

The Effect of Practical Life Activity towards the Improvement of An Autistic Child's Fine Motor Skill

Indri Winegal, Sudarsini, Eka Pramono Adi

Universitas Negeri Malang
E-mail: indriwinegal@gmail.com

Abstrak: There is an attempt to help autistic child's in improving their fine motor skill, one of them is through practical life activities. This research was aimed at improving the fine motor skill of an autistic child's through practical life activities. This research implemented Single Subject Research Method with A-B-A design. The data were analyzed using the technique of visual analysis in the form of data graphic both in between the condition and in the condition. The findings presented the percentage of 0% overlap. Besides, the data analysis showed that the children's fine motor skill improved in Baseline-2 (A2) or control condition with stable score of 75%, which was higher than Baseline-1 (A1) or condition before intervention was given, with the stable score of 53,12%. In conclusion, Practical Life activity could improve the fine motor skill of the autistic.

Keywords: Autistic, Practical Life Activity, Fine Motor.

Autistic children as the children with special needs have such a complex disorder that encompasses interaction, communication and behavioral disorders. According to (Sujarwanto, 2005) argues that "autism is a developmental process disorder occurring within the first three years that causes language, cognitive, social, and adaptive disorders. So, the children are getting left behind compared to their peers. "This sense indicates that it is said to be autistic if experiencing developmental disorders in the first three years, which causes language development, cognitive, social and adaptive functionality is less than the child of his age. Another opinion according to (Pamuji, 2007) explains "autistic children have impaired development of brain function covering social and affective fields, verbal and nonverbal communication, imagination, flexibility, interest, cognition and attention".

Based on these opinions, it is concluded that autism is someone who has a complex disorder that encompasses interaction, communication and behavioral disorders that cause developmental delays. One of them delays fine motor development. This is because motor skills do not develop according to age where it can be seen from the movements that are rigid and rough. So, they have difficulty to do fine motor movement like buttoning clothes, removing buttons and folding clothes. The presence of delays in fine motor skills in children with autism is necessary to improve the ability of fine motor. One of them through Practical Life activities. Practical Life is a series of activities that emphasize motor activity packaged in the learning process that includes self-care activities, environmental care, life skills, and movement control and coordination of gestures. As the opinion (Morisson, 2012) explains that "Practical

Life is an activity that emphasizes everyday motor activities such as walking from one place to another in an orderly manner, carrying objects such as trays and chairs, studying care skills self, and perform other practical activities ". The use of Practical Life activities is very beneficial for children, where through Practical Life activities the coordination of fine motor movement of the child can develop optimally. The Practical Life activity has several themes, but in this research, it is chosen only one theme such as "Clothes". It is because in theme of "Clothes", the fine motor activity covers the activities of holding clothes, holding buttons with finger and thumb finger, inserted buttons into button holes, unbuttoned the buttons from the buttonhole, flipped the shirt, folded the right side and the left side of the shirt, and folded the shirt into two parts (top bottom) which is very useful in fine motor development. As previously reported by Diah (Yunifita et al., 2015) entitled Efforts to Increase Fine Motor Capabilities through Practical Life Activities in Children Group A of Aisyiyah Kindergarten 21 Premulung Surakarta academic year 2014/2015 states that "based on inferential statistical tests, increased significantly with the use of Practical Life activities as a means to improve the fine motor of Kindergarten children of group A". Therefore, Practical Life activities are used as a mean to improve fine motor of autistic students in class I of autistic school laboratory of the State University of Malang. Selection of this theme "Clothes" in Practical Life activities are tailored to the needs, conditions and abilities of students, so that, the criteria of fine motor skills achieved is more focused with optimal results.

METHOD

Single Subject Research (SSR) with experimental method is used in this study to know how big the effect of a treatment (intervention) given on a subject. According to (Sunanto et al., 2005) put forward “on the design of a single subject measurement of dependent variables performed repeatedly with a certain period of time such as weekly, daily, hourly. The comparison is not among individuals or groups, but rather on the same subject with different conditions “.

This study uses A-B-A design that shows a causal relationship between the dependent variable and the independent variable. The baseline condition (A1) is the dependent variable (fine motor ability) measured periodically before treatment is given. Initial measurements are through instruments provided by the researcher. Condition B is an intervention of the dependent variable (fine motor ability) observed or measured during a Practical Lifestyle activity study. After measurement of intervention condition (B), the measurement at the second baseline condition (A2) is given. The addition of the second baseline condition (A2) is intended as a control for the intrvensi phase, making it possible to draw conclusions about the functional relationship between independent variables (Practical Life activities) and dependent variables (fine motor skills).

The subjects of the study are ARR, 10 years male old of an autistic student in SLB Autism Laboratory UM who has a mild fine motor disability. This is because the ability of 3 finger point is newly formed, so there is still rigidity and vibration that in performing activities related to the ability of 3 finger point. In addition, the eye contact and concentration ability possessed by the child is still lacking, so in the practical life given to the child, only oriented to one theme is “Clothes”, the selection of this theme is tailored to the needs, conditions and abilities of children, so the criteria of fine motor skills who want to be more focused with optimal results. The theme of this “Clothes” goes into the practice of taking care of oneself in practical lifesarial activities (opinion, 2013) “Practical activities Lifestyle four different exercises, self-care (eg dressing, buttoning, shoelaces, hand washing, environmental care (eg cleaning the table, mopping), social relations (a courtesy lesson, respectful honor), motion control and coordination (eg walking, jumping, exercising balance, pouring objects in a glass) “.

Stages of data collection in this study starts from 1) The planning stage is the stage of preparing the instrument and regulating the implementation of data collection. 2) Test Stages Validity, is the stage of the researcher test the validity of the instruments given to the expert. Based on the results of validity test that has

been done obtained 95% results on the media board clothes used in practical life activities which means the media used is very valid or very feasible. While for material expert validation is obtained result of 76,6% which means valid or proper, so that, material of this life practical activity is suitable used as means of improving fine motor ability. 3) Implementation Phase, data collection phase on fine motor ability of the child through three conditions: early baseline phase condition (A1), fine motor ability condition data at intervention phase (B) and second baseline phase data (A2). 4) Final stage, at this stage the data processing baseline-1 (A1), intervention, and baseline-2 (A2) of the research instrument are conducted.

Data collection techniques in this study are divided into three namely: 1) Interview, the process of collecting information from the problems to be studied. 2) Observation, given on to know the fine ability of an autistic child who becomes the subject of research. 3) Documentation, photographs during the research activity, during the initial baseline phase (A1), intervention (B) and the second baseline-2 (A2) activities.

Data analysis of research in single-subject research is divided into two, namely: 1) Analysis in Conditions is an analysis of changes in data in a condition, such as initial baseline conditions (A1), intervention conditions (B), and second baseline conditions (A2). The components analyzed are as follows: a) Determine the Length of Condition, b) Determine the Direction Trend Estimation, c) Determine the Stability Trend, d) Determine the Trace, e) Determine the Range, f) Determine the Level of Change. 2) Inter-Condition Analysis. Components in the analysis between conditions are: a) Determine the number of variables that change, b) Determine changes in trends and effects, c) Determine changes in stability trends, d) determine the level of change, e) Determine the percentage of data overlap conditions A and B.

FINDINGS AND DISCUSSION

Findings

Data collection

The first stage that is carried out in data retrieval is to measure the fine motor skills of the subjects starting from before being given intervention to the condition after being given a baseline-2 intervention (A2). Data collection was carried out for 20 sessions, with details of baseline-1 (A1) 6 sessions, intervention 8 sessions and baseline-2 (A2) 6 sessions which obtained shown in table 1.

Table.1 Data Acquisition Recapitulation

Session to	Results	Conditions
1	A1	50%
2		50%
3		46,87%
4		53,12%
5		50%
6		50%
7	B	68,75%
8		71,87%
9		75%
10		68,75%
11		75%
12		78,12%
13		81,25%
14		78,12%
15	A2	65,62%
16		68,75%
17		65,62%
18		71,87%
19		71,87%
20		75%

Table 2. Data Analysis Under Conditions

Kondisi	A1	B	A2
1.Long Con- dition	6	8	6
2.Direction Trend Esti- mation	(=) ————	(+) ————	(+) ————
3.Stability Trends	Stabil (100%)	Stabil (87,5%)	Stabil (100%)
4.Data Trace	(=) ————	(+) ————	(+) ————
5.Stability and Range Level			
6.Level changes			

Tabel 3. Data Analysis Between Conditions

Comparison of conditions	B/ A1	A2/ B
1.Number of variables	1	1
2.Changes in direction and effect	———— (+)	———— (+)
3.Changes in stability trends	Stabil Ke Stabil	Stabil Ke Stabil
4.Level changes		
5.Percentage of overlap	0%	-

Data analysis

In this study, the data analysis used is divided into 2, namely data analysis in conditions and data analysis between conditions. To be more clear, consider the table below:

Data Analysis Under Conditions

Based on the results of data analysis in conditions, the following results show in table 2.

Table 2 describes the summary of the results of data analysis in conditions as: The length of the conditions carried out at the baseline-1 (A1) session is 6 sessions, the intervention condition (B) is 8 sessions, and the baseline session-2 (A2) is 6 sessions.

Based on the line of direction trend estimation, it is known that the baseline-1 (A1) condition estimates the tendency of the direction to be horizontal because the score obtained is flat. The line in the intervention condition (B) estimates the tendency of the direction to increase, this shows that there is an increase in the child's fine motor skills when given the intervention. The line in baseline-2 (A2) condition estimates that the direction of the trend increases, but with a sloping level, the score indicates that there is a positive effect on fine motor skills after being given intervention.

The results of the tendency of stability at baseline-1 (A1) condition is 100% meaning that it is stable, the tendency of stability of intervention (B) is 87.5% meaning that it is stable, and at baseline condition-2 (A2) the stability tendency reaches 100%. Based on the data trace line, it is known that the baseline-1 (A1) data traces are flat. The line in the intervention condition (B) increases, this indicates that there is an increase in the child's fine motor skills when it is given the intervention. The line at baseline-2 (A2) has increased, but with a sloping rate, the score indicates that there is a positive effect on fine motor skills after intervention.

The level of stability and range at baseline-1 (A1) increased with a range of 50.00% -53.12%. Similarly, in the intervention condition (B) it increased with a stability range of 68.75% - 81.25% and in baseline condition-2 (A2) increased with a stability range of 65-62% -75.00%.

Inter-condition Data Analysis Based on the results of data analysis between conditions, in table 3. Explanation of table 3 summarizing the results of data analysis between conditions are as follows.

The number of variables to be changed is one, namely the baseline condition to intervention conditions.

Changes in the direction trend between baseline-1 (A1) and intervention (B) conditions are increased to increase, then the intervention condition to baseline-2 (A2) is the same from increasing to increase.

Changes in the tendency of stability between baseline-1 to intervention and intervention to baseline-2 were stable from stable to stable.

Changes in the level between intervention conditions (B) and baseline-1 (A1) was 18.75% with a positive sign (+) which means that the score showed an increase, and a change in level between baseline-2 (A-2) and intervention (B) was 6.25% with a positive sign (+) which means that the score showed an increase.

The overlap percentage is data that overlaps from baseline-1 to intervention that was 0%. The overlap percentage of intervention data to baseline-2 does not need to be calculated because baseline-2 acts as a control. Based on the results of the percentage of overlap of 0%, this showed that giving intervention in the form of the use of practical life activities affects the target behavior, namely fine motor skills because it can improve the fine motor skills of an autistic child in grade I of Autism Laboratory SLB, State University of Malang.

DISCUSSION

Ability of An autistic Child in Grade I of UM Laboratory Autism SLB Before Intervention was given (baseline condition-1 A1)

The fine motor skills of an autistic child in grade I of UM Laboratory Autism SLB before being given intervention in the form of practical life activities with the theme "Shirt/Baju" is lower than after being given intervention. This can be seen from the mean score of the child's fine motor skills before being given intervention activities in the form of practical life activities with the theme "Baju", which only gets a score of 50% with a tendency towards horizontal direction, with a range of obtaining a score of children's fine motor skills autism is relatively low, so that, the score increase is not too flashy. Thus, based on the analysis obtained, it can be concluded that the results of the study in the baseline phase-1 (A1) showed a low score, despite the tendency of stability of 100%. The low level of fine motor skills of an autistic child is the impact of the authenticity experienced. As opinion (Pamuji, 2007) "describes an autistic child experiencing developmental disorders of brain function which include social and affective fields, verbal and nonverbal communication, imagination, flexibility, interest, cognition and attention".

The existence of delays in fine motor development in children with autism requires efforts to improve their fine motor skills, one of which is to use practical life activities. Practical life is a practical life skill that is taught to children, so that, they know the activities that exist in the surrounding environment. This is like the opinion (Gettman, 2016) which states that Practical life allows children to try various things that adults do and often watch them every day, such as dressing themselves, cleaning the house and greeting people around. In addition, it can provide opportunities for children to develop themselves, this activity can also introduce and lead children to the habits that apply in the community.

The Beginning Writing Ability of An autistic student after being given intervention

The condition after being given intervention is baseline-2 condition (A2), this condition is carried out to determine how much effect of the intervention (B) towards the research subjects without using treatment (control conditions). The condition in the baseline phase-2 (A2) showed that the fine motor skills of an autistic child have increased after being given intervention. This was seen from the increase in scores obtained in the previous phase, namely the baseline-1 (A1) phase, where the score in the baseline-2 (A2) phase condition was higher than the score in the baseline-1 (A1) phase indicated by the mean level score of 69.78 in the baseline phase-2 (A2). In addition, the baseline-2 (A2) trend estimation condition showed an increase compared to baseline-1.

There is an increase in fine motor skills in the child, in line with the opinion (Yunifita et al., 2015) with the title "Efforts to Improve Fine Motor Ability through Practical Life Activities in Grade A Kindergarten Aisyiyah 21 Premulung Surakarta 2014/2015 Academic Year" states that based on the test inferential statistics, children's motor skills increase significantly by using Practical Life activities as a means to improve the fine motor skills of group A kindergarteners ".

According to (Elcombe, 2017), Over a five-week period, Children's House students received interventions in the area of Practical Life specifically focusing on developing pincer grip ability. Results show growth in fine motor ability, which indicates that Practical Life materials to support the development of fine motor ability.

The statement above explains that, over a five-week period, the child receives interventions in the field of practical life specifically focusing on developing pincer grip abilities. The results showed that the growth of fine motor skills increases. This shows that practical life materials can improve fine motor skills. Based on this explanation, it can be concluded that the intervention in the form of practical life activities can improve fine motor skills in child with autism.

The Effect of Practical Life Activities towards the Improvement of An Autistic Child's Fine Motor Ability in the Grade I Autism Laboratory SLB, State University of Malang

The study of the effect of Practical Life activities on the improvement of fine motor skills of an autistic child in grade I showed that the Practical Life activities have an effect on increasing the fine motor skills of an autistic child. This was shown by the acquisition of baseline-1 (A1) fine motor skills scores ranging from 46.87% to 53.12%. Meanwhile, a significant increase in scores was shown during the intervention condition (B), namely 68.75% to 81.25%, and the control phase of baseline-2 (A2) score of fine motor

skills was 65.62% to 75%. Changes in the level of intervention conditions (B) to baseline-1 (A1) equal to + 18.75% means that there is an increase in scores from baseline-1 to intervention, then the results of this study have an overlap percentage of intervention to baseline-1 (A1) which shows 0% result which means that the intervention in the form of Practical Lives has a good effect on an autistic child's fine motor skills in UM Autism Laboratory SLB

The effect of Practical Life activities on the improvement of fine motor skills of an autistic child is in the same line with the opinion (Cadence in Bramaprov, 2016) which states that:

Designed the practical life activities to help children become more independent with various self-help skills, as well as teaching children how to be considerate and social with one another. Until Cadence discussed that specific goal (e.g., fine motor, coordination) paired with social goals are necessary for children with ASD to interact with their peers.

The statement above explains that, Practical life is designed to help children become more independent with various self-help skills and teach children about social interaction. So, Cadence discusses more specific goals (eg fine motor, muscle coordination) that are paired with social goals that are very necessary for ASD children to interact with their peers.

The other opinion is according to (Montessori, 2015) which states that "through Practical Life activities children can develop muscle coordination and learn to be diligent in developing a task". So that, through Practical Life-child activities can develop the coordination of muscles, including deep smooth muscles that use fine motor skills.

Based on the explanation above, it can be concluded that Practical Life activities can improve fine motor skills in children, including children with special needs with such complex disorders as children with autism.

CONCLUSIONS

Practical life activities affect the child's fine motor skills in terms of holding clothes, buttoning clothes, undoing shirts, flipping clothes and folding clothes. The percentage overlap from intervention to baseline-1 (A1) is 0%, which means that there is no overlapping data between intervention data and baseline-1 (A1),

so that, it can be concluded that the intervention influences the target behavior, which means practical life activities can improve fine motor skills of an autistic child in grade I of Autism Laboratory, State University of Malang.

Based on research findings and conditions in the field of research, the researchers put forward the following suggestions: 1) Recommendations for teachers, they can develop practical life activities as a means to improve fine motor skills. 2) Recommendations for further researchers, they can develop research with variables that are similar to the characteristics of different children or with different behavioral targets. Recommendations for parents, they can provide practical life activities at home, activities can be carried out while playing and relaxing, so that, the fine motor skills of autistic children are more optimally developed.

REFERENCES

- Elcombe, E. (2017). *Effects of Practical Life Exercises on Fine Motor Development in a Montessori Children's House Classroom*. Tesis.
- Gettman, D. (2016). *Metode Pengajaran Montessori Tingkat Dasar (Aktivitas Belajar Anak Balita)*. Yogyakarta: Pustaka Pelajar
- Montessori, M. (2015). *Metode Montessori: Panduan Wajib Guru Orang Tua Didik PAUD (Pendidikan Anak Usia Dini)*(Gutek L.G,Ed). Yogyakarta: Pustaka Pelajar
- Masnipal. (2013). *Siap Menjadi Guru dan Pengelola PAUD Profesional*. Jakarta : Gramedia
- Morisson, S. G. (2012). *Dasar-Dasar Pendidikan Anak Usia Dini (PAUD)*. Jakarta: PT Indeks.
- Pamuji. (2007). *Model Terapi Terpadu Bagi Anak Autis*. Jakarta: Departemen Pendidikan Nasional
- Sunanto, J., Takeuchi, K & Nakata., Hideo. (2005). *Pengantar Penelitian Pendidikan Subyek Tunggal*. Jepang: CRICED University of Tsubuka
- Sujarwanto. (2005). *Terapi Okupasi Untuk Anak Berkebutuhan Khusus*. Jakarta: Depdiknas
- Yunifita, D., Rahmawati, A., & Palupi, W. (2015). Upaya Meningkatkan Kemampuan Motorik Halus Melalui Kegiatan Practical Life Pada Anak Kelompok A Tk Aisyiyah 21 Premulung Surakarta Tahun Ajaran 2014/2015. *Kumara Cendekia*, 3(1), 1-7.