

The Use of Direct Instruction Method to Improve The Ability of Tying Laced Shoes in Down Syndrome Child Class IV in SLB Theresia Sonder

Yudit Triningsi¹, Maria J. Wantah², Aldjon Nixon Dapa^{3*} ^{1,2,3} Special Education Department, Faculty of Education, Universitas Negeri Manado, Indonesia

*Corresponding Email: aldjondapa@unima.ac.id

Abstract

The purpose of this study was to determine whether the use of the direct instruction method could improve the self-development ability to tie shoes with laces for children with Down syndrome. The research method used is the Single Subject method. this was held at SLB Theresia Sonder. With the subject of class IV students totaling 1 person, as for the data collection techniques (observation and tests). The results showed that the direct instruction method could improve the self-development ability to tie lace-up shoes in children with Down syndrome at Theresia Sonder Special School. Therefore, the use of this method will greatly affect the improvement of the results of students' abilities.

Keywords: direct instruction method; down syndrome; tying shoes with laces

Abstrak

Tujuan dari penelitian ini adalah untuk mengetahui apakah penggunaan metode direct instruction dapat meningkatkan kemampuan pengembangan diri mengikat tali sepatu pada anak down syndrome. Metode penelitian yang digunakan adalah metode Single Subject. ini diadakan di SLB Theresia Sonder. Dengan subjek siswa kelas IV yang berjumlah 1 orang, adapun teknik pengumpulan data (observasi dan tes). Hasil penelitian menunjukkan bahwa metode direct instruction dapat meningkatkan kemampuan pengembangan diri mengikat tali sepatu pada anak down syndrome di SLB Theresia Sonder. Oleh karena itu, penggunaan metode ini akan sangat berpengaruh terhadap peningkatan hasil kemampuan siswa.

Kata kunci: kabupaten ramah anak; peraturan Daerah; peran legislator perempuan

How to Cite: Triningsi, Y., Wantah, M.J., & Dapa, E, A,N. (2022). The use of direct instruction method to improve the ability of tying laced shoes in down syndrome child class IV in SLB Theresia Sonder. *Journal of Disability*, 2 (1), 17 - 24. https://doi.org/10.20961/jod.v2i1.67284.

INTRODUCTION

Education is a long-term investment that requires considerable effort, this is recognized by everyone or a nation for the sake of its future continuity. Likewise, Indonesia has high hopes for students in the future development of this nation. In Indonesia, education functions to develop abilities and shape the character and civilization of a dignified nation in order to develop the potential of students. Compulsory education in Indonesia is up to the age of fifteen years or elementary to junior high school.

Education for children with special needs brings many benefits to the children themselves. Through education, it is possible to know the abilities of children with special needs which will then be developed and will be useful for their lives because many children with special needs have talents that are not possessed by normal children in general. Can make children more disciplined and independent so they are no longer dependent on others in living their lives. Children can socialize and communicate with the surrounding community so that children feel part of the community. So that children can have a better life in the future.

Down syndrome is a genetic disorder that is quite common. The World Health Organization (WHO) estimates that there are 8 million people with Down syndrome worldwide. With an estimated incidence of 1: 1,000 per birth or about 3,000 to 5,000 births of children in the world who experience this condition. According to the results of the Basic Health Research from 2010 to 2018 cases of Down syndrome in Indonesia tend to increase. The latest research in 2018 shows data on birth defects of children aged 24 to 59 months as much as 0.41 percent. Based on research conducted, Down syndrome accounts for the largest disability up to 0.21 percent of the weighted number 57, 361. To carry out their daily activities, Down Syndrome children need educational services such as self-development programs.

According to Down Syndrome is also known as trisomy 21, which is a chromosome 21 abnormality that affects the body and brain. This self-development program is included in the Specialty Development Program that must be given to Down Syndrome children to train them to carry out activities that must be done at home, at school, and in the community. This self-development program includes skills to maintain safety and health, communicate, socialize, work and use spare time as well as self-care. This program must be given in a simple way so that children can follow it well and are expected to have basic abilities to meet the needs of daily life and become provisions for them both in the family and community environment. By providing proper self-development learning, it is hoped that MM can become independent, so that it can make MM able to carry out daily activity skills without asking for help from others and is also expected to lead Down syndrome children to be able to live independently in their families, schools, and communities.

Therefore, children with Down syndrome need to be given learning to take care of themselves in which there is material on wearing shoes which includes the activity of tying shoes with laces. In addition to being able to make children independent, the implementation of the initial assessment of self-development activities tying shoes with laces is also related to fine motor skills. By providing an initial assessment of continuous self-development activities, tying shoes with laces, the fine motor skills of children with Down syndrome develop and MM becomes trained so that MM can also perform other activities related to fine motor skills.

Based on the results of direct observations in the initial assessment of the self-development activity of tying lace-up shoes in May 2021 in the fourth grade room at SLB Theresia Sonder, students have not been able to tie lace-up shoes coherently and correctly. This is shown when students still need help when the researcher is asked to name the parts of the shoe with laces, insert the shoelace into the front shoe hole, insert the right foot into the right shoe, insert the left foot into the left shoe, and make a basic knot. Meanwhile, MM has not been able to match the length of shoelaces, make regular knots,

and make ribbon knots. Thus, the results of the observations showed that during the initial assessment of self-development activities, tying MM laces required an alternative action that made it easier for MM in tying lace-up shoes, could improve the ability to tie lace-up shoes on MM, and could improve the learning process for tying lace-up shoes in MM. actions taken by the previous teacher.

According to Assjari (2010), the ability to take care of oneself is a skill or skill that must be mastered by children with mental retardation (down syndrome) so that they can take care of themselves in their daily needs without the help of others, including tying shoes. (Dapa et.all, 2021) The function of wearing shoes is to maintain health and modesty. In addition, by using shoes, feet can be protected from friction of sharp objects and can also make the appearance more attractive. The ability to think in children with Down syndrome is low so that the child cannot fully grasp the learning material. Therefore, children with Down syndrome need stages in each learning process that can make it easier for MM to understand and follow the learning process.

METHOD

The type of research used in this study is a method with a single subject (Single Subject Research), which is a method that aims to obtain the necessary data by looking at the results of the effect of a given treatment (intervention). The design needed in this study is the A-B-A design, which means that the A-B-A design provides a stronger causal relationship between the dependent variable and the independent variable.

RESULTS AND DISCUSSION

The Ability to Tie Shoe Laces

Graph 1 illustrates MM's ability to tie lace-up shoes in condition A-1, the line is rising, while condition B when given the intervention has an increase, it can be seen in sessions 6 to 15 that the ability to tie laces shoes increases compared to sessions 1 to 5, although in sessions 6 to 15 11th level was flat but in the next session his ability to tie laces started to improve.

Overall data collection was 20 sessions with the width of the initial baseline condition (A1) being 5 sessions, intervention (B) with the width of the condition 10 sessions and the width of the baseline condition (A2) being 5 sessions. By estimating the direction of the trend of the data for the baseline session A1 towards increasing (+), after intervention the results of estimation B tend to increase (+), while in the baseline session A2 the estimation of the direction of the trend of the data increases (+).

For trend stability in the baseline session A1 to B rose and in the baseline session A2 rose (stable). In the A1 baseline session, the trend of the data is 0-1. In the intervention session B, the trend of the data was 1-10, then the baseline (A2) the trend of the data was 9-10. To determine the level of change by marking the first and last data on each baseline and intervention, calculate the difference between the two data and determine the direction of increasing or decreasing. Changes in level from baseline (A) 1, namely data from the last session in baseline condition (A1) (0) minus data from the first session

of baseline (A1) (1), and for changes in level in intervention condition B, namely data from the last session in intervention condition B (10) minus the data for the first session of the intervention condition B (1), while the change in the level of the baseline condition (A2), which is the result of the last session of baseline A2 (10) is subtracted from the first session of the baseline condition (A2) (9). As shown in the table below, the results of the analysis under the conditions of implementation of the intervention.



Picture 1. MM's ability to tie lace-up shoes in condition A-1

Overall data collection was 20 sessions with conditions baseline-1 (A1) was 5 sessions, intervention-1 (B) was 10 sessions, baseline-2 (A2) was 5 sessions.

The results showed an increase so that the direction trend that occurred in the baseline-1 (A1) condition was a variable with a trace of an upward trend, intervention-1 (B) was a variable. Baseline-2 (A2) is a variable with an upward trend trail. After analyzing the conditions, the results of the analysis can be summarized as in table 1 below,

Condition	A1	В	A2
Condition length	5	10	5
Estimated Trend Direction			
	(+)	(+)	(+)
Trend of data stability	Variabel	Variabel	Stabil
Trace data	/		
Level and Range Stability	0-1	1-10	9-10
Level change	1	9	1

Table 1. Analysis Under Conditions

DISCUSSION

Based on the research data that has been presented on a line graph, the percentage increase in self-development ability to tie lace-up shoes along with the analysis of the research results that have been presented, provides an illustration that increasing self-development ability to tie lace-up shoes in children with Down syndrome at Theresian Sonder Special School can be handled in a different way. the right way is to use the direct instruction method.

This is evident from the results of the data graph, namely in the direction of the trend of condition (A) baseline-1, the stage of tying shoes with lace up to the 5th observation, only MM is able to make one regular knot. Meanwhile, in the intervention condition (B) after being given an intervention using the direct instruction method, the ability to tie MM lace shoes tends to increase compared to the baseline-1 condition. The results are seen at the intervention stage in the 6th session, MM was able to make three regular knots, then at the 15 MM session, they were able to make regular knots and ribbon knots. In the baseline-2 condition without any observational intervention after giving the intervention, the ability of MM at sessions 16 to 20 increased and remained stable. The trend is increasing, indicated by the achievement of the A2 percentage to 80%.

In accordance with the opinion of Sunanto (2006: 73) to know the size of a treatment, then "important components that can show whether there is an influence of intervention on the dependent variable are aspects of stability, changes in level, and a lot of overlapping data or data overlap". Based on the results of the analysis of the data obtained in the baseline-1 phase, the baseline-2 intervention has stable data in each phase. The results of the analysis of overlapping data (overlapping data) can show changes between conditions as indicated by the presence of the same data between the two conditions being compared. The same data or overlapping data shows no change in the two conditions. The more overlapping data, the less convincing the effect of the intervention given. The conditions between the baseline-1 phases (A2/A1) showed that there was no overlapping data so that the percentage of data overlap was 0%. This is in accordance with the opinion of Sunanto (2006: 84) that "the smaller the percentage of overlap, the better the influence of the intervention on target behavior".

The ability to self-develop tying shoes with laces is a skill that everyone can acquire, including children with Down syndrome, because by having the ability to develop self-taught tying shoes, children can reduce the burden on those around them and their independence will also increase.

Based on the above, the direct instruction method is a method that can be chosen so that children are able to tie shoes with laces correctly. And it is proven that this technique is effective with an increase in baseline (A2) which can be seen from the effect of the intervention, where the ability of children with Down syndrome in self-development of tying shoes with laces can increase.

CONCLUSION

Based on the results of research, analysis and data processing regarding the use of the direct instruction method to increase the ability to self-development to tie shoes with laces in children with Down syndrome (MM), starting from the initial condition of the subject in the baseline-1 phase (A1), intervention (B), and baseline-2 (A2), it can be concluded that: Practicing self-development skills in tying shoes with laces in children with Down syndrome in the initial condition before being given intervention using the direct instruction method, which is relatively low, this can be seen from the mean level acquisition in the initial baseline-1 (A1) condition of 0.6, the effect of trend stability is 40% (variable). Training the self-development ability to tie lace-up shoes in children with Down syndrome after being given an intervention using the direct instruction method, which is relatively low, which has increased from the initial condition baseline-1 (A1), this can be seen from the acquisition of playing level in the baseline-2 condition (A-2) of 9.8 with a trend stability percentage of 80% (stable)

The direct instruction method improves self-development ability to tie lace-up shoes (MM). this is evidenced by an increase in the playing level, in the baseline-1 phase (A1) the playing level was 0.6, the playing level in the intervention phase (B) was 6 and the baseline-2 phase (A2) the playing level was 9.8. Looking at the data, it can be concluded that the playing level from the initial phase of baseline-1 (A1) to the final phase of baseline-2 (A2) has increased.

REFERENCES

Azizah, F. (2014). Model Pembelajaran Langsung Terhadap Kemampuan Bina Diri Dalam Mencuci Tangan Anak Cerebral Palsy. Jurnal Pendidikan Khusus, 5(2).

https://www.kompasiana.com/sridewi26/5e8e756dd541df06dc4a2b12/model-pengajaran-langsungdirect-instruction?page=2.

- Dapa, Aldjon. *Pool Therapy to Reduce Aggressive Behavior of Autistic Children*. Proceedings of the 5th International Conference on Education and Technology (ICET 2019). Online di : <u>https://www.atlantis-press.com/proceedings/icet-19/125926483</u>.
- Dapa, Aldjon, Tiersa Undap, Henny Kiriweno. 2021. *The Implementation of Drill Methods to Improve Children with Autism's Ability to Tie Shoelaces.* Indonesia Journal Of Disability Studies. Volume 8 Nomor 2 2021.
- Joko Yuwono. (2009). Memahami Anak Autis (Kajian Teoritik dan Empirik. Jakarta: Alfabeta.
- Kasiyati, K. (2019). *Meningkatkan Bina Diri bagi Anak Down Syndrom Melalui Model Explicit Instruction di kelas I/C.* Jurnal Penelitian Pendidikan Khusus, 7(2), 43-48.
- Kementrian Kesehatan Republik Indonesia, 2018, "Laporan Riskesdas 2018"
- Tombokan R dan Usman Duyo. (2008). Metodologi Penelitian. Bahan Ajar. Tidak diterbitkan. Manado.
- Ulfah, W. (2019). Implementasi Bina Diri Melalui Bimbingan Kelompok Pada Siswa Tunagrahita Smplb Di Slb Negeri Kroya (Doctoral dissertation, IAIN Purwokerto)