THE IMPACT OF ONLINE EDUCATION ON THE EARLY CHILDREN’S LEARNING OUTCOMES

PENGARUH PENDIDIKAN SECARA DARING TERHADAP HASIL BELAJAR ANAK USIA DINI

Wahyuni
Universitas Negeri Padang
wahyuniyuni0301@gmail.com

Prima Aulia
Universitas Negeri Padang
primaaulia.psi@gmail.com

Abstract
This research is motivated by the existence of an online learning process in early childhood so that it impacts on children’s learning outcomes. This study aims to determine the effect of online learning on early childhood learning outcomes at Raudhatul Athfal Islam Bakti 99 Nairatul Jannah Padang. This study uses quantitative and qualitative research techniques, namely the mixed method. The subjects in this study amounted to five people. Data collection techniques are in the form of interviews and questionnaires. This study uses quantitative data analysis techniques using level categorization, while qualitative data analysis uses coding approaches. And the outcomes of this study meant that there is an effect of online learning on early childhood learning outcomes. Quantitative and qualitative data supports these results. Quantitative data shows the impact of online education on learning outcomes in the moderate category. In contrast, while the results from qualitative data show that online learning partially affects children’s learning outcomes so that learning outcomes tend to be less stable.

Keywords: online learning, early children learning outcomes

Abstrak
Penelitian ini dilatarbelakangi oleh adanya pembelajaran online pada masa kanak-kanak sehingga berdampak pada hasil belajar anak. Penelitian ini bertujuan untuk mengetahui pengaruh pembelajaran online terhadap hasil belajar anak usia dini di Raudhatul Athfal Islam Bakti 99 Nairatul Jannah Padang. Dalam penelitian ini digunakan teknik penelitian kuantitatif dan kualitatif yaitu metode campuran. Subjek dalam penelitian ini berjumlah lima orang. Teknik pengumpulan data berupa wawancara dan anket. Dalam penelitian ini, sementara teknik pengkodean digunakan untuk analisis data kualitatif, teknik analisis data kategori digunakan pada tingkat kuantitatif. Hasil penelitian ini menunjukkan bahwa pembelajaran online berdampak pada prestasi akademik anak prasekolah. Hasil tersebut didukung dengan data kuantitatif dan kualitatif. Data kuantitatif
menunjukkan pengaruh pembelajaran daring pada hasil belajar dalam kategori sedang, sedangkan hasil dari data kualitatif menunjukan bahwa pembelajaran daring sebagian mempengaruhi hasil belajar anak sehingga hasil belajar cenderung kurang stabil.

**Kata kunci:** pembelajaran daring, hasil belajar anak usia dini

### A. Introduction

The corona virus (Covid-19) is rampant, so almost all activities have been stopped, one of which is face-to-face learning (offline), which the schools and universities implement. The impact of Covid-19 on early childhood education requires the learning system to change from face-to-face (offline) to online (online). In personality development and in preparing children for higher education.

Online learning has never been applied before in kindergarten, so it is new for teachers. A teacher inevitably has to apply online knowledge to continue teaching and learning. E-learning is an educational activity that uses electronic media and networks to support learning. One application that supports online education in PAUD is WhatsApp Group, such as sending messages, photos, video calls, and shipping documents.

Compared to the face-to-face learning process, assessing of children’s learning outcomes during online learning (distance) has a difference. Practice teaching at home because teachers cannot learn face to face. They only post online materials and review children at home. This causes the teacher’s supervision to decrease. Independent study at home makes children’s enthusiasm less, children feel bored, and many have difficulty doing assignments. They are also confused about where to start, so parents directly role in doing children’s work.

Online learning has a significant influence because using online education can make aspects of children’s development decline. According to Wulandari & Purwanta, their research stated that the research results show

---

1. Putri Hana Pebriana, “Analisis Penggunaan Gadget Terhadap Kemampuan Interaksi Sosial Pada Anak Usia Dini,” *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini* 1, no. 1 (2017), https://doi.org/10.31004/obsesi.v1i1.26.

2. Meyda Setyana Hutami and Aninditya Sri Nugraheni, “Metode Pembelajaran Melalui Whatsapp Group Sebagai Antisipasi Penyebaran Covid-19 Pada AUD Di TK ABA Kleco Kotagede,” *PAUDIA: Jurnal Penelitian Dalam Bidang Pendidikan Anak Usia Dini* 9, no. 1 (2020): 126–30, https://doi.org/https://doi.org/10.26877/paudia.v9i1.6107; Yuli Tri Andini and Melia Dwi Widayanti, “Pelaksanaan Pembelajaran Daring Pada Masa Pandemi COVID-19 Di TK BIAS Yogyakarta,” *Jurnal Tarbiyatuna: Kajian Pendidikan Islam* 4, no. 2 (2020): 206–16, https://doi.org/https://doi.org/10.29062/tarbiyatuna.v4i2.424.

3. Deka Ramanta and Febi Dwi Widayanti, “Pembelajaran Daring Di Sekolah Menengah Kejuruan Putra Indonesia Malang Pada Masa Pandemi COVID-19,” in *Prosidings Seminar Bimbingan Dan Konseling: Mengukuhkan Eksitensi Peran BK Pasca Pandemi Covid-19 Di Berbagai Setting Pendidikan*, ed. Blasius Boli Lasan et al. (Malang: Universitas Negeri Malang, 2020), 61–67, http://conference.um.ac.id/index.php/bk2/article/view/81.
that most children’s development has decreased in every aspect. One of the aspects that is most affected is the social aspect. Therefore, as has been researched, we can see that if a child’s development begins to decline, the child’s learning outcomes will automatically decrease. In early childhood education, he assesses learning outcomes through his process when carrying out an activity in the learning process.

B. Method

This research method is a mixed. The use of mixed methods aims to produce more complete data. The mixed method research uses two studies, namely quantitative and qualitative research. Quantitative research is a researcher’s effort to collect data in the form of numbers. This research used SPSS to distribute and process the data obtained from questionnaires, as Martono said. A qualitative approach is a researcher’s effort to get descriptive data in written or spoken words from people. And observed behavior, namely by obtaining data through the interview process.

Subjects in the study amounted to 5 people, where the sampling technique in this study was saturated. The data collection techniques are through interviews, distributing questionnaires, and documentation. This research uses questionnaires and interviews as instruments. The instruments are as follows:

| Variable            | Aspect                  | Total |
|---------------------|-------------------------|-------|
| Children’s learning outcomes | Moral, religious values | 5     |
|                     | Favorable | Unfavorable |       |
|                     | 1,2       | 3,4,5       |       |
| Emotional social    |           | 5           |       |
|                     | 6,7,8     | 9,10        |       |
| Language            |           | 4           |       |
|                     | 13,14     | 11,12       |       |
| Cognitive           |           | 3           |       |
|                     | 15,16     | 17          |       |
| Motorik             |           | 4           |       |
|                     | 18,19     | 20,21       |       |
| Art                 |           | 5           |       |
|                     | 22,23,24  | 25,26       |       |

The data collection method used in this study is a Likert scale, and we modified into four alternative answers, namely: SS (strongly agree), S (agree), TS (disagree), STS (strongly disagree).

---

4 Hesti Wulandari and Edi Purwanta, “Pencapaian Perkembangan Anak Usia Dini Di TK Selama Pembelajaran Daring Saat Pandemi Covid-19,” Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini 5, no. 1 (2021): 452–62, https://doi.org/10.31004/obsesi.v5i1.626.

5 Nanang Martono, Metode Penelitian Kuantitatif: Analisis Isi Dan Analisis Data Sekunder, ed. Santi Pratiwi Tri Utami, 5th ed. (Jakarta: RajaGrafindo Persada, 2016).

6 Ajat Rukajat, Pendekatan Penelitian Kualitatif (Qualitative Research Approach), 1st ed. (Yogyakarta: Deepublish, 2018).
The results were analyzed using the data analysis technique, namely level categorization. According to the measurements of Azwar as quoted by Yusrizal, we could place the subject’s position in a tiered group by making some levels of categorization. The following is the level categorization formula:

| Description | Formula                   |
|-------------|---------------------------|
| Low         | $x < (\mu - 1.0 \sigma)$  |
| Medium      | $(\mu - 1.0 \sigma) \leq x < (\mu + 1.0 \sigma)$ |
| Tall        | $(\mu + 1.0 \sigma) \leq x$ |

Table 2. Online education interview instrument on learning outcomes

| No | Variabel                  | Aspect                              | Total |
|----|---------------------------|-------------------------------------|-------|
| 1. | Children’s learning outcomes | a. Moral, religious values           | 1     |
|    |                           | b. Emotional social                 | 1     |
|    |                           | c. Cognitive                        | 1     |
|    |                           | d. Motorik                          | 1     |
|    |                           | e. Language                         | 1     |
|    |                           | f. Art                              | 1     |

This research used some data analysis techniques, namely open coding, axial coding, and selective coding, to analyze the interviews. The qualitative data analysis technique in this study used the coding method of Strauss and Corbin.

C. Result and Discussion

1. Result
   a. Quantitative data

   Quantitative data were analyzed using the formula from Azwar. We used the level category to adjudge the impact of online education on children’s academic achievement from the questionnaire results. Distribution, standard deviation, and mean (mean). And the result is as follows:

---

7 Yusrizal, *Tanya Jawab Seputar Pengukuran, Penilaian, Dan Evaluasi Pendidikan*, 1st ed. (Banda Aceh: Syiah Kuala University Press, 2016).

8 Cosmas Gatot Haryono, *Ragam Metode Penelitian Kualitatif Komunikasi*, ed. Dewi Esti Restiani (Sukabumi: CV Jejak (Jejak Publisher), 2020).

9 Yusrizal, *Tanya Jawab Seputar Pengukuran, Penilaian, Dan Evaluasi Pendidikan*. 
### Table 3. The results of the online education questionnaire analysis of level categorization

| Description | Kategori | Total | Percent (%) |
|-------------|----------|-------|-------------|
| Low         | $X < (\mu -1.0 \sigma)$  
$X < (65-13)$  
$X < 52$ | - | 0% |
| Medium      | $(\mu -1.0 \sigma) \leq X < (\mu +1.0 \sigma)$  
$(65-13) \leq X < (65 + 13)$  
$52 \leq X < 78$ | 5 | 100% |
| Tall        | $(\mu +1.0 \sigma) \leq X$  
$(65+13) \leq X$  
$78 \leq X$ | - | 0% |
| Total       |          | 5     | 100% |

It shows us that of the five teachers who teach at Raudhatul Athfal Islam Bakti 99 Nairatul Jannah, some of them say that the influence of online learning is in the medium category. The medium type of online learning in early childhood impacts children’s learning outcomes.

b. Qualitative data

The interviews were conducted with teachers at Raudhatul Athfal Islam Bakti 99 Nairatul Jannah Padang with five subjects on September 14-17, 2021. Here are the results:

R1 said that of the six aspects interviewed, all of them can affect children’s learning outcomes during online learning, both in terms of religious, moral, social, language, cognitive, motor, and artistic values. This online learning is carried out remotely and at home, of course. The only ones who guide children to study at home are parents or their families like their brothers and sisters. Online learning also makes children seem monotonous because online learning can only be done with video calls from smartphones.

R2 said that in face-to-face teaching and learning activities, children would feel more fun, play more and interact more with their friends. However, if children learn online, automatically learning is done remotely and only relies on smartphones, so it requires parents to guide their children to study while parents are busy working. The interaction between children and teachers is limited, and parents find it difficult to teach their children due to time constraints.

R3 said that face-to-face learning is more effective than online learning. In this online learning, children will learn more at home, so that it requires children to only mingle with their parents so that
children are used to it, and it could be the cause the child will feel embarrassed to socialize, and he feels less confident.

R4 said that online learning impacts children’s learning outcomes because online learning can automatically only deal with cellphone screens, so teachers can only invite children and cannot help directly. In automatic online learning, children only meet with their families, so whatever activities are carried out by children parents must involve their parents in any way, as if it happened to a child who does not obey his parents' orders. He is more obedient to the teacher's orders, so online learning will be challenging to learn.

R5 said that online learning could affect children’s learning outcomes. Studying at home makes the child’s environment limited, but if the child has many friends at school, it is suitable for the child’s social life. At school, when learning takes place, children are given more explanations by the teacher before carrying out activities so that children better understand the teaching that the teacher provides. If at home, they study only through cellphones, the limited time and distance make the teacher less than optimal in teaching children.

2. Discussion

The questionnaire results analyzed per aspect show that the high category only lies in the religious and moral aspects, namely as much as 20%. The previous researchers reinforce the result, namely Solekah et al., who researched how to teach moral values, respect, and appreciation to teachers for 4-5 years at home. The results show that children's religious and moral values have increased. During learning at home, children will mingle with their parents so that at home, parents can also invite children to worship together.\(^\text{10}\)

Other aspects show the questionnaire results in the medium and low categories, namely, the cognitive aspect where in this aspect of cognitive development from 5 respondents. The standard type is one person (20%), and the medium category is 4 people (80%). The motor aspect resulted in the low sort amounting to 1 person (20%), while those said it was four people (80%). The language aspect resulted in the medium variety amounting to 5 people (100%). Aspects of this art produced medium category amounted to 5 people (100%). The socio-emotional aspect resulted in a low category of 2 people (40%) who said it was three people (60%). The standard class shows that online learning has little effect on children's academic achievement. The average category indicates that online education during childhood significantly impacts a child’s

\(^{10}\) Maratus Solekah, Anik Lestariningrum, and Linda Dwiyanti, “Implementasi Pembelajaran Nilai Agama Dan Moral Pada Anak Usia 4-5 Tahun Selama Belajar Dari Rumah,” *Journal Ashil* 1, no. 1 (April 2021): 67–79, https://doi.org/https://doi.org/10.33367/piaud.v1i1.1621.
educational performance. This is corroborated by a previous researcher, Wulandari & Purwanta, who studied “Ensuring the development of preschoolers during online education in the Covid-19 epidemic college,” and argues that the results of his research show the following. The tremendous success is in the development of the child.

The researchers had conducted interviews with various participants, including teachers of Raudhatul Athfal Islam Bakti 99 Nairatul Jannah. The interviews show that online learning affects children's learning outcomes. If you study at home with your parents or siblings, the child will quickly feel bored, so the child becoming lazy to learn. Things that make online learning affect children's learning outcomes include busy working parents, making it challenging to guide children to study. These children who feel bored while looking at home because the learning is monotonous on average. Children catch learning from teachers less effective when learning from a distance far because if the child is in school, he needs guidance and an example from the teacher so that the child understands the learning that the teacher provides. Ramanta & Widayanti’s opinion reinforced this fact. They said the shortcomings in online learning include independent education at home, which reduces students' enthusiasm for learning. Often feeling lazy and bored with many teacher assignments makes students stressed.11

Judging from the results of the categorization test shows that the medium category is more dominant (100%). At the same time, the results of interviews conducted also offer the same results, where online learning influences learning outcomes. And we could have the conclusion that online education in early childhood could affect children’s learning outcomes.

D. Conclusion

Based on research conducted by researchers on teachers of Raudhatul Athfal Islam Bakti 99 Nairatul Jannah, we could conclude that the impact of online education on learning outcomes is as follows:

The questionnaire results show the medium category reaches 100% of the impact of online education on children's learning outcomes. The interviews reveal the impact of online education on children's learning outcomes. This conclusion is based on the analyzing of the results of interviews with the subject. Conclusions from six aspects of the development of children are only part of the results that are affected by online learning.

11 Ramanta and Widayanti, “Pembelajaran Daring Di Sekolah Menengah Kejuruan Putra Indonesia Malang Pada Masa Pandemi COVID-19.”
References

Andini, Yuli Tri, and Melia Dwi Widyanty. “Pelaksanaan Pembelajaran Daring Pada Masa Pandemi COVID-19 Di TK BIAS Yogyakarta.” *Jurnal Tarbiyatuna: Kajian Pendidikan Islam* 4, no. 2 (2020): 206–16. https://doi.org/https://doi.org/10.29062/tarbiyatuna.v4i2.424.

Haryono, Cosmas Gatot. *Ragam Metode Penelitian Kualitatif Komunikasi.* Edited by Dewi Esti Restiani. Sukabumi: CV Jejak (Jejak Publisher), 2020.

Hutami, Meyda Setyana, and Aninditya Sri Nugraheni. “Metode Pembelajaran Melalui Whatsapp Group Sebagai Antisipasi Penyebaran Covid-19 Pada AUD Di TK ABA Kleco Kotagede.” *PAUDIA: Jurnal Penelitian Dalam Bidang Pendidikan Anak Usia Dini* 9, no. 1 (2020): 126–30. https://doi.org/https://doi.org/10.26877/paudia.v9i1.6107.

Martono, Nanang. *Metode Penelitian Kuantitatif: Analisis Isi Dan Analisis Data Sekunder.* Edited by Santi Pratiwi Tri Utami. 5th ed. Jakarta: RajaGrafindo Persada, 2016.

Pebriana, Putri Hana. “Analisis Penggunaan Gadget Terhadap Kemampuan Interaksi Sosial Pada Anak Usia Dini.” *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini* 1, no. 1 (2017). https://doi.org/https://doi.org/10.31004/obsesi.v1i1.26.

Ramanta, Deka, and Febi Dwi Widyanty. “Pembelajaran Daring Di Sekolah Menengah Kejuruan Indonesia Malang Pada Masa Pandemi COVID-19.” In *Prosiding Seminar Bimbingan Dan Konseling: Mengukuhkan Eksitensi Peran BK Pasca Pandemi Covid-19 Di Berbagai Setting Pendidikan,* edited by Blasius Boli La san, Edy Legowo, Lutfi Fauzan, Indriyana Rachmawati, Riski yana Prihatining sih, Farid Imam Kholidin, Muwakhidah, Novi Rosita Rahmawati, and Septinda Rima Dewanti, 61–67. Malang: Universitas Negeri Malang, 2020. http://conference.um.ac.id/index.php/bk2/article/view/81.

Rukajat, Ajat. *Pendekatan Penelitian Kualitatif (Qualitative Research Approach).* 1st ed. Yogyakarta: Deepublish, 2018.

Solekah, Maratus, Anik Lestariningrum, and Linda Dwiyanti. “Implementasi Pembelajaran Nilai Agama Dan Moral Pada Anak Usia 4-5 Tahun Selama Belajar Dari Rumah.” *Journal Ashil* 1, no. 1 (April 2021): 67–79. https://doi.org/https://doi.org/10.33367/piaud.v1i1.1621.

Wulandari, Hesti, and Edi Purwanta. “Pencapaian Perkembangan Anak Usia Dini Di TK Selama Pembelajaran Daring Saat Pandemi Covid-19.” *Jurnal Obsesi: Jurnal Pendidikan Anak Usia Dini* 5, no. 1 (2021): 452–62. https://doi.org/10.31004/obsesi.v5i1.626.

Yusrizal. *Tanya Jawab Seputar Pengukuran, Penilaian, Dan Evaluasi Pendidikan.* 1st ed. Banda Aceh: Syiah Kuala University Press, 2016.