How to Manage Distance Learning for Children with Autism during the COVID-19 Pandemic at Rumah Autis Depok, Indonesia?

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Abstract

The Covid-19 epidemic, which attacked in early 2019, had an influence on all aspects of society, including schooling. Students who are studying must eventually follow from home, limiting their activities. Learning at home is challenging for most children, but it is more difficult for children with autism. Children with autism have a unique view of life compared to the general public. This research is necessary because it will provide additional information about the best distance learning methods and media for children with autism, particularly at Rumah Autis Depok in Indonesia. This research employs qualitative analysis, which is a technique for analyzing social research data without translating it to a numerical format. This research demonstrates that Rumah Autis Depok has a comprehensive distance learning program for children with autism, which includes employing online learning, such as a home visit program and worksheets delivered to parents once a week, which the teacher will supervise every day via WhatsApp and/or Zoom Meeting. Each child's worksheets will be unique, and each child's worksheets will be tailored to his or her IEP. The use of online and electronic-based learning is seen to be beneficial for children with autism.

Keywords: Distance; Learning; COVID-19; Children with Autism

Introduction

The COVID-19 epidemic spread throughout the planet in late 2019 and early 2020. The COVID-19 outbreak is a coronavirus disease pandemic in 2019, caused by coronavirus 2 (severe acute respiratory syndrome). This disease was initially discovered in December 2019 in Wuhan, Hubei, China (Lumbanrau, 2020).

The COVID-19 outbreak has triggered a global healthcare crisis. This COVID-19 outbreak is having an unprecedented impact on families, schools, and communities. We must address the myriad needs of students, including nutrition, physical and mental health, internet connection, and online learning alternatives accessible, during this awful moment, under completely new and certainly not ideal conditions. To get over this crisis, we'll have to be imaginative and ingenious. We'll have to work together and assist one another (National Center for Learning Disabilities, 2020).
All public venues, including schools, have been closed by governments due to the COVID-19 pandemic. All schools eventually decide to use distance learning, allowing students to continue learning even when they are at home. Approximately 14% of students enrolled in public schools in the United States require special education assistance (Norris, 2020). Parents must keep a close eye on their children as they study at home. Learning at home is challenging for most children, but it is more difficult for children with autism.

Learning is an activity that necessitates an organized and systematic approach because it is linked to your goals (objectives and competencies that must be mastered). This remark implies that a learning process must begin with meticulous planning to be implemented successfully (Supriadie & Darmawan, 2012). For children with autism, the classroom learning process is important in developing their self-confidence and discipline, as well as discovering their potential. Every youngster is born with the ability to stand out and be unique.

Distance learning is defined as enhanced knowledge and behavior capacities as a result of mediated experiences confined by time and distance, in which the learner is not in the same context as what is being taught (King, Young, Drivere-Richmond, & Schrader, 2001).

During the COVID-19 epidemic, distance learning presented new obstacles for all families. Consider what your child's hard actions are telling you about why he or she is suffering. If you are unable to assist your child in finding answers to their difficulties or unmet requirements, contact the school staff and request assistance.

Children with autism, also known as Autism Spectrum Disorder (ASD), have a unique perspective on the world. As a result, ASD children interact with others differently than non-ASD youngsters. Academics in communications and the Commissioner of Indonesian medical consciences both raised this issue, Leila Mona Ganiem (Khoppiya, 2020).

Rumah Autis Depok is a social institution that was founded on behalf of Yayasan Cahaya Keluarga Fitrah to bridge the demand for therapy sites and schools for children with autism and special needs from low-income households at cheap or even free of charge (Rumah Autis, 2019).

Table 1: the Services Provided by Rumah Autis Depok, Indonesia

<table>
<thead>
<tr>
<th>No</th>
<th>Name of Services</th>
<th>Range of Age</th>
<th>Number of Children in the Classroom</th>
<th>Therapist/Teacher</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Therapy</td>
<td>Various age</td>
<td>One child</td>
<td>Therapist</td>
<td>Usually called as one on one. One therapist handles one child.</td>
</tr>
<tr>
<td>2.</td>
<td>Sekolah Kemandirian Fungsional (SKF)</td>
<td>1-17 years old</td>
<td>4-7 Children (maximum)</td>
<td>Teacher</td>
<td>Each class has two teachers.</td>
</tr>
<tr>
<td>3.</td>
<td>Transition Class</td>
<td>Various age</td>
<td>3-6 Children (maximum)</td>
<td>Teacher</td>
<td>Each class has two teachers.</td>
</tr>
</tbody>
</table>

Source: The interview results with Informant 1 on January 2, 2020.

The number of children with autism who attend schools in all branches of Rumah Autis is fairly broad; the diagnoses include Down syndrome, speech delay, ADHD (Attention Deficit Hyperactivity...
Disorder), cerebral palsy, and other conditions. Children with autism, on the other hand, are the most numerous.

Rumah Autis currently has 7 (seven) branches as of July 2019. Rumah Autis Bekasi, Rumah Autis Depok, Rumah Autis Cileungsi, Rumah Autis Tanjung Priok, Rumah Autis Bogor, Rumah Autis Karawang, and Rumah Autis Tangerang are among the Autis rumahs in Indonesia. ABA (Applied Behavior Analysis) therapy, structured therapy programs that focus on teaching a certain set of skills for children with autism, is available at Rumah Autis Depok; speech therapy is a medical process that helps a person maximize his or her linguistic talents; sensory integration therapy is a treatment for children with autism and/or special needs that is also frequently used to enhance developmental or developmental disorders or learning disorders, as well as impaired social relations and other behaviors. (Rumah Autis, 2019).

Sensory integration is a process of recognizing, changing, and differentiating sensations from the sensory system to produce a response in the form of "Aims of Adaptive Behavior"; and occupational therapy is a type of health service provided to the community or patients with physical and mental disorders that involve the use of exercises/activities to work on specific targets (occupation) to increase individuals’ independence in the area of daily life activities based on an interdisciplinary approach.

**Literature Review**

**History of Autism**

Autism spectrum disorder (ASD) is a neurodevelopmental condition with a high heritability that affects 1 in every 150 children in the United States. Autism was first identified by Leo Kanner in 1943 as a developmental condition that began at birth and affected reciprocal social behavior, language, and communication, as well as patients' narrow interests and repetitive actions (Zimmerman, 2008).

As a result, communication impairment in autism may include several deficiencies in lexis, linguistic development, the subjects to which autistic persons choose to relate, and how they communicate and engage in social situations, all within its broad limitations. Indeed, according to Tager-Flusberg, Rhea, and Lord (2005) (Wood, 2018).

**Characteristics of Autism**

Deficits in social skills, communication, and motor functions, as well as compulsive and repetitive behaviors and interests, characterize autism spectrum disorder (ASD) (Zimmerman, 2008). The facts are that autism affects one out of every 68 children, that there is no cure for autism, and that every child with autism will be different, or similar, but not identical at the end (Chandra, 2018).

In Kamus Besar Bahasa Indonesia, autism is a developmental problem in children that causes them to be unable to speak and express their feelings and desires, disrupting their connections with others. Based on research from Gunadi (2011) said that autism could happen to anyone, regardless of race, social, ethnic, economic, and education (Gunadi, 2011). Even according to the results of a survey conducted in 2002, there were 60 children with autism out of a total of 10,000 children. Boys outnumber girls by a factor of four to one. According to the findings of a 2002 survey, boys are more likely than girls to have autism. However, the fundamental reasons why guys have a considerably larger population of autism than girls have yet to be discovered (Yuwono, 2012).

Autism is associated with "poorly integrated verbal and nonverbal communication," "deficits in comprehension and use of gestures," and "absence of nonverbal communication," according to the Diagnostic and Statistical Manual (DSM)–5 (Centers for Disease, Control, and Prevention [CDC] 2016). Similarly, childhood autism is defined by "abnormal functioning" in "reciprocal social interaction (and)
communication," according to the International Classification of Diseases (ICD)–10 (2016). Thus, the posited difficulties might be “language abnormalities” (Wing and Gould, 1979), or be thought to reside in the shared nature of communication, and so typified by “persistent deficits in social communication and social interaction” (CDC 2016) (Wood, 2018).

**Distance Learning**

Learning is a multi-faceted process involving a variety of interconnected components. Enrique and Danielle will be more effective in the classroom if they have a thorough understanding of these elements, as they will be able to devise teaching strategies to accomplish their instructional objectives and meet the requirements of their students (Powell & Powell, 2010).

Learning is an activity that necessitates an organized and systematic approach because it is linked to your goals (objectives and competencies that must be mastered). This remark implies that a learning process must begin with meticulous planning to be implemented successfully (Supriadie & Darmawan, 2012). Distance learning is defined as enhanced knowledge and behavior capacities as a result of mediated experiences confined by time and distance, in which the learner is not in the same context as what is being taught (King et al., 2001).

The United States Distance Learning Association defined distance learning in 1998 (Roblyer & Edwards, 2000) as “the acquisition of knowledge and skills through mediated information and instruction, encompassing all technologies and other forms of learning at a distance (King et al., 2001).

We are halfway to our aim of defining distant learning with this definition of LEARNING. Consider the fact that learning serves multiple purposes. Recognizing that learning is a continuous process that occurs wherever and whenever the individual is receptive, accommodations must be provided for various learning purposes (different learning intentions). For instance, in ordinary contexts, learning opportunities might be formal (forced) or self-directed (naturalistic). Learning might take place on purpose or by accident. With these options in mind, the authors propose three key learning subcategories: 1) instruction: goal-oriented learning; 2) unintentional learning through discovery; and 3) serendipity through unintentional learning through exploration (King et al., 2001).

Many students with special needs struggle in both academic and social settings, and they have repeatedly failed, leading to feelings of inadequacy and powerlessness. Students with disabilities are frequently served and rarely have the chance to see themselves as valuable to others. Students with disabilities benefited from service-learning in terms of conduct, academics, attitudes, functional skills, social skills, attendance, and interactions with non-disabled peers, according to studies (Brill, 1994; Malmgren, Abbott, & Hawkins, 1999; Muscott, 2000; Wade, 1994; Yoder, Retish, & Wade, 1996) (Powell & Powell, 2010).

**Methodology**

According to Creswell (2005), qualitative research necessitates researchers to draw conclusions based on the participants' perspectives (Bandur, 2016). Methods for assessing social research data without transforming them to a numerical format are known as qualitative analysis. The non-numerical investigation and interpretation of observations to identify underlying meanings and patterns of relationships are known as qualitative analysis. This method is most commonly used in historical and field research (Babbie, 2011).

A simple definition of qualitative research is an interpretive study that uses a variety of approaches to investigate research concerns. Triangulation is the term used to describe the usage of these numerous procedures. It indicates that the researcher has a thorough comprehension of the subject under investigation (Mulyana, 2018).
Many disciplines, including education, psychology, and the social sciences, have used qualitative and descriptive research methods to conduct the study. A qualitative descriptive method was used in this research. The qualitative descriptive research method utilized in this research is qualitative data that is described descriptively. This sort of qualitative descriptive study is frequently employed to investigate social phenomena, events, or conditions. To put it another way, this research combines descriptive and qualitative research approaches. The author's results will be presented as they were discovered in the research. Therefore, it is meant for the study and elucidation of the phenomena that exist in the social environment, or it is a complete picture of the social situation (Nassaji, 2015).

**Research Subject**

The participants in this research were volunteers from Rumah Autis Depok, particularly teachers and parents, to learn more about how the suitable distance learning methods and media are appropriate for children with autism at Rumah Autis Depok. The research participants were chosen because they are knowledgeable about children with autism at Rumah Autis Depok and can provide as much information as possible on remote learning methods and media at Rumah Autis Depok. Purposive sampling was used to select this subject. Purposive sampling is a data source sampling technique that takes into account specific factors." The Purposive Sampling technique was chosen since not all samples meet the criteria for this research's occurrence. As a result, the researcher employs the Purposive Sampling technique, which specifies particular criteria or factors that must be addressed (Sugiyono, 2016). An informant, according to Moleong, is a person who is valuable in providing knowledge about all aspects of the study problem. As a result, an informant must be well-versed in the research and have a strong foundation in it (Moleong, 2009).

The criteria set by the researcher as informants in this research are:

1. They called as volunteer teachers from Rumah Autis Depok. Volunteers have at least two years of experience working at Rumah Autis Depok and are familiar with children with autism and their families (parents). Their families (parents) were also used as informants by the researchers.
2. Families (parents) of children with autism. The researchers set criteria for children with autism that researchers set the criteria for the family or parents.

The data of selected informants as follows:

<table>
<thead>
<tr>
<th>No</th>
<th>Name of Informants</th>
<th>Position</th>
<th>Year of Entry at Rumah Autis Depok</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Informant 1 (55 years old)</td>
<td>the Branch Head of Rumah Autis Depok</td>
<td>2015</td>
</tr>
<tr>
<td>2.</td>
<td>Informant 2 (24 years old)</td>
<td>Teacher</td>
<td>2018</td>
</tr>
<tr>
<td>3.</td>
<td>Informant 3 (21 years old)</td>
<td>Teacher</td>
<td>2017</td>
</tr>
<tr>
<td>4.</td>
<td>Informant 4 (24 years old)</td>
<td>Teacher</td>
<td>2018</td>
</tr>
<tr>
<td>5.</td>
<td>Informant 5 (Mother of Haikal – 10 years old)</td>
<td>Parent</td>
<td>2018</td>
</tr>
<tr>
<td>6.</td>
<td>Informant 6 (Mother of Aan – 14 years old)</td>
<td>Parent</td>
<td>2013</td>
</tr>
</tbody>
</table>

Source: The interview results with each informant on July 7, 2020.
Research Objects

At Rumah Autis Depok, this research item was a phenomenon related to distance learning during the COVID-19 pandemic for children with autism. During the COVID-19 epidemic, the object observed was a medium and methods of distant learning process activity for children with autism at home.

Data Collection Technique

This research employed several data collection techniques as follows:

1. In-depth Interview
   Because field observations are impossible to do during lockdown due to the COVID-19 pandemic, this data gathering technique is the primary data collecting technique for this research. At Rumah Autis Depok, the researchers conducted in-depth interviews with several volunteers and parents. Interviews were done to learn more about the participants' perspectives on a variety of facts. A researcher should prepare questions related to the research subjects for the interview (Anshori, 2017). This research employed an in-depth interview with only a few people. Informant 1-6 was their number.

2. Literature Study
   The researchers used documentation analysis, which is a type of literature study. This method entails examining documents in the form of a written report (Anshori, 2017). A literature review was undertaken by gathering materials relevant to this subject from a variety of sources. Various publications, national and international periodicals, theses, and dissertations on children with autism and distant learning were used as data sources.

Data Validity Techniques

Triangulation was one of the data validity techniques used in this research. This triangulation is one of the data validity inspection strategies that use additional factors outside data to check or compare the data. To determine the validity of the data in the field, the validity of the data was tested (Widodo, 2018).

Furthermore, researchers verify data by contacting several experts, practitioners, academicians, and colleagues who worked as autistic experts/doctors, special therapists for autism, or special instructors for autism and had a general understanding of autism, particularly children with autism and distance learning for children with autism.

Results and Discussion

Autism is defined by IDEA (the Individuals with Disabilities Education Act) as a developmental impairment that "adversely affects educational performance" because it affects verbal and nonverbal communication and social interaction considerably before the age of three. Repetitive behaviors and stereotyped motions, reluctance to changes in daily routines or the surroundings, and atypical responses to sensory events are all characteristics associated with autism. The term autism does not apply if the child's educational performance is adversely affected primarily because the child has emotional disturbance (U.S. Department of Education, 2000) (Powell & Powell, 2010).

In Kamus Besar Bahasa Indonesia, autism is a developmental problem in children that causes them to be unable to speak and express their feelings and desires, disrupting their connections with others. Based on research from Gunadi (2011) said that autism could happen to anyone, regardless of race, social, ethnic, economic, and education (Gunadi, 2011). Even according to the results of a survey conducted in 2002, there were 60 children with autism out of a total of 10,000 children. Boys outnumber girls by a factor of four to one. According to the findings of a 2002 survey, boys are more likely than girls to have autism. However, the fundamental reasons why guys have a considerably larger population of autism than
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Girls have yet to be discovered (Yuwono, 2012).

Autism can be classified into two types based on sensory disorders: hyposensitivity and hypersensitivity. Self-injury, self-abuse, and other behaviors are common with hyposensitivity. Hypersensitivity, unlike hypersensitivity, does not like to be touched by another person, does not like certain sounds such as blenders, and so on. There are numerous types of autism. Classic autism, according to Puspitaningrum (2004), is autism caused by nerve damage from birth. The rubella virus (in the womb) or heavy metal exposure can induce nerve injury (mercury and lead). Regressive autism, on the other hand, is autism that develops between the ages of 12 and 24 months in children (1-2 years old). The prior child's development was rather typical, but after the age of two, the child's ability began to deteriorate. According to Pusponegoro and Solek (2007), there are three stages of autism: low functioning, medium functioning, and high functioning. Low Functioning "Low I.Q.”. If the patient has a low functioning "low I.Q.,” it is almost guaranteed that he or she will not be able to live alone for the rest of his or her life; the patient will require assistance from others.

Medium Functioning "Medium I.Q.”. If the patient falls into the “moderate I.Q.” category, they will be able to live in the community in the future. This patient can still enroll in a special needs school for children with autism.

While High Functioning "high I.Q.”. If the suffering falls into the "high I.Q." category in the future, he or she will be able to live independently and possibly even prosper in employment or family life (Yuwono, 2012).

Social engagement is difficult for children with autism. Limitations in social contact include taking activities that are out of the ordinary or are frequently perceived as weird in the surroundings. Autism affects children's emotional and attraction development. They won't be able to start anything since, unlike most children, they lack initiative (Ayuningtyas et al., 2020).

Rumah Autis Depok is a social institution founded on behalf of Yayasan Cahaya Keluarga Fitrah to bridge the demand for therapy sites and schools for children with autism and special needs from low-income households at cheap or even free of charge (Rumah Autis, 2019).

The extraordinary school curriculum was adopted by Rumah Autis, however, the program's implementation was customized to each child's ability. The IEP, or Individualized Education Program, will be used by each kid. IEP stands for Individualized Education Plan, and it is used to assess the

![Diagram of Autism Spectrum Disorder (ASD)](Source: Ayuningtyas et al., 2020)
progress of a student with special needs. According to an interview with Informant 4, when the first child arrived at Rumah Autis Depok, an IEP was obtained. Before being determined, each child will enter a class where the program's director will be observed. IEP is gained in a variety of methods based on its capabilities, such as communication, social interaction, intelligence, emotional, behavioral, sensory problems, refined and coarse sensory, and other disorders. Individual Education Program will be evaluated by the teacher every six months. After the evaluation, usually, IEP is modified or revised for each child.

Peterson and Hittie (2003) found two programs that have worked well with autistic students. Each program is based on a distinct set of principles. Treatment and Education of Autistic and Related Communication-Handicapped Children (TEACCH) is one of the programs available. Teachers use visual materials to manage the educational environment so that students can acquire new abilities. Students are first guided by the teacher, but the goal is for them to learn to do their daily activities on their own. The visual schedule is built on a student's abilities, interests, and requirements. PECS (Picture Exchange System) students reinforce a concrete way to express themselves. A PECS (Picture Exchange System) curriculum gives kids a visual approach to express their requirements (Powell & Powell, 2010).

Distance learning is defined as enhanced knowledge and behavior capacities as a result of mediated experiences confined by time and distance, in which the learner is not in the same context as what is being taught (King et al., 2001).

Learning expectations, communication with the school, the amount of time and the help children need learning at home from parents or careers, and setting up a home environment that supports learning can be overwhelming and demanding. Those challenges can change the behavior of the child. The behavior can be a means to communicate often expresses a need or a response to a problem that is not being resolved. Children are more likely to use disruptive behavior because they can respond quickly (PACER Center, 2020).

Collaboration between families and schools is more crucial than ever in this uncertain time. Families and educators are dealing with increased tensions and obstacles. Everyone's situation will be different. Parent-school collaboration and communication can go a long way toward resolving issues. While school buildings are closed, creativity will aid us all in avoiding conflicts (National Center for Learning Disabilities, 2020).

Due to the COVID-19 pandemic, Informant 2 said that Rumah Autis Depok has a new program related to distance learning for children with autism: the home visit program and the worksheet (there are TEACCH and PECS inside the worksheet) given to parents every week. Teachers will monitor every day via WhatsApp or zoom meeting application. The worksheets for each child will be different from one another. The worksheet is adjusted to the IEP of each child.

Every week, teachers get a worksheet evaluation through written reports in the form of narratives from parents. Teachers will monitor through WhatsApp applications related to the difficulties or problems faced by parents during distance learning.

For some reason, detailed scheduling is very helpful for children with autism. But every situation is different; every child is different. There is a FORMULA for success. The most important thing is to find what works for children with autism. Everyone is struggling with this situation. Every parent needs to manage their expectation. Scheduling time for fun activities can help relieve stress and even introduce life-lasting interest (autism.org, 2020).
Based on the results of an interview with Informant 2, this method is effective for some children with autism. Some children do not effectively run this method, but all teachers at Rumah Autis Depok strive always to make innovations and continuous improvement; therefore, all students can keep learning even at home. This statement is similar to Informant 6. Haikal joined at Rumah Autis Depok in August 2017. His father was passed away. Therefore Mrs. Antie is a single parent for Haikal. During lockdown due to the COVID-19 pandemic starting on March 16, 2020, to the present, Rumah Autis Depok decided to learn from home; therefore, when Informant 6 told Haikal to study at home, he rejected to do it.

Informant 6 had a hard time handling Haikal at home during the COVID-19 pandemic. She needed a tremendous struggle so that Haikal could sit and do the homework from Rumah Autis Depok. Another problem was present because the time given by Informant 6 to Haikal felt less much because she had to work for a living to support herself and Haikal. Haikal always says that learning, writing, and reading should be done in school instead of at home. If still forced, Haikal will be angry and bored. Haikal often does not work on daily tasks and evaluations each week. The solution is often in getting out of the house, like a walk to a park near the house. After being consulted with Informant 3, finally, Rumah Autis held a home visit program to Haikal House once a week. When Informant 3 came to Haikal's home, Haikal became obedient and wanted to learn.
But different children turned out different stories. Aan is currently 14 years old, and he was joined Rumah Autis Depok in 2013, declared ASD by a doctor at five years old. When facing distance learning, it turns out better when compared to Haikal. Informant 5 said that Aan is making rapid progress and can receive instructions well. He can do worksheets with outstanding. Even in terms of emotions, Aan was able to control them well. Besides, when Indonesia was declared the COVID-19 pandemic last March 2020, Aan's family decided to return to his hometown in Medan, North Sumatra. It feels safer there than in Jakarta or Depok. In Medan, there are many Aan's siblings who can teach and play with Aan every day, said Informant 5 as a closing word.

Figure 3: Study the Quran at home during COVID-19 outbreak

Source: (Rumah Autis, 2019).

Conclusion

Distance learning refers to better knowledge and behavior as a result of mediated experiences confined by time and distance, in which the learner is not in the same situation as what is being taught. For some reason, thorough scheduling is extremely beneficial to autistic youngsters. However, each situation is unique, as does each child. There is a SUCCESSFUL FORMULA, and the most essential thing is to figure out what works best for autistic children. This is a difficult situation for everyone. Every parent must keep their expectations in check.

Due to the COVID-19 pandemic, Rumah Autis Depok has launched a new distance learning program for children with autism, which includes a weekly home visit program and a worksheet (which includes TEACCH and PECS). Every day, teachers will check in via WhatsApp or Zoom Meeting. Each child's worksheet will be unique, and each child's worksheet will be tailored to his or her individual IEP. Every week, teachers receive a worksheet review from parents in the form of written reports in the form of narratives. Teachers will monitor issues or problems faced by parents during distant learning via WhatsApp applications.

Acknowledgement

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