

IMPROVING THE ABILITY TO FOLD T-SHIRTS THROUGH THE TOTAL TASK PRESENTATION TECHNIQUE IN CHILDREN WITH DOWN SYNDROME

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ABSTRACT

This study was motivated by the identification of a fifth-grade student with Down Syndrome at SLB Negeri 1 Bagansiapiapi, Rokan Hilir Regency, who experienced difficulties in folding a T-shirt independently. The purpose of this study was to improve the student's ability to fold a T-shirt through the implementation of the total task presentation technique. The method used was an experimental study with a Single Subject Research (SSR) approach employing an A-B-A design with one subject, a child with Down Syndrome identified by the initials AYA. The baseline condition (A1) was conducted for 3 sessions, the intervention phase (B) for 7 sessions, and the second baseline (A2) for 3 sessions. Data were collected through direct observation and a performance test using a clothing-folding skills test instrument, and were analyzed using visual graph analysis techniques. The results showed that the subject's ability to complete the steps of folding a T-shirt during the baseline condition (A1) was consistently at 12.5%. After the intervention was implemented, the ability increased during the intervention phase (B), with percentages of 40.63%, 50%, 56.25%, 65.63%, and reaching 93.75%. In the second baseline condition (A2), the subject's ability remained high and stable at 96.88%. Therefore, it can be concluded that the total task presentation technique is effective in improving the ability to fold a T-shirt for a fifth-grade student with Down Syndrome at SLB Negeri 1 Bagansiapiapi.

Keywords: Total Task Presentation, Down Syndrome, Folding T-Shirt

1. INTRODUCTION

Children with special needs are children who have different characteristics that require special educational services and treatment. Special education is intended for students who experience physical, emotional, mental, or social disabilities, and/or have the potential for intelligence and special talents. One educational unit that provides these services is the Special Needs School (SLB), which groups students into several categories, namely blind (A), deaf (B), mentally retarded (C), physically disabled (D), emotionally retarded (E), and multiple (G) (Damri, 2019). Down Syndrome included in the category of intellectual disability (C) because it is in the group intellectual disability, namely individuals with below average intellectual abilities at mild to severe levels. However, children Down Syndrome has unique characteristics compared to other mentally retarded individuals. Medically, Down Syndrome is a genetic disorder caused by trisomy of chromosome 21 (Fatmawati & Putri, 2021). This extra chromosome causes growth disorders, physical weakness, and intellectual limitations (Mulia & Kristi, 2012). General characteristics of children with trisomy Down Syndrome including a flat

facial profile, upward slanting eyes, small or abnormal ears, a wide gap between the thumb and index finger, epicanthal folds, and below average IQ (Ministry of Health of the Republic of Indonesia, 2019).

In the special education curriculum, self-development programs are an important element for students with intellectual disability. The Directorate of Special Education and Special Services (PKLK) (2014) in Damastuti (2020) explains that self-development includes skills in self-care, maintaining safety and health, communicating, socializing, working, and utilizing free time. One relevant aspect is the skill of maintaining neatness of clothing as part of life skills. Based on a preliminary study at SLB Negeri 1 Bagansiapiapi, a self-development program has been implemented as a compulsory subject. At the SDLB/C level, one of the focused work skills indicators is folding T-shirts. This skill serves as the foundation for developing vocational skills laundry at the next level. In addition, folding clothes is an important everyday skill for children's independence, including toddlers Down Syndrome (Mayangsari, 2015).

The choice of T-shirts as a training medium is based on their simple structure without buttons, zippers, or complex details, thus reducing cognitive load and facilitating visual-motor coordination. This is in line with the opinion of McKinney & Eike (2023), who recommend the use of simple clothing (simple to use/intuitif) for individuals with cognitive or motor limitations. However, the results of the observation show that a student tDown Syndrome A fifth-grade student with the initials AYA has not yet achieved the skill indicator for folding T-shirts. Initial assessment results indicate the child's ability is in the poor category. The folds are not symmetrical, wrinkled, and not rectangular according to criteria. Interviews with teachers indicate that AYA does not experience gross motor difficulties, but has intellectual abilities equivalent to moderate intellectual disability. The learning method used is still a demonstration method and has not yet implemented a learning approach behavior modification.

One of the relevant techniques in the approach behavior modification is a technique total task presentation, part of behavioral chaining based task analysis. According to (Cooper & Heward, 2020), total task presentation is a method chaining where students work on the entire series of tasks as a whole, while the teacher provides prompt on the necessary steps and make an assessment based on task analysis. This technique allows for the provision of reinforcement and facilitates the evaluation of the success of each skill stage. Based on this description, this study aims to improve the ability to fold t-shirts through the total task presentation technique in children Down Syndrome class V at SLB Negeri 1 Bagansiapiapi.

2. METHODOLOGY

This research uses a quantitative approach with a single subject experiment type (Single Subject Research). An experiment is an experimental activity to examine symptoms or behavior under certain conditions (Pratama, et al., 2015), while a quantitative approach is used because the data is analyzed in the form of numbers and statistics (Sugiyono, 2019). The design used is A-B-A which consists of the first baseline (A1), intervention (B), and second baseline (A2) to see changes in behavior before, during, and after treatment is given (Sunanto, et.al., 2006).

The subject of the research was a child Down Syndrome A 13 years old female student with the initials AYA, a fifth-grade student at SLBN 1 Bagansiapiapi, Rokan Hilir Regency, experienced difficulties in the self-development program, particularly in the skill of folding T-shirts. The results of the initial assessment in three baseline sessions showed that the percentage of ability was 12.5%, 25%, and 25%, respectively, which are in the category of not yet capable, so intervention is needed to improve these skills. The independent variable in this

study is the technique. total task presentation, while the dependent variable is the ability to fold a t-shirt.

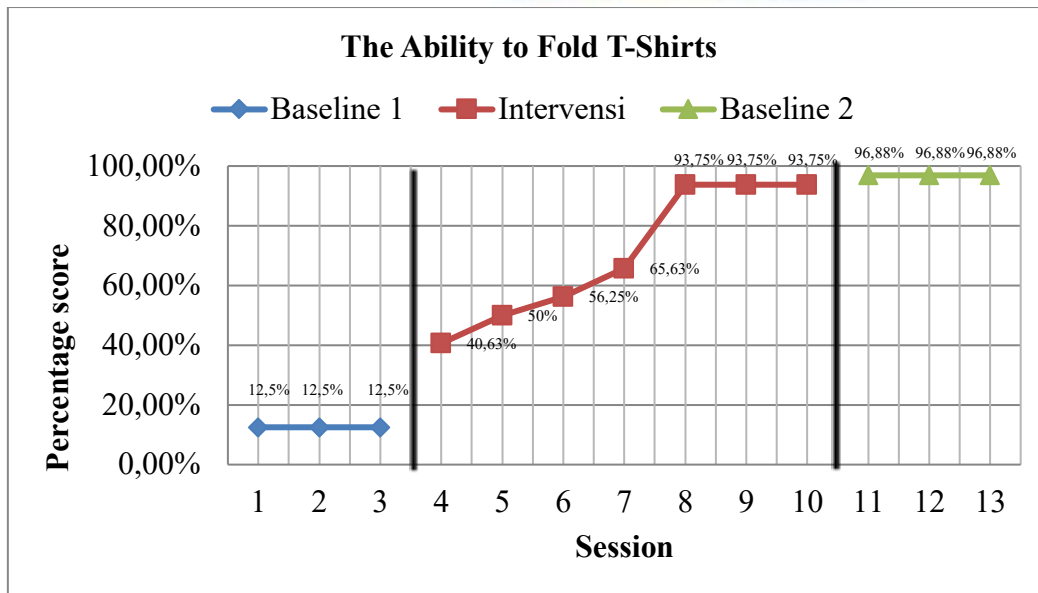
The research instrument is in the form of a behavioral test (performance test) in the form of an observation sheet compiled using the technique task analysis, which breaks down complex skills into small, systematic steps (Cooper, et.al., 2020). The use of task analysis in functional skills learning is supported by Westling & Fox (2009) and Alberto & Troutman (2013). Each step is scored using a 0–4 scale based on the subject's level of independence, namely 4 (independent), 3 (verbal assistance), 2 (verbal and gestural assistance), 1 (physical assistance), and 0 (not doing). The score obtained is calculated as a percentage by comparing the score obtained with the maximum score and multiplying it by 100% (Sunanto, et al., 2006). Documentation in the form of photos and videos is used as supporting data to strengthen the observation results.

The research procedure was carried out in three stages according to the A1–B–A2 design. The first baseline stage (A1) was conducted to measure the subjects' initial abilities without intervention. The intervention stage (B) was conducted by providing learning using the technique. total task presentation, where subjects were trained to complete the entire sequence of steps to fold a t-shirt with assistance as needed. Measurements were taken at each session to monitor skill development. A second baseline phase (A2) was conducted after the intervention was discontinued to determine the sustainability of the treatment's effects.

The research data was analyzed using techniques visual analysis of graph on design Single Subject Research (A1–B–A2). Visual analysis is the main procedure in SSR research to assess behavioral changes based on graphic patterns at each phase (Sunanto, et al., 2006). Measurement data from each session is entered into a graph, then analyzed to see behavioral changes in the baseline (A1), intervention (B), and second baseline (A2) phases. Behavioral changes that increase during the intervention phase and decrease when the intervention is stopped indicate the effectiveness of the treatment (Marlina, 2023).

3. RESULTS

The results of this study present data on the subjects T-shirt folding abilities, obtained through repeated measurements at the baseline (A1), intervention (B), and second baseline (A2) phases. The following graphs present the research data to demonstrate changes in the subjects abilities at each session.



Picture 1. Recapitulation of the Ability to Fold T-Shirts in Different Conditions
Baseline (A1), Intervention (B) and Baseline (A2)

Based on graph 1, it can be seen that the conditions baseline (A1) was implemented for 3 sessions and the data showed stability in the 1st to 3rd meetings with the percentage of results obtained being 12.5%. Furthermore, intervention (B) was in the form of a technique total task presentation was given at the 4th meeting for 7 sessions and the data showed stability at the 8th to 10th meetings with the percentage of results obtained being 93.75%. Then, in the condition baseline (A2) Observations were made on the child's abilities after no longer being given intervention for 3 sessions and stable data was obtained at the 11th to 13th meetings with a percentage of results obtained of 96.88%. To determine whether the intervention had an effect on the target behavior, can be seen based on the results of the following data analysis.

Table 1. Summary of Analysis Results in Conditions

No.	Condition	Baseline (A1)	Intervention (B)	Baseline (A2)
1.	Long Condition	3	7	3
2.	Trend estimation Directions			
3.	Tendency towards stability	100% stable	14,29% unstable	100% stable
4.	Trend data trace			
5.	Stability levels and ranges	(Horizontal) Stable 12,5%–12,5%	(Increase) Varied 40,63%–93,75%	(Horizontal) Stable 96,88%–96,88%

6.	Level Change	0% (=)	53,12% (+)	0% (=)
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From the results of data analysis in the conditions, the length of the A-B-A condition is 3-7-3. For the tendency of the direction of condition A1 is horizontal (=), condition B increases (+), and in condition A2 is horizontal (=). Judging from the stability tendency in condition A1, the stability percentage is 100% (stable). In condition B, the stability percentage is 14.29% (unstable). In condition A2, the stability percentage is 100% (unstable). Judging from the trend of the data trace, it shows that in condition A1 it is horizontal (=), condition B increases (+), and in condition A2 it is horizontal (=), and in condition A2 it increases (+). Furthermore, at the stability and range levels, the results obtained are A1 is stable in the range (12.5% - 12.5%), B is unstable (variable) in the range (40.63% - 93.75%), and A2 is unstable (variable) in the range (96.88% - 96.88%). Then at the level of change in condition A1 there was no change, in condition A2 there was a change of 53.12%, and 0% in condition A2.

Table 2. Summary of Visual Analysis Results Between Conditions

No.	Kondisi	A1/B/A2
1.	Number of variables changed	1
2.	Change in directional tendency	 (=) (+) (=)
3.	Direction of change stability tendency	Stabil – Tidak stabil – Stabil
4.	Level of change	
	a. Level of change in condition B/A1	40,63% - 12,5% = 28,13%
	b. Level of change in condition B/A2	96,88% - 40,63% = 56,25%
	Data overlap percentage	
	a. In baseline conditions (A1) with intervention	0
5.	conditions (B)	
	b. In baseline conditions (A2) with intervention	42,86%
	conditions (B)	

From the results of the data analysis between conditions, the number of variables changed was 1, namely the ability to fold a T-shirt. The change in the direction of the trend shows that in condition A1 the direction is flat, in condition B there is an increase, and in

condition B there is a flat. Furthermore, the change in the trend of the data stability shows a stable-unstable-stable pattern. In the baseline condition (A1), the data is stable because the subject's ability is consistently low due to the absence of intervention. In the intervention phase (B), the data becomes unstable because there is a gradual increase as a result of the intervention in the form of techniques total task presentation. Furthermore, at the final baseline (A2), the data returned to a stable high level, indicating that the subject's abilities remained stable after the intervention was stopped. Then, looking at the level of change, in A1 and B there was a change rate with a value of 28.13%, this means that in this condition there was a change, then between the intervention condition (B) and baseline (A2) experienced a change rate with a value of 56.25%, this means that in this condition there was a change with an increase. From the calculation results overlape obtained a percentage that could be said to be small, namely overlape in conditions A1 and B it was 0% and in conditions B and A2 it was 42.86%.

4. DISCUSSION

Based on the results of data analysis, it is proven that children's abilities Down Syndrome (AYA) showed improvement as a result of providing intervention in the form of techniques total task presentation in learning to fold t-shirts. This can be seen in graph 1. Data in the Baseline Conditions (A1), Intervention (B) and Baseline (A2) show a significant increase in ability between the baseline phase before the intervention (A1), the intervention phase (B), and the baseline phase after the intervention (A2).

In the baseline phase (A1), during 3 consecutive meetings the child showed the same ability in folding a T-shirt, namely only being able to do 1 step of folding a T-shirt independently, namely the indicator of taking a T-shirt with a score of 4 and a percentage of 12.5% in each meeting. Meanwhile, the child was not able to do the other 7 steps correctly. The seven steps that were not yet able were spreading the T-shirt on the table with the front facing down; straightening the left sleeve of the T-shirt; straightening the right sleeve of the T-shirt; folding the left side of the T-shirt to the middle; folding the right side of the T-shirt to the middle; folding the bottom of the T-shirt up (1/2); and tidying up the T-shirt folds.

Based on the data obtained above, the researchers stopped observing the baseline phase (A1) at the third meeting, because the data obtained had shown stability for three consecutive times. This is in line with the opinion of (Sunanto, et al., 2005) who stated that the phase change in SSR research is carried out after the data shows a stable trend. One indicator of data stability is when at least three consecutive data points are within the stability range, so that the next phase can begin.

In the intervention phase (B), the data obtained was quite varied, but the data tended to increase every day. This intervention phase was carried out for 7 meetings. In the 4th meeting, the data obtained showed that the child was able to take a T-shirt independently; the child was able to spread the T-shirt on the table with the front facing down with verbal and gestural assistance; the child was able to straighten the left sleeve of the T-shirt, straightten the right sleeve of the T-shirt, fold the left side of the T-shirt to the middle, fold the right side of the T-shirt to the middle, and tidy up the T-shirt folds with direct physical assistance; the child was able to fold the bottom of the T-shirt up (1/2) with verbal and gestural assistance. The percentage obtained in this 4th meeting was 40.63%.

At the 5th meeting, the data obtained increased from 40.63% to 50% which was indicated by an increase in the child's abilities, namely being able to take a T-shirt and spread

the T-shirt on the table with the front facing down independently; the child was able to straighten the left sleeve of the T-shirt and straighten the right sleeve of the T-shirt with verbal and gestural assistance; the child was able to fold the left side of the T-shirt to the middle, fold the right side of the T-shirt to the middle, fold the bottom of the T-shirt up (1/2), and tidy up the T-shirt folds with direct physical assistance.

At the 6th meeting, the data obtained increased from 50% to 56.25% which was indicated by an increase in the child's abilities, namely being able to take a T-shirt and spread the T-shirt on the table with the front facing down independently; the child was able to straighten the left sleeve of the T-shirt and straighten the right sleeve of the T-shirt with verbal assistance; the child was able to fold the left side of the T-shirt to the middle, fold the right side of the T-shirt to the middle, fold the bottom of the T-shirt up (1/2), and tidy up the T-shirt folds with direct physical assistance.

At the 7th meeting, the data obtained increased from 56.25% to 65.63% which was indicated by an increase in the child's abilities, namely being able to take a t-shirt and spread the t-shirt on the table with the front facing down independently; the child was able to straighten the left sleeve of the t-shirt, straighten the right sleeve of the t-shirt, and fold the bottom of the t-shirt up (1/2) with verbal assistance; the child was able to fold the left side of the t-shirt to the middle with verbal and gestural assistance; the child was able to fold the right side of the t-shirt to the middle and tidy up the folds of the t-shirt with direct physical assistance.

At the 8th meeting, the data obtained increased quite significantly from 65.63% to 93.75% which was indicated by an increase in the child's abilities, namely the child was able to do the first 7 steps independently, namely taking a T-shirt, spreading the T-shirt on the table with the front facing down, straightening the left sleeve of the T-shirt, straightening the right sleeve of the T-shirt, folding the left side of the T-shirt to the middle, folding the right side of the T-shirt to the middle, folding the bottom of the T-shirt up (1/2). Meanwhile, in the 8th step, namely tidying the folds of the T-shirt, the child was able to do it with verbal and gestural assistance. At the 9th and 10th meetings, the same results were obtained as at the 8th meeting. This means that stable data has been obtained for 3 consecutive meetings. So the researcher stopped the intervention phase (B) at the 10th meeting.

After the intervention phase ended, the researchers gave a break of approximately 19 days before moving on to the Baseline phase (A2).time (time gap) sufficient time between the intervention phase (B) and the second baseline (A2) is required.so that the intervention effect is not immediately carried over. In the A-B-A design, the second baseline phase (A2) aims to observe behavioral conditions after the intervention is stopped. Therefore, a sufficient time gap is needed between the intervention phase and the A2 phase to minimize the residual effects of the intervention. (Horner et al., 2005) emphasized that a clear temporal separation of phases in a single-subject research design is crucial to ensure the validity of the functional relationship between the intervention and behavioral change, so the post-intervention baseline phase needs to be conducted after the treatment effect has diminished. This is in line with the opinion of (Kazdin, 2011) who stated that measurements in the reversal phase should be conducted after the intervention effect has diminished, so a sufficient time gap is needed to avoid carryover effect (residual effects of intervention).

The Baseline Phase (A2) began at the 11th meeting. The data obtained showed an increase compared to the last three data of the intervention phase, namely from 93.75% to 96.88%, which was indicated by an increase in the child's ability in step 8, namely tidying up the folds of the shirt, which previously the child was able to do with verbal and gesture assistance,

now he was able to do it with verbal assistance only. The data obtained was stable until the 12th and 13th meetings. So the researcher decided to stop the baseline phase (A2) and stop the research at the 13th meeting.

Based on the discussion above, the final result of the study was 96.88%. The child was not yet able to perform the final step independently, namely smoothing the folds of the shirt, and still needed verbal assistance in the form of instructions to continue smoothing the folds of the shirt. This resulted in the percentage of his ability not reaching 100%. Nevertheless, the researcher still stopped the study at the baseline phase (A2) with a final percentage of 96.66% because referring to (Bulkeley et al., 2013) which states that the minimum number of baseline data points commonly used ranges from 3 to 10 sessions, depending on the need for stability and the research context. This indicates that 100% achievement scores are not necessary before the baseline can be stopped if the data already shows stability.

This statement is also supported by (Sunanto, et al., 2005) who stated that Baseline (A2) was stopped after the data showed stability for three consecutive sessions with a relatively flat trend, even though the achievement level had not reached 100%. This is in line with the principle of single subject research which emphasizes that the stability of baseline data is prioritized over the level of achievement of scores. Baseline termination is carried out when the data has stabilized, because baseline stability is necessary to ensure that changes in the intervention phase are the effects of treatment, not natural variations in the data (Kazdin, 2011).

However, theoretically the achievement of results of up to 100% in mentally retarded students in this case down syndrome, it's not impossible. However, the cognitive developmental characteristics of students with intellectual disabilities indicate that they generally require more time, repeated practice, and consistent reinforcement to achieve maximum mastery. Therefore, the process towards full mastery often occurs gradually and requires a longer duration of intervention than for students in general (Sunanto et al., 2005). In the case of the skill of folding T-shirts, achieving maximum and lasting results requires continuous practice for students with intellectual disabilities, both at home and at school. One way is to involve students with intellectual disabilities in vocational activities, laundry at school and working with parents to participate in training children at home consistently and with discipline.

From the explanation above, the overall results show that the child's abilities before the intervention were still relatively low. Then, under the intervention, the results continued to improve at each meeting. Furthermore, after the intervention was no longer given, the technique was used. Total task presentation. The results showed that children's abilities had improved significantly in understanding how to fold t-shirts correctly. Total task presentation technique. What researchers use is an effort to improve children's ability to fold t-shirts. Down Syndrome. By using this technique, children more easily understand the steps given by the researcher because they are composed of detailed and structured steps, and children are very enthusiastic in learning to complete these steps because of the reinforcement provided (reinforcement). Positive verbal (such as "smart, great, good" or nonverbal (such as "smile, thumbs up, and applause") can increase motivation and reinforce behaviors that children have already mastered. This is in line with the opinion of (Murpratiwi & Tjakrawiralaksana, 2018) that reinforcement can strengthen children's motivation, so they don't give up easily when practicing folding clothes.

Technique total task presentation can improve children's ability to fold t-shirts because it is carried out in stages and repeatedly until the child is able to fully complete all the steps. This is in line with several relevant studies that researchers have found, including research

(Magdalena & Majid, 2018) which states that this technique total task presentation can improve the subject's ability to wear a t-shirt without buttons in subjects who experience intellectual disability. The results of the research on the intervention program of wearing buttonless t-shirts for children with intellectual disability level severe (heavy) success experienced improvement and individuals were able to independently wear unbuttoned t-shirts at baseline conditions after being given intervention.

Furthermore, research (Amran, 2020) states that the technique total task presentation can improve self-care skills in children with intellectual disabilities. Research conducted by (Edwina & Tjakrawiralaksana, 2018) also showed that the technique total task presentation in honing independent drinking skills in autistic students with intellectual disabilities. This is evidenced by the results showing that children's abilities in carrying out activities drinking independently increased significantly compared to the phase baseline (before intervention).

5. CONCLUSION

Based on the research results above, it can be concluded that the technique total task presentation proven effective in improving children's ability to fold t-shirts Down Syndrome. The increase in ability is seen from the change in the percentage of skills in the intervention phase compared to the baseline phase, as well as the stability of ability in the second baseline phase after the intervention was stopped. These findings indicate a functional relationship between the provision of intervention and the improvement of the subjects self-development skills. Thus, the technique total task presentation can be recommended as an effective learning strategy to develop functional skills in children with intellectual disabilities.

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