Although slowly but surely, students' interest and learning motivation began to show an increase in line with the return to normal face-to-face learning.

Keywords: Learning loss; Parents; Post pandemic, Qualitative research; Teachers

Introduction

The COVID-19 pandemic has been designated by the World Health Organization as a current threat to humanity. Coronavirus is a virus that causes a global pandemic (Adedoyin & Soykan, 2023).The first recorded case of this corona virus occurred in China, precisely in the city of Wuhan in December 2019 (Subandowo et al., 2021). Its spread was so fast that in March 2020 this virus had spread to 152 countries with 197,168 cases. This virus can cause infections of the respiratory tract, colds ranging from mild to deadly. As a result of this pandemic, various sectors have been paralyzed, such as business, politics, tourism, education and so on (Attamimi et al., 2022; Nurmalahayati et al., 2022; Prahani et al., 2023; Saleh & Mujahiddin, 2020).

The corona virus is increasingly having an impact on Indonesia and causing changes in the order of life including education. Indonesia itself education is the right of every child of the nation, this is in the preamble of the 4th paragraph of the Constitution of the Republic of Indonesia namely "the intellectual life of the nation". Therefore, it is appropriate for the government as a supervisor in the development of education in Indonesia to be the guarantor of the rights of the nation's children so that education runs smoothly (Nafrin & Hudaidah, 2021). However, when the Corona virus hit, the school closures which were originally one week were extended for months. According to the Indonesian Ministry of Education and Culture, there are at least 407,000 schools, 3.4 million teachers and 56 million students affected by this pandemic (Febrian et al., 2021; Firman et al., 2021; Nahumury & Antony, 2022; Timah, 2021). The application of online learning is one of the solutions offered for the pandemic, for example the use of digital technology such as Google Classroom, Zoom, Google Meet, Live Chat, YouTube and so on (Camilleri & Camilleri, 2022; Cui et al., 2023). However, this solution is very difficult to implement because of the immature preparation of Indonesian technology on all fronts that support online or online learning. Indonesian families are less familiar with this online learning and there is also no scale that is tested and measurable because this condition has never happened before. This shock causes

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children to experience psychological problems which are used to face-to-face learning with teachers and friends at their school (Abdimusa et al., 2022; Rengkuan et al., 2022; Syah, 2020).

The reason for doing online learning is to reduce the spread of COVID-19 and reduce the risk of students and teachers being exposed because Pascarella et al. (2020) found that infections are transmitted from human to human and through contact with contaminated environmental surfaces. Hand hygiene is essential to prevent contamination. Wearing personal protective equipment is recommended in certain environments. Online learning is very flexible and accessible, but of course it has new psychological challenges plus a relatively long time of approximately two years (Naim & Mokodenseho, 2022). Schools that cannot learn face to face make learning not optimal. Students who are confused will get more confused and do not understand the learning material given to them. This condition is further exacerbated if students with a low economic level, online learning really need Android, maximum quota and network to support their learning.

Science subjects are subjects that contain a collection of knowledge in the form of concepts, facts, and ideas that are obtained based on a scientific study process which is supported in it by a scientific attitude (Khusnah, 2020). During the pandemic, learning science went sober at the beginning. However, as you get used to it, there are many solutions, interesting online media, teaching materials that support the situation, in essence, there are many new learning innovations (Daniel, 2020; Guzzo et al., 2023). Even so, we cannot deny that for almost two years students experience learning that is different from usual, causing learning loss in students. According (Patricia Aguilera-Hermida, 2020) students also prefer face-to-face learning over online learning. Students' reports of increased tension, worry, and difficulties concentrating point to social isolation and social distancing as additional impediments to fully online learning, in addition to technological and instructional issues (Barrot et al., 2021; Lemay et al., 2021).

Loss or lack of interest in learning of students due to lack of interaction with teachers as educators is called learning loss. Students who experience learning loss have symptoms such as decline in achievement, decreased intellectual and skills, disrupted growth and development, have psychological and psychosocial pressures and gaps in access to learning (Budi et al., 2021; Simal et al., 2022). Indonesian Minister of Education Mr. Nadiem Makarim said "we are at risk of having a generation with learning loss, there will be a permanent impact on our generation, especially on the younger generation". This is reinforced by research conducted (Hidayat et al., 2021) which says online learning is boring and unattractive to students, causing students to experience learning loss.

Two years have passed, learning has returned to normal. Teachers and students have returned to school to carry out the teaching and learning process as usual. The government has lifted the quarantine and opened schools (Solórza et al., 2020). Based on the description above, this research article discusses how teachers and parents perceive the learning loss experienced by students after the pandemic.

Method

This research method uses a qualitative approach. This study aims to look at teachers' and parents' perceptions of the learning loss experienced by students in post-pandemic science learning. The qualitative data analysis model used is Miles and Huberman, as shown in the flowchart below.

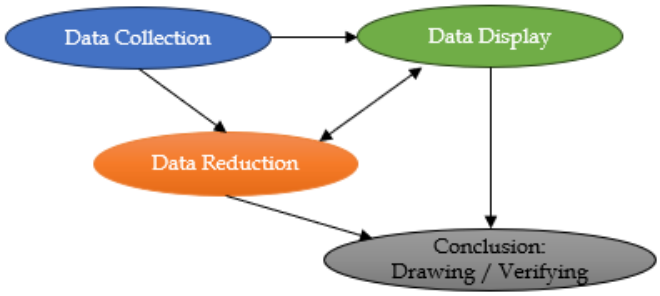

Figure 1. Miles and Huberman analysis model (Sugiyono, 2019)

At the data collection stage, researchers will collect data through samples, namely several teachers and parents of students. The sampling technique uses a purposive technique. The research sample came from teachers and parents of students from Riau province. Data collection was carried out in November 2022. At the data reduction stage, the researcher sorted and analyzed the data obtained, so that it became more conical and appropriate to the substance being studied. At the data display stage, the researcher presents the results of the data that has been analyzed. In the last stage through conclusion, the researcher draws conclusions from the results of the data analysis carried out.

Result and Discussion

Based on interviews conducted with several teachers and parents of students about their perceptions of learning loss that occurred after the COVID-19 pandemic, the following results were obtained:

Teachers Perceptions on Learning Loss

Learning during a pandemic is very difficult to implement, the learning is less effective. This opinion was conveyed by several teachers who were interviewed. Because children are only given assignments online or done at home, the teacher finds it difficult to control learning. As acknowledged by the teacher who was the resource person, where the majority of people's work is fishing, children take advantage of this moment to help their parents' work. So that only about 50% of children collect assignments to school. This is inversely proportional to research (Rustiana, 2021) which says that parents during online learning play an important role as companions and oversee so that the learning process runs smoothly. In addition, parents are expected to be teachers for their children if their children have difficulty learning. However, during the pandemic, teachers admitted that only 20% of parents asked about how their children's school was going, reporting their children's difficulties to the teacher.

Furthermore, the teacher also said that during the pandemic the Provincial Education Office gave instructions so that learning was only given assignments. However, in carrying out this learning there are constraints in place, such as the internet network is not very good and most students do not have Android. Assignments are carried out via WhatsApp which does not require stable internet and students come to school to take assignments and deliver assignments. However, according to research conducted by Hidayat et al. (2021) the lack of feedback and response makes the innovations carried out by teachers ineffective. A small number of children who come to school only to ask about learning that they do not know. The rest just come to pick up and deliver assignments, not even a few who only leave their school work assignments to friends.

During the pandemic, the teacher said that there was a large decrease in children's motivation and interest in learning, this should have been minimized with concern from all walks of life, including the family. The factor of holidays being extended from a week to months at the start of the pandemic was also a big factor in the decline in motivation and interest. Learning outcomes are directly proportional to the motivation and interest in learning, which also decreases. The most severe conditions, sources said, were in the first year of the pandemic, the following year it has started to improve because teachers, children and parents are getting used to these conditions. Research conducted by Masni et al. (2021) concerning the relationship between interest in learning and learning outcomes during a pandemic in the moderate category, to improve this it is necessary to cooperate between all elements of education in order to provide facilities and infrastructure so that children get fun learning with the hope that learning outcomes will also increase.

Furthermore, the teacher also said that during the previous 2 years of the pandemic, it meant that there were 4 semesters and one semester before only completing 2-3 learning chapters of 6-7 chapters each semester. This is of course a lot of learning that is left behind. During the pandemic, teachers lowered learning standards so that children's grades remained high, but the field fact is that results are just a number and children miss a lot of lessons. Therefore it takes very interesting learning innovations to be carried out by teachers, especially science teachers to catch up on this learning. Now learning is as usual as before the pandemic. However, children who have been addicted to using Android during previous online learning instead abuse their devices to tend to play games, social media, and all kinds of other entertainment.

The big challenge faced by teachers today is increasing interest in learning and motivating students to learn. Teachers must be able to take advantage of existing media for optimal learning outcomes, such as especially learning science using the Virtual Laboratory, Learning Management System, and others. Even better if the teacher makes his own media for learning that suits the needs of his students at school. This is in accordance with research conducted by Sumardi et al. (2020) learning media can clarify the presentation of messages and information so that it can improve student learning processes and outcomes. Learning strategies are also very important for a teacher, especially after the current pandemic. With the right strategy, learning becomes more focused.

Teachers also hope that the government will again focus more on developing education. As one of them in the aspect of educational advice and infrastructure. All planning will not succeed if it is still lacking in schools. As acknowledged by the sources who explained that there would still be a lack of facilities for homework

Parents Perceptions on Learning Loss

The COVID-19 pandemic has made parents pay more attention to their children's education at school, especially in junior high school. Parents become parties who accompany more than teachers for the continuity of children's education in order to achieve good learning outcomes. However, because of this, not a few parents have difficulty, this is due to various factors such as not all parents understand the learning that their children are doing, busy making a living and work, the economy, technology illiteracy and so on. As a result, it became very difficult for children to gain knowledge during learning during the pandemic, which lasted for more or

less two years. Interviews were conducted with several informants, parents and guardians of students found that children had difficulty understanding the material provided by the teacher. This is due to giving questions from WhatsApp or taking school questions without explaining the material by the teacher. Students are required to study independently at home to fill in the questions given.

Reciprocal interactions which are very difficult in online learning are the main factors in the problems above. As Mualif (2021) said, teachers and students are two inseparable components of education. The teacher is the one who imparts and transfers knowledge to students, while the student is the subject of learning who always delivers the presence of a teacher to guide him. This relationship is a dynamic relationship with the main requirement is the interaction between the two. Limited interaction during the pandemic has hampered the transfer of knowledge. Moreover, teaching exact and natural sciences in junior high school, which must be explained directly, becomes a particular difficulty if only questions are given for learning. Parents hoped that they could use videos so that children would understand better, but due to the sudden pandemic, all lines, both schools and teachers, were unprepared for this condition.

The resource person as one of the parents of the students also felt that their child's interest in learning had decreased during the pandemic. During the pandemic, the intensity of children's learning has decreased due to the fact that there are too many temptations at home, such as playing Android or watching television, which are again a factor. Only the source admitted that he continued to control the development of his child's learning during online learning. Their children's learning outcomes also decreased in several lessons. He said as an example of Arabic which in elementary schools these subjects were not taught, whereas in junior high schools the lessons were available and the books or modules used were full of Arabic which required children to master, thus causing their learning outcomes to decline. Science and Mathematics lessons are also like that. Social Studies and History lessons can still be mastered by children because by searching the results have been obtained.

Now learning is completely face-to-face. The resource persons saw that their children's interest and motivation to study had increased compared to the pandemic. This is in accordance with research by Aswin et al. (2022) who said that interest and motivation do not grow from a person when he is born, but arise when a person experiences a process. The resource person also hopes that the teacher will always guide their children better in the future because they have great hopes for children's education while at the same time being able to catch up on learning during the previous pandemic and make up for what was left behind for two years.

Conclusion

The COVID-19 pandemic has caused learning in schools to not run well, so learning is carried out online to break the chain of transmission of this virus. The existence of online learning has an impact on learning, especially interest, motivation, and student learning outcomes. This impact has even caused learning loss for students until after the pandemic. This makes the teacher overwhelmed in carrying out the teaching and learning process back to normal. Parents of students are also worried about the impact of this learning loss on the continuation of the learning process of students after the pandemic. Although slowly but surely, students' interest and learning motivation began to show an increase in line with the return to normal face-to-face learning. The author hopes that there will be further studies such as research on learning innovation in dealing with learning loss experienced by students after this pandemic.

Author Contributions

Azrul Hamidi and Andika Febrian: writing-original draft preparation, methodology, result, discussion, conclusion; Jumadi Jumadi and Sabar Nurohman: analysis, correction, review, and editing.

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Conflicts of Interest

The authors declare no conflict of interest. The funder was not involved in the design of the study; collection, analysis, or interpretation of the data; creation of the manuscript; or the decision to publish the findings.

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