

# Modeling to Increase Self-Care Independence of Children with Intellectual Disability

<sup>1\*</sup>Defi Astriani, <sup>2</sup>Alaiya Choiril Mufidah

<sup>1,2</sup>Islamic Psychology, University of Nahdlatul Ulama Blitar

E-mail: <sup>1</sup>defi45astriani@gmail.com, <sup>2</sup>aalaya228@gmail.com

\*Corresponding Author

**Abstract**— DM (female / 15 years) complained of by her parents that she had poor self-care ability. Based on the results of interviews, observations, CPM and VSMS tests, she was diagnosed with severe intellectual disability and the social maturity of her was not appropriate for their age. The problem that she currently has is the independence of caring for oneself that is lacking. This makes she become dependent on others. The intervention aims to improve self-care independence (dressing and brushing teeth) through modeling techniques. This intervention was carried out in five sessions. The results of the intervention showed that she experienced an increase in independence in terms of caring for themselves. Self-care for the subject can be seen from the increasing score in the pre-test and post-test on each indicator made, which is the indicator of dressing and brushing teeth. Follow up was done a week after the intervention. Where the results of the follow-up show that she can independently take care of herself and is no longer assisted by his parents.

**Keywords**— Modeling; Self-care independence; Intellectual disability

This is an open access article under the CC BY-SA License.



---

**Corresponding Author:**

Defi Astriani,  
Islamic Psychology,  
University of Nahdlatul Ulama Blitar,  
Email: [defi45astriani@gmail.com](mailto:defi45astriani@gmail.com)



## I. INTRODUCTION

Intellectual disability (ID), also known as general learning disabilities and mental retardation (RM) is a common neurodevelopmental disorder characterized by impaired intellectual and adaptive functions. This is defined by an IQ below 70 and a deficit of two or more adaptive behaviors that affect daily life. From this understanding, it can be concluded that intellectual disability is a dysfunction or limitation both intellectually and adaptive behavior that can be measured or seen that causes a reduced capacity to act in certain ways (Carr, Linehan, O'Reilly, Walsh, & McEvoy, 2016).

Children with intellectual disabilities have limitations in language acquisition. They are not experiencing articulation damage, but the processing center (vocabulary) is not functioning as it should. For that reason they need concrete words that are often heard. In addition, differences and similarities must be shown repeatedly. Simple exercises such as working on big and small concepts, need to use a concrete approach. In addition, mentally retarded children are less able to consider something, distinguish between good and bad, and distinguish right from wrong. This is all because of their limited abilities so that mentally retarded children cannot imagine in advance the consequences of an act (Somantri, 2007).

In this case, DM has limitations in adaptive social functions. She experienced difficulties in social relations. At school she only saw her friends playing and occasionally only smiled, could not walk straight and had problems with fine motor skills (for example, holding a pencil incorrectly). Physically she also looks different from his friends, where the subject's eyes are less focused when looking.

Problems related to independence in caring for themselves experienced by DM is caused because parents have never trained or taught the subject about how to care for themselves properly. Everyday subject's needs and activities are always helped by parents and cause the subject to have difficulty developing their skills in caring for themselves and being dependent on parents. This shows the lack of independence of DM in caring for her so that Modeling interventions are needed to overcome this.

Modeling technique is a part of the techniques that exist in Behavior therapy. Behavioral therapy is a scientific view of human behavior. Behaviorism is characterized by the attitude of limiting the methods and procedures of the observed data (Corey, 2013). Modeling or imitation is "the direct, mechanical reproduction of behavior", the reproduction of direct and mechanical behavior (Baran, 2000). Modeling technique is learning to react by observing others who are

reacting and imitating. How to learn through the process of observation, imitation, and piloting and the formation of new behavior, reinforcing the behavior that has been formed.

Therefore this intervention uses modeling techniques to increase the independence of caring for children with intellectual disability. There have been many studies that test the effectiveness of this technique and the results can effectively improve child self-care skills (Akhmetzyanova, 2014; Gardner & Wolfe, 2013; Susilowati, Rustiyaningsih, & Hartini, 2018; Youngmee, 2014). And the hypothesis of this intervention is that there is an increase in children's independence after being given treatment in the form of modeling.

## **II. RESEARCH METHOD**

The research is used Quasi experiment method. The assessment is used to establish the correct diagnosis through a series of methods including interviews, observation and psychological tests. Interviews were conducted on the subject, the teacher and also the family to obtain more in-depth information about the problems experienced by the subject. Observations were made to obtain information on the subject's behavior and activities. The psychological tests used are as follows:

1. Colored Progressive Matrices (CPM) is used to measure the level of intelligence of the subject. Vineland Social Maturity Scale
2. Vineland Social Maturity Scale (VSMS) is a social maturity test to see the level of social development and at the age stage of the subject's social maturity

## **III. RESULT AND DISCUSSION**

After the entire stage of the intervention is carried out, the results obtained on the independence of caring for oneself on the subject slowly begin to change. Evidenced by an increase in the number of activities or daily activities carried out based on behavioral indicators that have been made previously. Habit indicators are based on aspects of self-care independence (dressing and brushing teeth) and based on interviews with subjects' parents. Improvements made to the activities carried out by the subject and agreed based on behavioral indicators that have been made as a result of the intervention process.

The subject experienced an optimal increase in the ability to dress, it can be seen from the fulfillment of the subject's criteria in the pre-test, post-test and follow-up. Where in the pre test there are still many indicators that the subject has not been able to do, and the results of the post test there are several indicators that can be done but still need help. However, these skills

increase at follow-up, where all indicators can be done by the subject independently without the need for help from others.

Subject has an optimal increase in the ability to brush her teeth, it can be seen from the fulfillment of the subject's criteria in the pre-test, post-test and follow-up. Where in the pre test there are still many indicators that the subject has not been able to do, and the results of the post test there are several indicators that can be done but still need help.

Follow-up or evaluation, also called follow-up, is a step to see the extent to which programs or actions are designed and agreed upon and have been implemented. With the follow-up can be controlled to the extent that the effectiveness of interventions carried out will be overcome or not. In the follow-up, besides re-observing after the treatment is done. However, also re-interviewing with secondary data sources namely parents to find out the extent of subject changes. The results of the follow-up show that these skills have improved, where all indicators can be done by the subject independently without the need for help from others.

Interventions are given to increase self-care independence of students with intellectual disabilities, namely modeling techniques. Modeling is one of the techniques in behavioral therapy that emphasizes learning procedures. In principle, behavioral therapy itself aims to obtain new behaviors, eliminate old self-destructive behaviors and manage and maintain the healthier behaviors needed (Gardner & Wolfe, 2013; Sherer et al., 2001).

This intervention was given to increase the independence of caring for children with intellectual disability which was carried out in six sessions. After conducting the pre-test, the subject is given an intervention in the form of applying video modeling to increase the independence of caring for the subject and the intervention shows an increase in self-care skills.

Operant conditioning is the right theoretical basis for explaining modeling techniques through reinforcement given to the subject can increase self-care independence in subjects with intellectual disability. The formation of behavior according to Skinner depends on the consequences that follow the behavior and the individual tends to maintain a behavior if there are pleasant consequences for him for the behavior (Olson & Hergenhahn, 2011).

Reinforcer in the form of giving food or praise to the subject not only becomes material reinforcement but also as social reinforcement. From the reinforcer given, the subject feels he gets attention from the social environment that he did not get from his previous family. The consequences designed to follow the expected behavior are called engineering consequences that are part of the modeling strategy (Watson & Tharp, 2007).

Provision of interventions through the process of observation, imitation, and modeling as well as the formation of new behavior (modeling) and strengthen the behavior that has been formed. Changes in behavior on the subject make the subject more independent and no longer

dependent on others, especially in terms of caring for themselves, namely dressing and brushing teeth.

#### **IV. CONCLUSION**

Based on the results of the intervention it can be concluded that the modeling technique can increase the independence of caring for children with intellectual disability. Descriptions of increasing dress independence can be seen from the subject's ability to use clothes, insert arms, straighten the collar, wear and button the skirt. While the increase in independence of brushing can be seen from the ability of the subject to hold a toothbrush, put toothpaste on the brush, rinse, brush the mouth and start brushing teeth. Increased independence in caring for oneself in walking in five sessions with the addition of several methods such as rewards, and individual guidance so as to achieve predetermined success.

#### **REFERENCES**

- Akhmetzyanova, A. I. (2014). The development of self-care skills of children with severe mental retardation in the context of Lekoteka. *World Applied Sciences Journal*, 29(6), 724–727.
- Association, A. P. (2013). Diagnostic and statistical manual of mental disorders. *BMC Med*, 17, 133–137.
- Baran, S. D & Dennis (2000). *Mass Communication Theory. Foundations, Ferment and Future*. Cengage Learning: Boston, MA: Wadsworth. ISBN-13, 970–978.
- Carr, A., Linehan, C., O'Reilly, G., Walsh, P. N., & McEvoy, J. (2016). *The handbook of intellectual disability and clinical psychology practice*. Routledge.
- Corey, G. (2013). *Groups: Process and practice*. Cengage Learning.
- Gardner, S., & Wolfe, P. (2013). Use of video modeling and video prompting interventions for teaching daily living skills to individuals with autism spectrum disorders: A review. *Research and Practice for Persons with Severe Disabilities*, 38(2), 73–87.
- Olson, M. H., & Hergenhahn, B. R. (2011). *An introduction to theories of personality*. Prentice Hall.
- Sherer, M., Pierce, K. L., Paredes, S., Kisacky, K. L., Ingersoll, B., & Schreibman, L. (2001). Enhancing conversation skills in children with autism via video technology: Which is better, “self” or “other” as a model? *Behavior Modification*, 25(1), 140–

158.

- Somantri, S. (2007). Psikologi Anak Luar Biasa. 2007. Bandung: Refika Aditama.
- Susilowati, L., Rustiyaningsih, A., & Hartini, S. (2018). Effect of self development program and training using video modeling method on dressing skills in children with intellectual disability. *BELITUNG NURSING*, 420.
- Wantah, M. J. (2007). Pengembangan kemandirian anak tunagrahita mampu latih. Jakarta: Departemen Pendidikan Nasional.
- Watson, D. L., & Tharp, R. G. (2007). Self-directed behavior (9th Eds.). Cengage Learning.
- Youngmee, K. (2014). The Development of Multimedia on Dressing Skill Practice for Children with Moderate Mental Retardation. *Humanitis, Sciences and Art*, 14(2), 141–163.