



Parent's perspective on early childhood learning needs during Covid-19 using NVivo 12 software: A case study in Indonesia

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Abstract

This case study was conducted with the aim to identify the parent's perspective on early childhood learning needs while studying at home due to the Covid-19 pandemic. A total of 50 parents (25 fathers and 25 mothers) in one of the Early Childhood Education (PAUD) schools in Bandung, West Java, were recruited as participants in this research. The instrument used was a questionnaire as input to the needs of early childhood. Data were analysed with NVivo 12 software and presented as a percentage based on four indicators, namely: (1) Parents' needs; (2) Time; (3) Costs; and (4) Children's needs. The result: (1) As many as 76 percent of parents need a "Cognitive Game" and "Guide" for their children's education at home; (2) The highest time percentage, 50 percent, refers to the amount of time that parents can spend, especially on their child's education, which is "More than 30 minutes"; (3) The highest percentage for expenses incurred by parents is 30 percent, namely, for expenses of "More than IDR300,000"; and (4) As many as 86 percent of parents think that their children need "Books" and "Educational Games Tools for their learning.

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Introduction

Early childhood is a period of rapid development in various ways such as sleep habits, cognitive and psychomotor processes, feelings, and performance (Deoni, Dean, Joelson, O'Regan, & Schneider, 2018;

Ravanis, 2017; Schumacher et al., 2017; Wodon, 2016; Yenpiam, Sirisunhirun, & Wichitputchraporn, 2019). This period is a golden age for humans. In addition, education for early childhood must be considered. In this case, the National Association of Early Childhood, which is an organization of early childhood education experts, has standards, including: (1) Learning in early childhood must be in accordance with children's development; (2) PAUD learning depends on expert resources;

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(3) Having learning that applies assessment that encourages children's development appropriately and ethically; and (4) Learning shows cooperation between professional teachers and parents (Kurniah, Andreswari, & Kusumah, 2019). We argue that there are at least four factors that influence the early childhood learning needs as shown in Figure 1.

Regulations and expert's perspective affect early childhood learning needs as previously described. Meanwhile, the perspective of teachers and parents must be explored by conducting research. Miller and Kehl (2019) concluded that early childhood achievement is simplified when parents and teachers share beliefs about the skills children need to succeed. Thus, it is important for teachers and parents to work together in meeting early childhood learning needs. Usually, teachers carry out their obligations at school while parents provide their learning at home. However, in January 2020, the Coronavirus, also known as Covid-19, became a serious issue in most parts of the world because of its rapid spread.

In Indonesia, the government began to take action on Covid-19 around March 2020. This led the Indonesian government to make a number of policies in various areas, such as regulations on health, environment, society, and education. In the world of education, Indonesia applied home-schooling rules for students ranging from early childhood education to higher education (Rasmitadila et al., 2020). Changes in the learning system cannot be avoided, such as with online learning. In this case, all parties must be able to adapt quickly. Institutions or universities or schools must be ready to facilitate both technically and non-technically for teachers and parents (in the case of PAUD) so that learning can run smoothly. However, the concern is, are parents ready to change the current learning system, especially in PAUD? Given that parents currently have various kinds of professions, we wanted to identify the parent's perspective on early childhood learning needs during Covid-19. This is important because parents directly have the greatest role in meeting the educational needs of their children. In this research, NVivo 12 software was used as an aid in processing the data we obtained.

NVivo 12 is software that can be used to help in analysing qualitative data. This was introduced by QSR International 30 years ago (Dollah, Abduh, & Rosmaladewi, 2017). This software has been widely used by several researchers, such as (Leech & Onwuegbuzie, 2011), "Beyond constant comparison of qualitative data analysis: Using NVivo", (Ishak & Bakar, 2012), "Qualitative data management and analysis using NVivo: An approach used to examine leadership qualities among

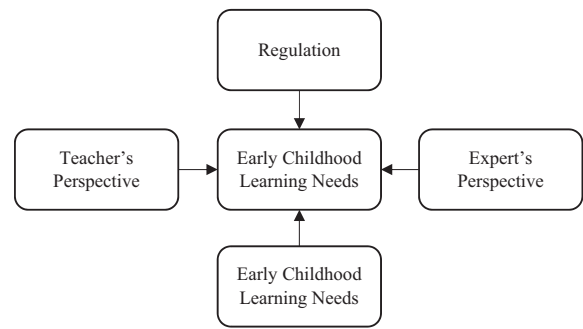


Figure 1 The influencing factors of early childhood learning needs

student leaders", (Robins & Eisen, 2017), "Strategies for the effective use of NVivo in a large-scale study: Qualitative analysis and the repeal of don't ask, don't tell", (Rasmitadila et al., 2020), "The Perceptions of Primary School Teachers of Online Learning during the COVID-19 Pandemic Period: A Case Study in Indonesia". Thus, it was hoped NVivo 12 software would provide a picture of early childhood learning needs based on the parent's perspectives.

Methodology

This research was a case study to describe the parent's perspective on early childhood learning needs during Covid-19. It was limited to the views of parents only, although that does not rule out that it can be developed to see about the learning needs of early childhood from another point of view. The parent's perspective would be presented in the Node form of NVivo 12 software.

Participant

Participant in this research were 50 parents (25 Male with code (M) and 25 Female with code (F) in one of the Early Childhood Education (PAUD) schools in Bandung, West Java. West Java is one of the provinces with a fairly large population in Indonesia and is dominated by the Sundanese Tribe (Aminudin et al., 2019). This is an interesting characteristic, considering that Indonesia has a variety of tribes and cultures. Participants come from urban areas, thus most of them work and understand technology. Each respondent only filled in the instruments that had been prepared online via Google Form.

Instrument

The instrument used was an online questioner

distributed through Google Form. There were four indicators that were made to determine early childhood learning needs, including: (1) Parents' needs, because parents need guidance for parenting early children at home (Herbell & Breitenstein, 2020); (2) Time, because in early childhood sufficient time for each activity is required, and during the Covid-19 pandemic, parents must meet these needs (Jayasuriya, Williams, Edwards, & Tandon, 2016); (3) Costs, because it is important for parents to estimate the costs that will be incurred, as this issue must be weighed up (Jones, Bierman, Crowley, Welsh, & Gest, 2019); and (4) Children's needs, because the needs in early childhood are also important in the learning process for parents (Buckler, Puterman, & Faulkner, 2020). Then, from the four indicators, choices were provided for the parents to choose from. The sub indicators for each of these indicators can be seen in Table 1 and Figure 2.

It was hoped that the instruments that were prepared would produce an overview of parent's perspective on early childhood learning needs during Covid-19.

Data Analysis

Descriptive analysis was used on data obtained to identify the parent's perspective on early childhood learning needs. Previously, the data obtained were categorized based on the Node contained in Table 1. Simply put, the distribution of early childhood learning needs in Table 1 was codified with Nodes in NVivo 12 software. The data can be entered into NVivo 12 software in the form of Nodes to be processed with specific Nodes

(Rasmitadila et al., 2020). The output, which has been numbered, is presented with the name "Project map of early childhood learning needs", as seen in Figure 2.

The answers chosen by respondents on each sub-indicator are presented with the output "Project Map" in NVivo 12 software. Then, the findings are presented in the output using Equation (1).

$$\% = \frac{\text{Number of participants for each sub-indicator}}{\text{Total participants}} \times 100\% \quad (1)$$

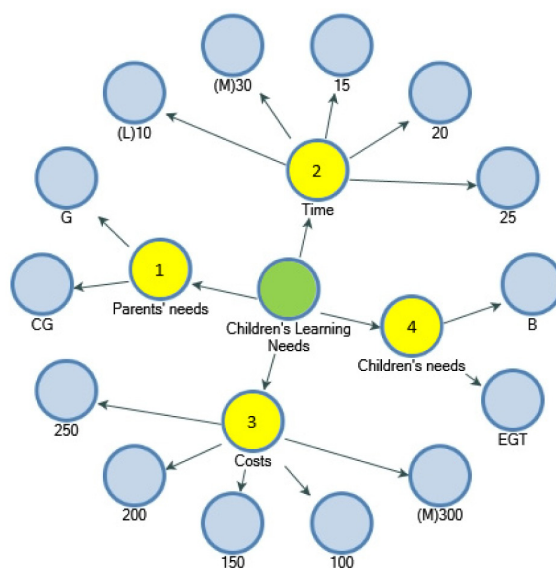


Figure 2 Project map of early childhood learning needs

Table 1 Code for each sub-indicator

No	Indicator	Sub-Indicator	Code
1.	Parents' needs	Guide	G
		Cognitive Game	CG
2.	Time	Less than 10 minutes	(L)10
		15 minutes	15
		20 minutes	20
		25 minutes	25
		More than 30 minutes	(M)30
3.	Costs	IDR100.000	100
		IDR150.000	150
		IDR200.000	200
		IDR250.000	250
		More than IDR300.000	(M)300
4.	Children's needs	Book	B
		Educational Games Tool	EGT

Result and Discussion

Data was taken based on respondents' answers about early childhood learning needs. The answer was then entered into the node that was created in NVivo 12. The results obtained are based on the output of the NVivo 12 software for each indicator, which are discussed in order. The sequence includes: (1) Parents' needs; (2) Time; (3) Costs; and (4) Children's needs.

Parents' Needs

This section had two Nodes, namely the Guide (G) and Cognitive Game (CG). The output on the NVivo 12 software for this section, can be seen in Figure 3.

Figure 3 shows that the majority of parents (76%) think that Guide (G) and Cognitive Game (CG) are both equally important to meet their needs. Meanwhile, others

(24%) think that only Guide (G) is what parents really need. The Guide is more needed than the Cognitive Game, even though the Cognitive Game is still an option for some respondents. These results are like what happened in Japan, where as many as 2/3 children meet the Physical Activity (PA) guidelines for early childhood (Fukushima et al., 2020). Hayati, Chamidah, and Fatimaningrum (2017) stated that guidance in the form of books is needed by educators and parents to observe the child's development. This explains that parents need a variety of guidelines to be able to educate their children, both under normal circumstances and during the Covid-19 pandemic. In addition, an in-depth approach to learning can provide success in learning (Poondej & Lerdpornkulrat, 2016). Thus, the parties concerned (school or government) must consider the parents' needs for their children's educational needs during the Covid-19 pandemic.

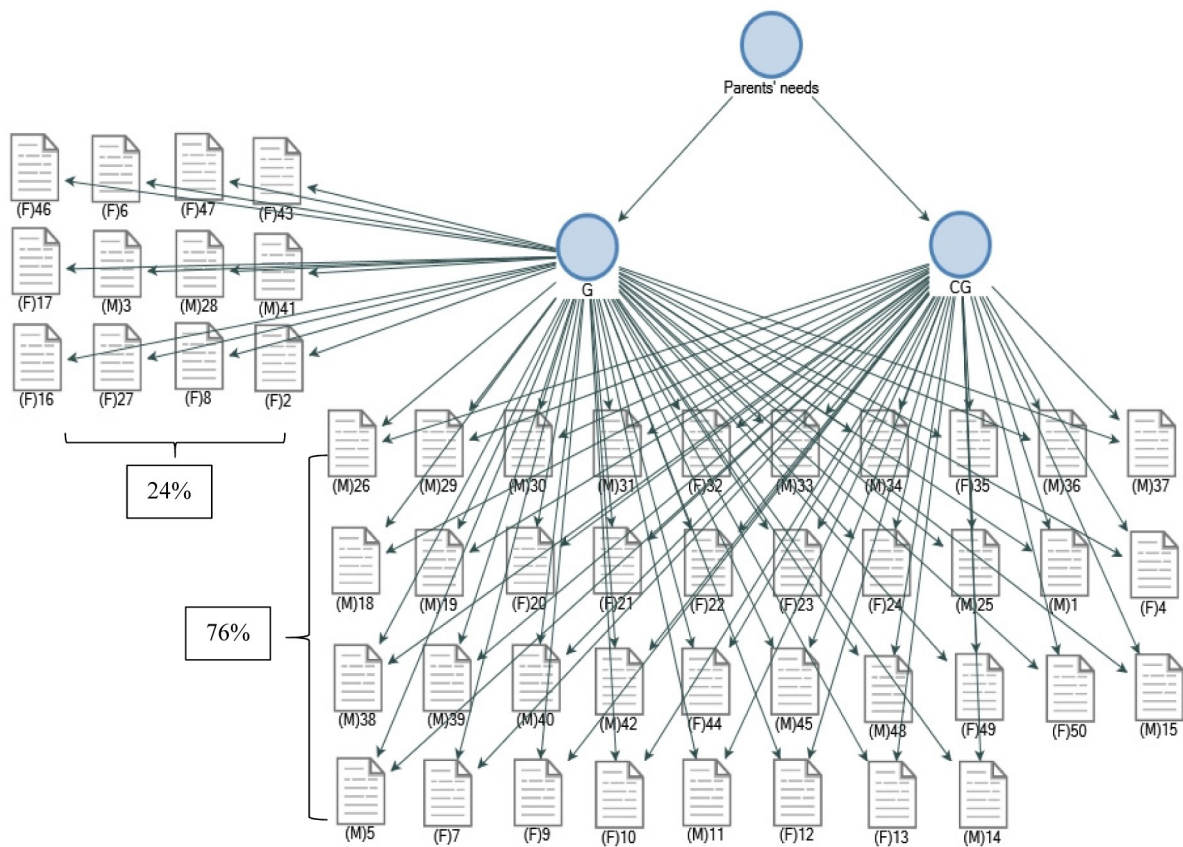


Figure 3 Parents' needs



Costs

Children's education cannot be separated from funding, that must be considered. Thus, the indicator that we reviewed next was the appropriate costs incurred based on the perspective and ability of the parents. The output in the NVivo 12 software as a visualization of parental input can be seen in Figure 5.

Figure 5 shows that the highest percentage of costs is 30 percent for more than IDR300.000 ((M)300). Meanwhile, the lowest percentage of 8 percent is found at IDR 200.000 (200). This becomes interesting if it is reviewed again between the appropriate costs incurred in a month with the time that can be devoted to the children because most likely, parents have the view that time with children is more important than money that can be spent. Or, there is also the possibility of being so busy as parents, they are willing to spend more than IDR300.000 to replace their inability to spend time with their children. In fact, it is possible for parents to spend a little time with their children and spend a little on their children's education. This becomes interesting to be reviewed further as an object of further research. However, in this case, money has indeed become an important thing in children's education. In South Korea, money is one of the determining factors in English education for early childhood (Lee, Kim, & Han, 2020).

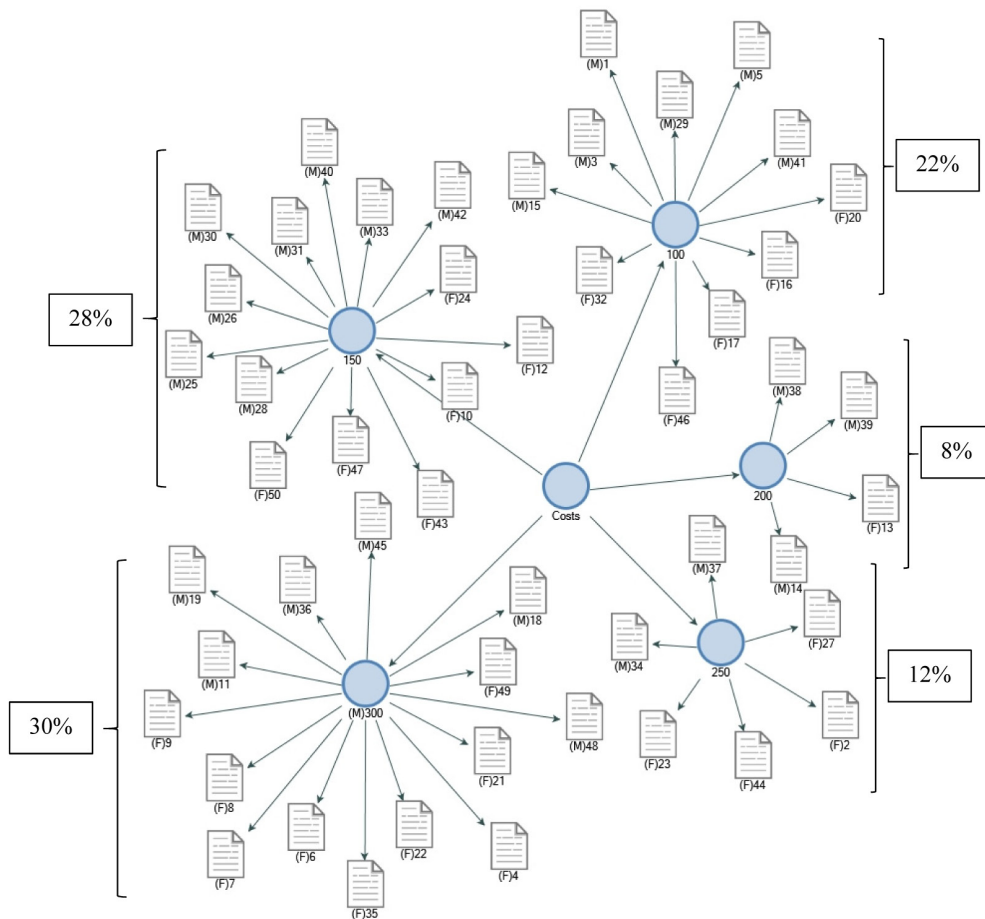


Figure 5 Costs

Children's Needs

Parents can be said to know their children better than anyone else, so the last indicator we considered was the child's needs based on the perspective of parents. Because it only has two Nodes like in section 3.1, the output in NVivo 12 software is as can be seen in Figure 6.

Figure 6 shows that the highest percentage (86%) is found in both (Book (B) and Educational Game Tool (EGT)), while there are participants who do not choose both. This was done by participants with code (F) 32 and was the lowest percentage (2%). These results indicate that both are considered important in meeting the needs of the children. In addition, it is important for parents to have the skill to play games when raising their children (Verkhuturova, Galaguzova, & Sergeeva, 2016). This is also supported by research (Khotimah, Aisyah, Fitri, & Riyanto, 2020) which states that educational game tools such as JUMOFAN (Fantasy Jumanji Modification) can enhance the beginning literacy ability to the children of

4–5 years old. Meanwhile, the importance of books from the perspective of parents is in line with research (Taylor, Zubrick, & Christensen, 2016), which states that reading books is one of the most important investments parents make in the literacy development of their children. So, it's not surprising, most parents choose both to fulfill their child's needs.

Conclusion

This research is expected to provide an overview of the readiness of parents in meeting the learning needs of early childhood during the Covid-19 pandemic. It should be noted that many factors can be used to achieve the success of early childhood education, but in this study the focus was on the perspective of parents. The majority of parents still have a need for various things, especially during a pandemic, because children's learning is done online. However, they can still provide more time and money so that their children's learning needs can be fulfilled.

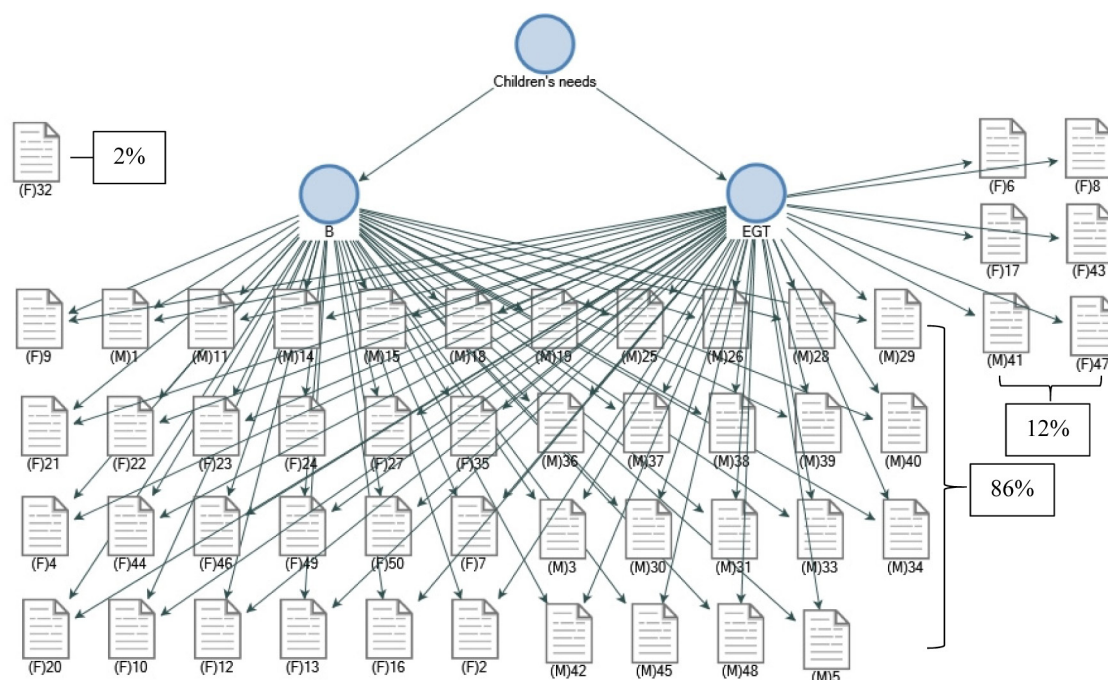


Figure 6 Children's needs

Conflict of Interest

There is no conflict of interest.

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