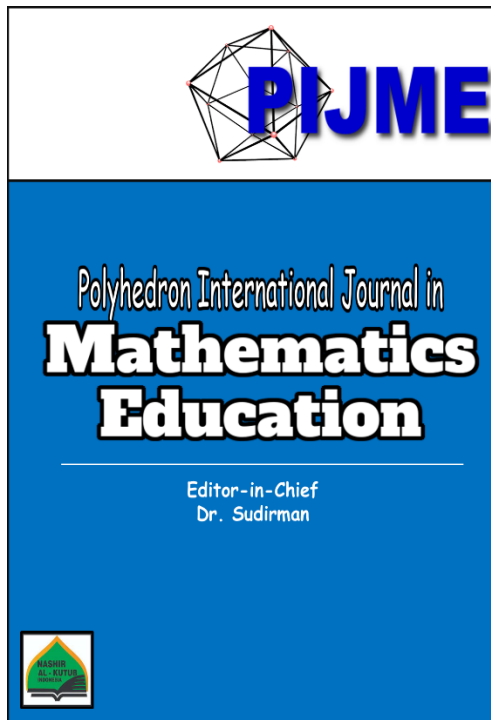


Polyhedron International Journal in Mathematics Education

Journal homepage: <https://nakiscience.com/index.php/pijme>



Parents and viewpoints: online learning during the Covid-19 pandemic

Muhammad Galang Isnawan^a, Essa Eql Elmazroei^b, Evana Gina Shantika^c, Indrawati^d, Muh. Rusmayadi^e, Samsuriadi^f

^aUniversitas Nahdlatul Wathan Mataram, Indonesia, galangisna19@gmail.com

^bUniversity of Jeddah, Saudi Arabia, eealmazroei@uj.edu.sa

^cUniversitas Nahdlatul Wathan Mataram, Indonesia, evanashantika@gmail.com

^dUniversitas Nahdlatul Wathan Mataram, Indonesia, flowmath@gmail.com

^eUniversitas Nahdlatul Wathan Mataram, Indonesia, muh.rusmayadi@gmail.com

^fUniversitas Nahdlatul Wathan Mataram, Indonesia, samsuriadimatematika@gmail.com

To cite this article: Isnawan, M.G., Elmazroei, E.E., Shantika, E.G., Indrawati, Rusmayadi, M & Samsuriadi. (2023). Parents and viewpoints: online learning during the Covid-19 pandemic. *Polyhedron International Journal in Mathematics Education*, 1(1), 1-6.

Original Article

Parents and viewpoints: online learning during the Covid-19 pandemic

Muhammad Galang Isnawan^a, Essa Eqa Elmazroei^b, Evana Gina Shantika^c,
Indrawati^d, Muh. Rusmayadi^e, Samsuriadi^f

^aUniversitas Nahdlatul Wathan Mataram, Indonesia, galangisna19@gmail.com

^bUniversity of Jeddah, Saudi Arabia, eelmazroei@uj.edu.sa

^cUniversitas Nahdlatul Wathan Mataram, Indonesia, evanashantika@gmail.com

^dUniversitas Nahdlatul Wathan Mataram, Indonesia, flowmath@gmail.com

^eUniversitas Nahdlatul Wathan Mataram, Indonesia, muh.rusmayadi@gmail.com

^fUniversitas Nahdlatul Wathan Mataram, Indonesia, samsuriadimatematika@gmail.com

Abstract

Parents play an important role during online learning during the Covid-19 Pandemic. However, there are still not many studies that examine parents' perspectives regarding online learning. Therefore, this study aims to examine the perspective of parents regarding the problems experienced by students during online mathematics learning. The participants in this study were 47 parents of junior high school students in Indonesia aged between 35 and 50 years. The instrument used was an interview guide in the form of a semi-structured interview. Data were analyzed using NVivo-12-assisted thematic analysis. The results of the study show that parents think students have problems in terms of low understanding of math material and children learning less than optimally while at home. However, some parents also revealed that there were no obstacles during online learning during the Pandemic. The results of this study then recommend that parents immediately provide information to the teacher when they find that children cannot solve problems and parents cannot help children in solving these math problems.

Keywords: Covid-19, Online learning, Mathematics, Parents

1. Introduction

Covid-19 is a very dangerous virus because it is very deadly ([Firmansyah & Kardina, 2020](#); [Kalogeropoulos et al., 2021](#); [Özüdoğru, 2021](#); [Van-Lancker & Parolin, 2020](#)). Covid-19 then turned into a pandemic and affected all aspects of life, including education. In fact, education is a very important aspect of life because it influences the progress of the nation. Students at school are the nation's youth who will make changes to the country, both for the better and for the worse. Learning that is usually done face-to-face has changed to online or distance learning ([Davis et al., 2019](#); [Frolova et al., 2021](#); [Kamanetz, 2020](#)). Under normal conditions, learning mathematics has become a serious problem for students, especially during the online learning period.

Several studies from various countries then tried to understand the problems students experienced during online learning during the pandemic. However, there are still not many studies that examine parents' opinions regarding online learning. [Chirinda et al. \(2021\)](#) used teachers as participants in their research and used a qualitative approach based on experimental methods for online learning during the pandemic. [Kalogeropoulos et al. \(2021\)](#) also uses teachers as participants by using a descriptive-based qualitative approach point of view. [Mailizar et al. \(2020\)](#) also

used teachers as research participants and used a combination of quantitative approaches to examine the use of e-learning during learning.

Several previous studies illustrate that all of the above research uses the teacher as the main participant and does not involve parents. Therefore, this study examines parents' views of online learning during Covid-19. The main reason for selecting parents as participants is because parents have a fairly dominant role while studying at home, starting from procuring learning facilities and infrastructure to monitoring or accompanying children while studying at home ([Agaton & Cueto, 2021](#); [Demir & Demir, 2021](#); [Hamaidi et al., 2021](#); [Hawighorst, 2005](#)). The approach used is a qualitative approach to the type of design phenomenology. This is because this research aims to examine the phenomenon ([Breiger, 1995](#); [Dangal & Joshi, 2020](#); [Laverty, 2003](#); [Standing, 2009](#); [Stolz, 2013](#)), namely online learning during the pandemic. Based on the previous description, the purpose of this study is to provide an overview of the problems students experience during online learning from a parent's perspective.

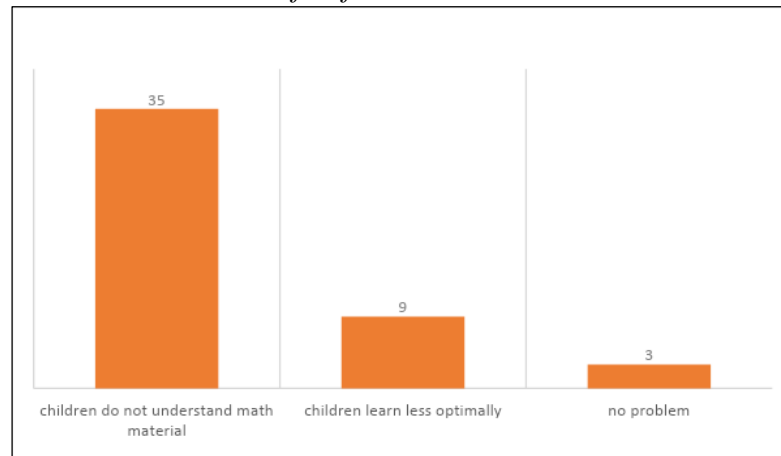
2. Method

This study uses a qualitative approach to the type of design phenomenology ([Dangal & Joshi, 2020](#); [Frudenthal, 2002](#); [Laverty, 2003](#); [Stolz, 2013, 2020](#)). This type of research was used because this research aims to examine the experiences of a group of parents in dealing with problems experienced by students during learning during the Covid-19 period. Participants in this activity were parents of junior high school students in Indonesia, totaling 47 people aged 35-50 years. Participants were selected using purposive sampling. The instrument in this study was a semi-structured interview guide. These guidelines are used so that participants give answers that are more flexible during interview activities. The data in this study are the answers of parents regarding the interview guidelines provided. Data were processed using NVivo-12-assisted thematic analysis. The thematic analysis steps carried out are reading the data repeatedly to get used to the data, looking for the initial code, compiling themes from initial codes that have the same characteristics, reviewing themes, and naming and defining themes ([Alhojailan & Ibrahim, 2012](#); [Benavides-lahnstein & Ryder, 2019](#); [Scharp & Sanders, 2018](#)). NVivo-12 is used to simplify or assist researchers in the coding process ([Dalkin et al., 2020](#); [Paulus et al., 2015](#); [Wilk et al., 2019](#)).

3. Research Results and Discussion

Based on the results of an analysis of parents' answers during interviews, information was obtained that most parents thought that children did not understand math material well during online learning. In addition, parents also think that children learn less optimally during online learning and the rest think that there are no obstacles during online learning. The number of references that make up the three themes above can be seen in Figure 1.

Figure 1
Theme Formation and Number of References



Related to the theme "children do not understand math material", the most dominant initial code in forming the theme is "without reason, children do not understand math material", followed by the initial code "learning is done remotely", and followed by "the teacher gives material with poor explanation. Apart from that, parents also revealed that they could not do math and that they had limited quota or internet signal. The rest, parents stated that the child was not enthusiastic during online learning, there were no discussion partners, the learning environment was not conducive, and solely relied on *Google* at the time of learning.

If you compare the previous theme with "children learn less optimally", it turns out that the two themes are related. Although, these themes cannot be compared or combined into one theme. This is because the theme "children do not understand math material" has an emphasis on students who do not understand math material. Meanwhile, the theme "children learn less optimally" emphasizes that students cannot learn optimally during online learning and does not guarantee that students do not understand math material well.

As for the theme "no problem" formed from three initial codes. Basically, parents think that the implementation of online learning is because students already have a laptop or smartphone to take part in online learning activities. In addition, parents also consider that the internet network they have is sufficient enough so that there are no obstacles during the implementation of online learning. After looking at the parents' biodata, it turned out that these parents work as civil servants or the National Police so that their financial situation was not so constrained during Covid-19.

Based on the previous description, several previous studies ([Frolova et al., 2021](#); [Isnawan et al., 2022](#); [Özüdoğru, 2021](#)) revealed that students at school experienced problems during learning during the Pandemic. This problem is in the form of limited understanding of students in understanding mathematical material resulting in a decrease in their competence. These results are then in line with the theory which reveals that students' knowledge is not good when learning during the Covid-19 period due to parental factors ([Hadriana et al., 2021](#); [Mailizar et al., 2020](#); [Megatsari et al., 2020](#)). Parents are considered unable to meet students' needs during online learning, such as procuring smartphones or laptops. Even when smartphone Yes, it turns out that parents don't have enough money to buy internet quota.

However, this theory is not generally applicable. This is because in this study, parents were still able to meet the needs of students during online learning during the pandemic.

4. Conclusion

The results of this study revealed that parents thought that children could not understand math material well during online learning during the Covid-19 period. This is because students cannot study optimally while at home. Although, these results also do not apply in general because some parent participants in this study thought that these parents had no problems during online learning. The results of this study are then expected to be used as one of the considerations in online learning. One consideration that can be recommended is that parents should provide space for their children to study comfortably at home. In addition, even if parents do not understand math material well, parents should report these activities to the teacher when there are math problems that cannot be solved together with students.

5. References

- Agaton, C. B., & Cueto, L. J. (2021). Learning at home: Parents' lived experiences on distance learning during COVID-19 pandemic in the Philippines. *International Journal of Evaluation and Research in Education*, 10(3), 901–911. <https://doi.org/10.11591/ijere.v10i3.21136>
- Alhojailan, M. I., & Ibrahim, M. (2012). Thematic Analysis: A Critical Review of Its Process and Evaluation. *West East Journal of Social Sciences*, 1(2011), 8–21. https://faculty.ksu.edu.sa/sites/default/files/ta_thematic_analysis_dr_mohammed_alhojailan.pdf
- Benavides-lahnstein, A. I., & Ryder, J. (2019). School teachers' conceptions of environmental education: Reinterpreting a typology through a thematic analysis. *Environmental Education Research*, 1–18. <https://doi.org/10.1080/13504622.2019.1687649>
- Breiger, R. L. (1995). Social structure and the phenomenology of attainment. *Annual Review of Sociology*, 21(1), 11–136. <https://doi.org/10.1146/annurev.so.21.080195.000>
- Chirinda, B., Ndlovu, M., & Spangenberg, E. (2021). Teaching mathematics during the covid-19 lockdown in a context of historical disadvantage. *Education Sciences*, 11(117), 1–14. <https://doi.org/10.3390/educsci11040177>
- Dalkin, S., Forster, N., Hodgson, P., Lhussier, M., & Car, S. M. (2020). Using computer assisted qualitative data analysis software (CAQDAS; NVivo) to assist in the complex process of realist theory generation, refinement and testing. *International Journal of Social Research Methodology*, 24(1), 123–134. <https://doi.org/10.1080/13645579.2020.1803528>
- Dangal, M. R., & Joshi, R. (2020). Hermeneutic Phenomenology: Essence in Educational Research. *Open Journal for Studies in Philosophy*, 4(1), 25–42. <https://doi.org/https://doi.org/10.32591/coas.ojsp.0401.03025d>
- Davis, N. L., Gough, M., & Taylor, L. L. (2019). Online teaching: Advantages, obstacles and tools for getting it right. *Journal of Teaching in Travel & Tourism*, 19(3), 256–263. <https://doi.org/10.1080/15313220.2019.1612313>
- Demir, E., & Demir, C. G. (2021). Investigation of parents' opinions about distance education during the COVID-19 pandemic. *Turkish Online Journal of*

- Distance Education*, 22(2), 42–57.
<https://files.eric.ed.gov/fulltext/EJ1290801.pdf>
- Firmansyah, Y., & Kardina, F. (2020). Pengaruh New Normal di Tengah Pandemi Covid-19. *Buana Ilmu*, 4(2), 99–112. <https://e-journal.unair.ac.id/jlm/article/view/23472/12821>
- Frolova, E. v, Rogach, O. v, Tyurikov, A. G., & Razov, P. v. (2021). Online student education in a Pandemic: New challenges and risks. *European Journal of Contemporary Education*, 10(1), 43–52.
<https://doi.org/10.13187/ejced.2021.1.43>
- Frudenthal, H. (2002). *Didactical Phenomenology of Mathematical Structures*. Kluwer Academic Publishers. <https://id1lib.org/book/672037/8436b0>
- Hadriana, Mahdum, Isjoni, Futra, D., & Primahardani, I. (2021). Online learning management in the era of COVID-19 Pandemic at junior high school in Indonesia. *Journal of Information Technology Education: Research*, 20, 351–383. <https://doi.org/10.28945/4819>
- Hamaidi, D. A., Arouri, Y. M., Noufa, R. K., & Aldrou, I. T. (2021). Parents’ perceptions of their children’s experiences with distance learning during the COVID-19 pandemic. *International Review of Research in Open and Distance Learning*, 22(2), 224–241.
<https://doi.org/10.19173/irrodl.v22i2.5154>
- Hawighorst, B. (2005). Parents’ views on mathematics and the learning of mathematics-an intercultural comparative study. *ZDM*, 37(2), 90–100.
<https://doi.org/https://doi.org/10.1007/BF02655718>
- Isnawan, M. G., Suryadi, D., Turmudi, T., & Marfuah, M. (2022). Parental Obstacles During Distance Learning Mathematics in Indonesia: A Phenomenology Study. *European Journal of Educational Research*, 11(2), 873–883. <https://doi.org/10.12973/eu-jer.11.2.873>
- Kalogeropoulos, P., Roche, A., Russo, J., Vats, S., & Russo, T. (2021). Learning mathematics from home during COVID-19: insights from two inquiry-focussed primary schools. *Eurasia Journal of Mathematics, Science and Technology Education*, 17(5), 1–16. <https://doi.org/10.29333/ejmste/10830>
- Kamanetz, A. (2020). ‘Panic-gogy’: Teaching online classes during the coronavirus pandemic. Npr.
<https://www.npr.org/2020/03/19/817885991/panic-gogy-teaching-online-classes-during-the-coronavirus-pandemic>
- Laverty, S. M. (2003). Hermeneutic phenomenology and phenomenology: A comparison of historical and methodological considerations. *International Journal of Qualitative Methods*, 2, 1–29.
http://www.ualberta.ca/~iiqm/backissues/2_3final/pdf/laverty.pdf
- Mailizar, Almanthari, A., Maulina, S., & Bruce, S. (2020). Secondary school mathematics teachers’ views on e-learning implementation barriers during the COVID-19 pandemic: The case of Indonesia. *Eurasia Journal of Mathematics, Science and Technology Education*, 16(7).
<https://doi.org/10.29333/EJMSTE/8240>
- Megatsari, H., Dwi, A., Ibad, M., Tri, Y., Putri, K., Ardiansyah, R., Geno, P., & Nugraheni, E. (2020). The community psychosocial burden during the COVID-19 pandemic in Indonesia. *Heliyon*, 6, 1–5.
<https://doi.org/10.1016/j.heliyon.2020.e05136>

- Özüdoğru, G. (2021). Problems faced in distance education during Covid-19 Pandemic. *Participatory Educational Research*, 8(4), 321–333. <https://doi.org/10.17275/per.21.92.8.4>
- Paulus, T., Woods, M., Atkins, D. P., & Macklin, R. (2015). The discourse of QDAS: reporting practices of ATLAS.ti and NVivo users with implications for best practices. *International Journal of Science Research Methodology*, 20(1), 35–47. <https://doi.org/10.1080/13645579.2015.1102454>
- Scharp, K. M., & Sanders, M. L. (2018). What is a theme? Teaching thematic analysis in qualitative communication research methods communication research methods. *Communication Teacher*, 1–5. <https://doi.org/10.1080/17404622.2018.1536794>
- Standing, M. (2009). A new critical framework for applying hermeneutic phenomenology. *Nurse Researcher*, 16(4), 20–33. <https://doi.org/https://doi.org/10.7748/nr2009.07.16.4.20.c7158>
- Stolz, S. A. (2013). Phenomenology and physical education. *Educational Philosophy and Theory*, 45(9), 949–962. <https://doi.org/10.1080/00131857.2013.785355>
- Stolz, S. A. (2020). Phenomenology and phenomenography in educational research: a critique. *Educational Philosophy and Theory*, 1–20. <https://doi.org/10.1080/00131857.2020.1724088>
- Van-Lancker, W., & Parolin, Z. (2020). COVID-19, school closures, and child poverty: A social crisis in the making. *The Lancet Public Health*, 1–3. [https://doi.org/10.1016/S2468-2667\(20\)30084-0](https://doi.org/10.1016/S2468-2667(20)30084-0)
- Wilk, V., Soutar, G. N., & Harrigan, P. (2019). Tackling social media data analysis: Comparing and contrasting QSR NVivo and Leximancer. *Qualitative Market Research: An International Journal*, 22(2), 94–113. <https://doi.org/http://dx.doi.org/10.1108/QMR-01-2017-0021>