



JURNAL ASESMEN DAN INTERVENSI ANAK BERKEBUTUHAN KHUSUS

Jurnal homepage: <https://ejournal.upi.edu/index.php/jassi/index>



Family-Sourced Early Intervention Programs to Optimize Communication Development of Children with Multiple Disabilities

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ABSTRACT

Communication is a fundamental skill that must be fulfilled for all humans, including individuals with multiple disabilities. With communication, individuals with multiple disabilities can interact and participate with the environment so that they are not isolated. This study aims to formulate a family-sourced early intervention program to optimize the communication development of students with multiple disabilities in accordance with children's needs, so that families can hopefully become a support system in supporting their children's communication development. This research uses research methodology design and development design and development research (D & DR), where in the first year researchers formulate programs based on needs in the field. The results showed that there are three family-sourced early intervention programs to optimize communication of individuals with multiple disabilities.

ARTICLE INFO

Article History:

Submitted/Received 24 Jan 2024

First Revised 07 Feb 2024

Accepted 01 Apr 2024

First Available online 01 Jun 2024

Publication Date 01 Jun 2024

Keyword:

Communication Development,
Early Intervention, Family-
Sourced.

1. INTRODUCTION

Communication is a fundamental skill that must be fulfilled for all human beings. Communication allows us as social beings to be able to interact with the environment. Every individual basically communicates, including individuals with multiple disabilities. In fact, they can communicate in a unique way that may be different from their peers in general. Immediately While individuals with multiple disabilities exhibit communication skills that may differ from their peers, the tendency is that many people may assume that they cannot communicate because they have nothing to say. However, the form of communication is not always only verbal but also non-verbal.

(Downing, 2001) explained that communication consists of three things including form, content, and purpose. Every individual who communicates has these three things to communicate. In this case, the form is how someone sends a message, the content is the meaning of the message conveyed, and each message must have a purpose and intent of the message conveyed. Sometimes individuals with multiple disabilities have different ways of conveying the intent of the message they want to convey. For example, a student with multiple disabilities may wiggle his head left and right when he feels a headache, while another student will shake their head while enjoying music. In addition, an individual with multiple disabilities may sniff out when they first meet someone, looking different, but sometimes they do this to get to know the person they first met to get to know them because of their loss of vision and hearing.

Individuals with multiple disabilities need to get communication stimulation so that they can connect with the environment around them and not be isolated. Teaching them to communicate means helping them to learn because communication is an important aspect of learning. Sometimes, teaching communication to students with multiple disabilities becomes a significant challenge because in some cases, verbal communication and communication in the pre-symbolic stage is limited. (Chadwick et al., 2019). Communication is one of the main things that individuals need to develop to learn. Language is a part of communication that can only affect other aspects such as cognitive, motor, and sensory. Communication is therefore important to be stimulated. (Cass et al., n.d.)

Because the obstacles experienced by children with multiple disabilities result in barriers in communication. If this is not given stimulation then it is not impossible that this will cause children to experience isolation from the environment and children cannot be independent. It takes stimulation for them to be able to optimize their communication skills. Teachers and parents play a role in providing stimulation for children with multiple disabilities at school and also at home.

Indeed, parents have an important role in the development of their children. Educating and stimulating children is not only the duty of teachers in schools but parents are also responsible and take a role in stimulating their children's needs at home. Family, in this case parents have a big role in child development so that intervention for children with multiple disabilities is one of the important things in supporting child development that parents at home can stimulate.

Family is the most important factor affecting a child's development because the family becomes the first environment in which a child grows and develops. The role of the family becomes very important for the development process of a child. It can be said that the family is the first environment in a child's life to learn. Ideally, the family becomes a positive environment for their child's development, this is because parents are responsible for the child's developmental phase. Bronfenbrenner's ecological theory in [Santrock \(2007\)](#) explains that five systems influence development, and the family is in a microsystem where the family is the closest environment that interacts directly and behind the child's life. Microsystems focus on behaviors influenced by parenting activities in families and schools.

The formulation of intervention programs is based on Bronfenbrenner's ecological theory where the family is part of the microsystem, the environment closest to the child to help the child's development, while also referring to Family Outcomes to stimulate communication of children with multiple disabilities.

2. METHODS

Researchers use design and development research (D&DR) as a research roadmap to develop family-based early intervention programs. Design and development research (D&DR) is the systematic study of the process of design, development, and evaluation with the aim of building an empirical foundation for the creation of instructional learning and non-instructional products. Design and development research (D&DR) focuses on analysis, planning, production, evaluation. It therefore is often referred to as a way of creating procedures, techniques and stages based on methodical analysis of a specific case. Data collection techniques are carried out by Observation, Interview, and Documentation. The stages in this research include a) building a conceptual framework; b) developing program architecture/literature studies, c) analysing and designing programs, d) implementing the program e) testing the program. ([J. Ellis & Levy, 2010](#)) In the first year, in this article the researcher focuses up to the stage of analysing and designing the program.

3. RESULTS AND DISCUSSION

3.1 Research Results

Based on the results of the study, researchers found some students with multiple disabilities who were at an early age. Among them are five and six years old. Based on observations of the communication skills of students with multiple disabilities that researchers found are still in the stage of non-verbal communication, which should at that age have begun to enter the stage of verbal communication development, where children can communicate both ways and can express their desires, tell stories, interact with peers, and develop other verbal language.

It was also found that parents do not fully know how to stimulate their children at home. Parents say that so far there has been no special stimulation to develop their child's communication skills when at home. When researchers conduct interviews with teachers, teachers have not been able to fully focus on one individual by one during the learning process, this is because the teacher's mind is divided to teach other students so that maximum support is needed from teachers to be able to stimulate their students who experience multiple disabilities.

(Susilowati et al., 2019) Intervention will get Stimulate growth child if Done by parents at house. Program Intervention that Given will better if get Discuss with expert deep implementation program. Thing Ini Because ahli dapat memberikan masukan dan saran yang sesuai dengan kebutuhan anak berdasarkan hasil dari asesmen dan identifikasi yang telah dilakukan. Researchers designed a Family-Sourced Early Intervention Program to optimize the communication skills of individuals with multiple disabilities so that their communication skills can develop optimally. This program is expected to help families who have children with multiple disabilities to be able to stimulate their children's communication skills at home. So that they can participate in the environment. As a first step to help families with children with multiple disabilities achieve directed communication development, researchers are trying to formulate programs to help parents who have children with multiple disabilities optimize communication.

Table 1 Design of Family-Sourced Early Intervention Programs to Optimize Communication Development of Children with Multiple Disabilities based on Family Outcomes (Badley, 2006)

No	Program	Theme	Purpose	Method	Impact on Children	Expected Family Results
1	Families Advocate for Their Children at Home	Families get information about the Child's Acceptance Stage Families make a Positive Acceptance of Children	So that the family can accept their child's condition So that families can make positive acceptance of their children with multiple disabilities [<ul style="list-style-type: none"> • Discussion • Q&A 	Children can develop communication skills after they in a stage of acceptance carried out by parents	Parents can accept children and help the development of children's communication. Children receive positive treatment from parents
2	Families Understand Their Children's Strengths, Barriers, and Potential in Communication	Families get information about the Advantages, Obstacles and Potential Communication Skills of Their Children	So that families can understand the Strengths, Abilities and Potential of their Children in Communication	<ul style="list-style-type: none"> • Observation • Discussion • Q&A 	Children's Communication Needs can be stimulated	Families are familiar with the conditions of their child's communication development.
3	Families Help Their Children Develop and Learn to Communicate	Communication for Individuals with Multiple Disabilities	So that families can provide appropriate communication stimulation for their children with multiple disabilities	<ul style="list-style-type: none"> • Discussion • Q&A • Practice 	Children get communication stimulation The child can participate in the environment	Families can communicate with their children who have multiple disabilities

The formulated program is shown to provide support to families to stimulate communication of their children with multiple disabilities at home. The first program explains where families advocate for their children at home. In this stage, researchers focus on parental acceptance of individuals with multiple disabilities. The first thing parents experience when having a child with multiple disabilities is shock, rejection, guilt, anger, and depression, then look objectively and make resolutions to overcome the problem.

This program aims to build parents' acceptance of their child's condition. This is important to do because when parents are able to accept the condition of their child with multiple disabilities, this can make parents realize the importance of being part of their child's development and support their child's development especially in terms of communication. Learning to communicate for children with multiple disabilities is a challenge as well as the greatest opportunity experienced by children because Communication can help us to know their wants, needs, and thoughts (Imas & Aprilia, 2012).

Communication can be started from the environment closest to the child, namely the family. Good acceptance will help parents in supporting the growth and development of their children. So that parents will easily share experiences with teachers and related experts about their children's information that is useful for identification and assessment in making communication programs for their children later. Positive acceptance from parents can have a positive impact on both children and families.

In the second program, it is important for parents to know the Strengths, Obstacles, and Potentials of their children to know at what stage their children develop and what stimulation they need and can run. This can help parents of children with multiple barriers to run the program. In this program, it is important to collaborate with teachers and related experts. Teachers and experts related to identifying and assessing children with multiple disabilities assisted by parents as a source of information. Parents who have fully accepted their child, will easily provide information on their child's development to help determine the program according to the child's needs.

In the third program, the Family plays a role in helping the communication of children with multiple disabilities at home. This is certainly done with what communication needs are needed by each child. To develop communication of individuals with multiple disabilities requires significant effort, basically everyone communicates, individuals with multiple disabilities may not have full control in the means of communication used in general to express one's communication such as speech, facial expressions, body language, and print. However, individuals with multiple disabilities can communicate in their own way according to their needs. Researchers tried to formulate how communication in individuals with multiple disabilities was carried out. (Downing, 2001).

Communication in children begins with non-verbal communication then goes into verbal communication. Students with multiple disabilities at an early age primarily initiate nonverbal forms of communication, such as facial expressions, body positions, and gestures. This is an important component of sending and receiving messages. When one or more additional obstacles are accompanied by other disturbances, the challenge becomes greater.

This Communication Challenge is important to overcome. It takes commitment from parents, teachers, and related experts to support student communication. The importance of their communication to be noticed (Sharon & Marry, 2016). Body movements, vocalizations, and facial expressions are the first means of expressive communication for children that can be developed to communicate with their environment. The importance of participation in interactions to stimulate their communication (Norén & Sigurd Pilesjö, 2016)

The initial communication stage that is built is presymbolic Communication where there are several aspects that need to be considered including:

1. Imitate the child's vocalizations and movements to encourage turn-taking. It is also necessary to pay attention to the student's hand, what the student touches can be a signal of student interest at that time.
2. Provide feedback indicating that their behavior is the cause of the response.
3. Use interrupts in the chain of behavior, where when parents and children do activities together and when parents immediately stop the activity and wait whether the activity is continued by the child or not. It can also create a need for the child to communicate his desires.
4. Give children the opportunity to make choices.
5. At the beginning of establishing receptive communication can use tactile cues
6. The use of real symbols in the recognition of activities or objects that are used daily.

Figure 1. In this case the child touches objects during activities, after knowing the object is associated with daily routines and associates it with events and activities and the object can be arranged sequentially, the arrangement of bends is commonly called a calendar system.



Figure 1. Calendar

In the implementation of family-sourced early intervention programs, consistency is needed from various parties ranging from parents, teachers, and related experts to be able to formulate, implement, and evaluate programs that have been run. Individuals with multiple disabilities have challenging characteristics and require strategies to cope with their communication. With them being trained in communication from an early age, this will have a positive impact on the future learning process that they do. The learning process involves communication. (Norén & Sigurd Pilesjö, 2016)(Steven Peck, 2004).

3.2 Discussion

(Gantini et al., n.d.) explained that Communication is the most important component for everyone so that out their lives. Communication is comprehensive covering the needs of all individuals. When individuals experience an inability to communicate, it will inhibit themselves from participating in the environment and self-actualization of the individual himself. It is important that everyone communicates so that they can participate in the environment so that they are not isolated and can be independent.

When an individual is late in his language management aspect then this is an indicator that his academic and social results will also experience a deficit. Every individual with multiple disabilities has their own uniqueness, these children usually experience obstacles in carrying out several areas of activity and require help and stimulation from those closest to them to play, communicate, and perform daily activities (Kaiser & Roberts, 2011)(Holmqvist et al., 2018). Individuals with multiple disabilities usually show limited communication skills, particularly in terms of verbal or conventional communication aided or supplemented with the help of tools (Hogg, 2001).

Individuals with multiple disabilities can result in a failure to find harmony between their behaviour and events around their environment, if stimulation to interact with their environment is not established. It is important for individuals with multiple barriers to be given stimulation in order to be able to be part of the environment around them and participate in the way that they have. In some cases, if individuals with multiple disabilities are not well stimulated in terms of communication, they are unable to participate in their environment, causing them to focus only on their own world, build their own world and be unable to be independent in various activities. Communication is one of the important aspects that must be built in individuals with multiple disabilities which is one of the abilities that individuals must have to learn. (Schweigert & Rowland, 1992)

(Susilowati et al., 2019) Intervention will be able to stimulate child growth if done by parents at home. The intervention program provided will be better if you can discuss with experts in the implementation of the program. This is because experts can provide input and suggestions that are in accordance with the needs of children based on the results of the assessment and identification that has been carried out.

Figure 2. (Arthur-Kelly et al., 2008) An inclusive environment for individuals with multiple disabilities is an ideal environment for them to achieve communicative interaction. The importance of family, teachers, related experts, and peers to stimulate their communication in order to participate in the environment. This can be started by identifying and assessing to be able to determine the stages of communication in individuals with multiple disabilities so that later intervention programs can be made to improve their communication skills. Family, teachers, and experts also involve peers can help implement the program so that the communication of individuals with multiple disabilities can develop well according to their uniqueness.

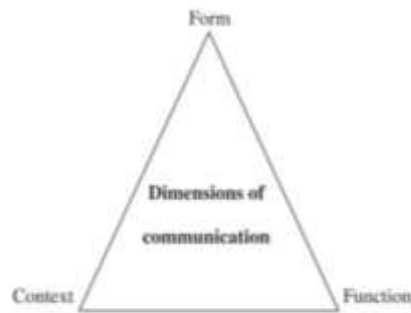


Figure 1. Communication Dimension (Arthur-Kelly et al., 2008)

In the picture explained about the Communication Dimension, where the Form of Communication is the way in which a person communicates starting from verbal and non-verbal. Verbal Communication is a form of communication whose delivery uses words both in oral and written form. Non-verbal communication is a form of communication that usually uses symbols or language cues. Context includes people who communicate in terms of location, time and activity. While the function is a message conveyed both in the form of needs and wants. These three dimensions need to be considered as part of communication that needs to be developed. It is necessary to identify and assess in the realm of communication to find out the stages of communication and which parts of communication need to be developed for them. (Learned Taboer & Imagery Ashri Maulidina, 2023)

Badley (2006) explains that there are five outcomes of families in Early Intervention including: (Epley et al., 2011) Families can know their rights and advocate effectively for their children, Families understand the strengths, abilities, and special needs of their children, Families help their children develop and learn, Families have support systems, and Families can gain access to desired services and activities in their communities. In making programs to stimulate communication, it is important to look at these five aspects, including: When families can find out information about their child's condition based on the results of identification and assessment both carried out by teachers and related experts, families can also understand the potential that can be developed from their children, after which families play a role in helping children develop by running programs that have been made by teachers with experts, Here the role of parents to be able to work with teachers and related experts is needed so that what children learn is in line and gets good result.

The role of the family has a very big influence on the development of children, because the family is the closest environment of children. Interventions and approaches to encourage the development of communication have been widely researched and implemented over time and have experienced significant improvements. Many researchers have discussed this because communication is an important aspect of everyday life. Every individual communicates. Those with multiple disabilities are no exception. (Siegel-Causey & Bashinski, 1997).

4. CONCLUSION

Children with multiple disabilities are those who experience more than one obstacle. Because this condition affects several aspects of their development including communication, movement, concepts, cognitive, and social emotions. The impact on communication makes children with multiple disabilities unable to participate in the environment if they are not given stimulation. The family is the closest environment to the child and is the microsystem. If children with multiple disabilities are not given stimulation in their communication aspects, they will be increasingly isolated from the environment and cannot participate in life directly because they are always dependent and cannot be independent. Conversely, if their communication is stimulated it will be able to help them to be able to participate in the environment.

There are three programs created for families to stimulate communication of individuals with multiple disabilities including: Families Advocate for Their Children at Home, Families Understand the Strengths, Barriers, and Potential of Their Children in Communication, Families Help Their Children Develop and Learn in Communication

5. ACKNOWLEDGMENT

The author creates a big thank you to various parties who have supported the birth of this article. This article came into being due to support from various parties.

6. AUTHORS' NOTE

The author ensures that there are no conflicts in this authorship. This writing is free from plagiarism and is compiled based on ethics and rules of writing that should be.

7. REFERENCES

- Arif Taboer, M., & Citra Ashri Maulidina, Mp. (2023). Pendidikan anak dengan disabilitas majemuk.
- Arthur-Kelly, M., Foreman, P., Bennett, D., & Pascoe, S. (2008). Interaction, inclusion, and students with profound and multiple disabilities: Towards an agenda for research and practice. *Journal of Research in Special Educational Needs*, 8(3), 161–166.
- Cass, H., Price, K., Reilly, S., Wisbeach, A., & Mcconachie, H. (n.d.). A model for the assessment and management of children with multiple disabilities.
- Chadwick, D., Buell, S., & Goldbart, J. (2019). Approaches to communication assessment with children and adults with profound intellectual and multiple disabilities. *Journal of Applied Research in Intellectual Disabilities*, 32(2), 336–358.
- Downing, J. E. (2001a). Meeting the communication needs of students with severe and multiple disabilities in general education classrooms. *Exceptionality*, 9(3), 147–156.
- Downing, J. E. (2001b). Meeting the communication needs of students with severe and multiple disabilities in general education classrooms. *Exceptionality*, 9(3), 147–156.
- Epley, P. H., Summers, J. A., & Turnbull, A. P. (2011). Family outcomes of early intervention: Families' perceptions of need, services, and outcomes. *Journal of Early Intervention*, 33(3), 201–219.
- Gantini, G., Peyuluh, E., & Kota Bandung, A. (n.d.). Komunikasi bagi anak berkebutuhan khusus. In *Jurnal Bimbingan Penyuluhan Islam* 4(1).
- Hogg, J. (2001). Consistency, context, and confidence in judgements of affective communication in adults with profound intellectual and multiple disabilities. *Journal Of Intellectuall Disability Research*, 45, 18–30.
- Holmqvist, E., Thunberg, G., & Peny Dahlstrand, M. (2018). Gaze-controlled communication technology for children with severe multiple disabilities: Parents and professionals' perception of gains, obstacles, and prerequisites. *Assistive Technology*, 30(4), 201–208.
- Imas, M., & Aprilia, D. (2012). *Interaksi dan komunikasi pada anak dengan hambatan majemuk*.
- J. Ellis, T., & Levy, Y. (2010). A guide for novice researchers: design and development research methods. *Proceedings of the 2010 InSITE Conference*, 107–118.
- Kaiser, A. P., & Roberts, M. Y. (2011). Advances in early communication and language intervention. *Journal of Early Intervention*, 33(4), 298–309.
- Norén, N., & Sigurd Pilesjö, M. (2016). Supporting a child with multiple disabilities to participate in social interaction: The case of asking a question. *Clinical Linguistics and Phonetics*, 30(10), 790–811.
- Schweigert, P., & Rowland, C. (1992). Early communication and microtechnology: instructional sequence and case studies of children with severe multiple disabilities.

Siegel-Causey, E., & Bashinski, S. M. (1997). Enhancing initial communication and responsiveness of learners with multiple disabilities: A tri-focus framework for partners. *Focus on Autism and Other Developmental Disabilities*, 12(2), 105–120.

Steven Peck. (2004). Communication made easier facilitating transitions for students with multiple disabilities.

Susilowati, E., Mujiastuti, R., & Nurbaya Ambo, S. (2019). Stimulasi, deteksi dan intervensi dini tumbuh kembang (SDIDTK) anak pada posyandu kelurahan penggilingan Jakarta Timur. In *Jurnal Pengabdian Masyarakat Teknik* 1(2).

Sharon & Marry. (2016). Keys to educational success teaching students with multiple disabilities. New York: AFB PRESS

Santrok, John (2013). Child development. Singapore: MCGraw Hill Company