

Does Learning Loss in Early Childhood Really Happen during the COVID-19 Pandemic?

A Literature Study

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ABSTRACT

Learning during the COVID19 pandemic through online and learning from home has several challenges and risks of learning loss that have a long term impact. To evaluate this, we conducted a thorough analysis of the loss of recorded learning evidence documented between March 2020 and August 2021. This systematic review aimed to gather available data and documents that are currently reported in the literature study. Given its urgency, 6 studies were identified: Five of them found evidence of student loss among at least some of the participants. The remaining studies found significant reductions in aspects of early childhood cognitive and academic achievement. In addition, four of the studies observed increasing gaps in which certain student demographics experienced more significant learning loss than others. There is a decrease in the level of participation of children and parents in following online and the number of learning hours decreases. It was decided that further research was needed to increase the number of studies produced, their geographic focus, and the number of students they observed.

Keywords: Learning Loss, Early Childhood

1. INTRODUCTION

The COVID-19 pandemic has wreaked plagues on education systems around the world through the closing of private schools. School closures have forced more than 1.6 billion students to drop out [1]. Even on a smaller scale, school closing is not only because of COVID-19, but it can also be disastrous for Nature and other viruses such as influenza and ebola [2]. Education at all levels, including kindergarten and early childhood education needs to be more attuned to online education. Training in conjunction with the agreement with the minister of education and culture of the republic of Indonesia to adopt the COVID-19 emergency policy in 2020, education should ensure that students can continue their studies. Though at home through online media [3].

Homeschooling in the COVID-19 pandemic in Indonesia is a concern for the section of parents, such as the lack of guidance and training materials [4]. The quality of online learning presents a number of challenges, especially for early childhood education. The problems of parents at home or online learning are embodied in a lack of understanding of the material provided by other schools or teachers, in the growing interest of children in learning and digital literacy.

Preschool programs reduce the student's enthusiasm in the preschool ward. 30% of the age of 35 have participated in online programs, participation rate is 60% less than pier, 2021.

This decline is due to a lack of involvement by parents and teacher-parent relationships and is based on the fact that only 8% of online learning is taking place [5]. Multiple barriers to access educational resources, Especially in low-income families. On the other hand, in high-income families, who are more likely to have access to resources, alternative educational materials such as books, computers, the Internet, television. And the smartphone [6][7]. One of the government solutions to the challenge of introducing online learning is to make home learning (BDR) accessible on national television or TVRI. The BDR TVRI program includes abalone materials such as reading and writing, mathematics and character education. TVRI program aimed at lower middle-class students having difficulty accessing a variety of educational resources for parents and children.

The LFH from TVRI implementation evaluation by the ministry of education and culture found that BDR's performance through tvri was ineffective because of the following limitations: different broadcast coverage,



women's program and activities, inconsistent upbringing, unattractive and child - centered material, and the availability of other resources [8]. Learning loss has a lifelong effect on children. Learning loss can occur if school performance drops in comparison with previous year [9]. Online risks of a generation with learning loss will Long-term impacts on future generations, especially at child educational levels [10]. Kaffenberger [11] says that even if schools are opened and teaching like others, the effect of losing learning will not stop. A third grader who skips school for six months may be a year and a half out of his league. Even for a new student who has been out of school for 6 months, the delay can be up to 2.2 vears. Students who lose learning opportunities within a year and a half lose 15 of their adult incomes. Hong [12] argues that children have a very low risk of developing a virus, and many experts also argue that it is safer to reopen buildings with younger age groups Than with an older student [13]. Happens because of the bad quality. As well as facilities for child BDR that impact [14][9][15].

Education cannot be achieved through long distance learning, such as social interaction and direct learning. The U.S. pandemic effect besides being taught away, school closure also increases school dropouts (5.5 percent for black students and 3.9 percent for white students). These influences are so heterogeneous, a quarter of the students have extended their study time more than 4 hours a week because of covid19, while another quarter limits their study time to more than 5 hours per week. Aspects of cognitive development are intertwined and cannot be separated from the affective aspect, and psychosomatic in the fusion of knowledge and vice versa. When young children lose the opportunity to learn basic skills, they will experience the decline in the level of development they achieve [9]. Learning loss is proven with the decline of the Pisa score in reading the post adolescent child and before the covid19 pandemic [15]. Learning loss has a different impact than disadvantaged students, especially fortunate students. Policymakers need to support underachieving students, and rural schools [16]. Learning loss is uneven, which leads to a significant increase in previously existing socioeconomic inequality education [17].

Three major contributions are made by this study. First, we do a complete evaluation of the studies on the influence of COVID-19 on the development of learning in the second student, which we then provide. If learning loss happened during the pandemic, we highlight important gaps in the literature and suggest appropriate advice for future study, as part of our solution to research questions.

2. RESEARCH METHOD

Initial searches were made using English articles. To ensure a comprehensive multidisciplinary search, including the Google scholar electronic database. The key is "covid-19", combined with "learning loss"," the age

"Early," home learning," or "long-distance learning." According to search analysis, several papers were found; however, the bulk of them were related to inherited or projected learning loss. Prerecorded abstract items were then selected out of this group. [18] Covid-19 school disruptions were included in a research that analyzed the influence on student learning (positive, negative, or negligible) as a consequence of student analysis. Eight items were selected for further consideration once the screening procedure was complete (table 1). The lack of student analysis and/or impacts documented on learning progress, analysis performed before to the appearance of the covid-19, or legacy data are all reasons to disqualify the research under consideration for this evaluation.

3. RESULTS AND DISCUSSION

Table 1: Studies Included

| Title | Autors |
|--|---|
| Learning inequality during the COVID-19 pandemic | Engzell, Frey, Verhagen (2020) |
| Collaborative for student growth. learning during COVID-19: Initial findings on students' reading and math achievement and growth | Kuhfeld, Tarasawa, Johnson, Ruzek, Lewis (2020) |
| Educational gains of in- person vs. distance learning in primary and secondary schools: a natural experiment during the COVID-19 pandemic school closures in Switzerland | Tomasik, Helbling, Moser (2020) |
| The Effects of the Covid-19 Pandemic on Italian Learning Ecosystems: the School Teachers Perspective at the steady state | Carlo Giovannella, Marcello Passarelli, Donatella Persico. (2020) |
| Stemming Learning Loss During the Pandemic: A Rapid Randomized Trial of a low-Tech Intervention in Botswana | Noam Angrist, Peter Bergman, Caton Brewster, and Moitshepi Matsheng. (2020) |
| Modelling the long-run learning Impact of the Covid-19 learning Shock: Actions to (more than) Mitigate loss. | Kaffenberger, M. (2021). |

Pier [9] suggests that losing school is an impairment of students' knowledge and skills. Learning difficulties occur when the progress of education is historically not



the same as the year before [16]. Boredom may be caused by adverse environmental conditions, a lack of activity. When studying online at home and in isolation at home, children feel stressed and bored and yearn for their friends and teachers. Parents need to give their child internal stimulation and motivation to be good at school [19]. Blasko [16] found that the only drawback was among students from the low economy because they did not benefit from their parents' jobs and education, their geographic location. In other words, during pandemics, teachers tend to use technology to replace traditional teaching methods to increase anxiety about access and use [20].

Full-time teachers must be proficient in body language, facial expressions and tone of voice. But online learning presents different challenges, teachers must provide different media such as text, video, pictures, audio and other teaching options [3]. Azevedo [21] finds learning and opportunity costs Potential income for students because of the effect of COVID-19 school closing. In the best cases, they lose about 23% of the development aspect, the worst is the 38th of the developing-and developing-related attainment of their ages.

The lower the level of education the greater the potential for learning disadvantage especially in kindergartners [4]. The decline in social-emotional development is online because of the lack of opportunity for children to have social interaction with others. Especially teachers and friends [22] in addition, research done by Village [23] carried out on passive activities such as games, television and lack of physical games for children, where the sensory integration ability threatens to be lost. These skills are useful in processing information about the senses and nerves that are then used to develop knowledge in children.

Usnadibrata [4] says 8 ways of fulfilling Child learning needs at pandemic: 1) using the source of learning and reading materials recommended from ministry of education and culture and other associated agencies. 2) the teachers program: children can continue learning, communicating, and interacting with friends and teachers so that children can maintain their reading and writing skills and motivate parents to support and consult the BDR children. 3) attachment to the curriculum: escort the children to the course at the appointed time (18:00 and 19:30) so there is a better emotional bond between Kids and parents, especially with parents. 4) radio show. 5). The festival. Literacy and book exchange. 6).LKS and parental guidance. 7. PJJ Use of offline duty, and 8). The parenting campaign (mobile parenting). Furthermore, Bao states daily reading for children, the choices available while staying at home, reducing losses by 105%. Reading to children is an effective low-tech alternative that can also increase the love of books and enhance socioemotional relationships between parents and children

Education academics have only recently started to examine the losses kids have endured because of this topic's novelty. A deeper study of how the 19 merged schools' school disruptions have affected student learning is still required, however. – More study is required to back this up.

Research on learning loss in children has been carried out in various countries such as: Pakistan, Botswana, Bangladesh, Rwanda, Brazil, Ethiopia, Colombia [1][24][7] found that children spend less time studying during online and experiencing declines in academic grades. For this reason, in countries where research is limited, researchers must continue to explore learning loss linked to COVID-19 in order to account for variations in educational institutions' quality, duration of school closures, as well as methods for remote learning.

4. CONCLUSION

For the period between March 2020 and August 2021, this systematic review conducted a recorded study of evidence of documented learning loss associated to COVID19. With regard to the topic, six research were identified: five of them indicated evidence of student learning loss, while one demonstrated improvements in a specific subset of participants. The last research looked at how college students performed academically. In addition, four of the studies found an increase in inequities where certain student demographics lost more knowledge than others. Increase the number of studies, their geographic scope, as well as the number of students observed in each study.

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