THE EFFECTIVENESS OF COMBINATION OF PLAY THERAPY AND TALK THERAPY ON THE BEHAVIOR OF CHILDREN WITH AUTISM SPECTRUM DISORDER (ASD)

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ABSTRACT
This study aims to analyze whether the combination of play therapy and speech therapy effectively affects the behavioral development of children with Autism Spectrum Disorder (ASD). This study uses a quantitative method with the population in this study are all children with autism who are regular visitors of speech therapy at NU_Kids Integrated Therapy 1 and 2. The collection of samples in this study used purposive sampling method. The results showed that most of the children who were given treatment only with speech therapy (Group I) had severe autism, namely 11 people (68.8%) then most of the children who were given combination treatment, namely combined speech therapy with play therapy (flash cards and puzzles) (Group II) also experienced severe autism, namely 9 people (56.3%). This shows that children with severe autism really need speech therapy to deal with the behavior disorders they experience.

KEYWORDS
Play Therapy, Speech Therapy, Autism Spectrum Disorder

INTRODUCTION
Autism is a developmental disorder characterized by repetitive behaviors, whether communication, interaction, social, or emotional behavior. Characteristics of children with autism that can be observed in daily life are: Behavioral disturbances include 1) ignorance of the environment, 2) undirected behavior (pacing, running, climbing, turning, jumping, etc.), 3) Attachment to a specific object, 4) non-directional behavior, 5) fascination with rotating or moving

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objects; social interaction disorders include 1) reluctance to interact (mismatched eye contact, facial expressions, postures, and gestures), 2) difficulty interacting with others or peer play, 3) lack of empathy, behavior is for interest or pleasure, 4) lack of reciprocal social and emotional interactions (Fadillah, 2019).

Globally, between 1.8 and 200 million children under the age of five are stunted each year, 86 percent of them in developing countries such as India, compared with just 8 percent in advanced economies. Meanwhile, data from developed countries show that 10% to 15% of children under the age of 5 are reported to be stunted, and 1% to 3% of children under the age of 5 are stunted globally. (Fernando, 2021). Other data show that approximately 16% of children (infants) under the age of 5 in Indonesia have mild to severe neurological and brain developmental disorders, 2 in 1,000 infants have motor development disorders, and 1 in 100 1 with low intelligence and language delay (Solama & Hipson, 2021).

National data from the Ministry of Health of Indonesia as many as 11.5 % of children under five in Indonesia have growth and development disorders. Survey data from the Indonesian Pediatrician Association (IDAI) shows about 5 to 10% of children experience development that is not in accordance with age, so it is necessary to carry out an early assessment of the development of toddlers (Iskandar & Indaryani, 2020). In Palembang City, of the 85 toddlers who attend kindergarten , 36.5% of toddlers experience abnormal growth and development (with special needs) (Purwasih, 2020).

One of the children with special needs is a child with autism spectrum disorder. The disorder causes children to be limited in communication, social interaction, and behavior. Therefore, it is necessary to address this issue in the individual planning and special education of parents of children with autism (Ismet, 2019). In contrast, autism in children is a pervasive developmental disorder that affects social interaction, communication, and behavior and is observed before age 3. Universal meaning means that the disease affects a person very widely, intensely and deeply. People with autism have different symptoms, hence the term GSA (autism spectrum disorder) for people with autism has emerged in recent years (Purwasih, 2020).

To avoid delays, Verbal Behavioural Intervention (VB), also known as a form of treatment for children with autism spectrum disorder, was administered. Verbal behavior interventions are related to applied behavior analysis, by asking children to learn language through words that correspond to what they want to convey (Kalalo & Yuniar, 2019). Then, for growth and developmental disorders, especially the development of cognitive knowledge, communication skills and social interaction, the researchers chose role-playing therapy, which uses game mode as an effective medium for exploring freedom and self-expression, developing cognitive knowledge, and communicating, skills and social interaction. Play allows kids to be creative and adapt to stressors (Mahdalena, Shodiq, & Dewantoro, 2020). Children can also adapt to their environment, play objects, time and space. Types of games that can be used for children with autism include puzzles, flashcards, role-playing games, and more (SITI, 2021).

In the study, researchers used a combined treatment regimen, speech therapy and occupational therapy, to train children with special needs to perform daily activities. I hope that children in the future will be more independent and
able to participate in various activities (Mud, Sham, & Ali, 2021). Speech and occupational therapy usually lasts 30-60 minutes at a time, depending on each child's needs and abilities. Play therapy, writing therapy, sensory integration therapy, social skills therapy, and behavioral therapy are specific to ergotherapy (Natalia, 2019). Play therapy methods, particularly the use of jigsaw puzzles and flashcards for children with autism, have been found to be effective in improving social interaction skills and reducing behavioral problems in children. Managed effectively using a combination of puzzles and flashcards, 20 minutes per session, twice a week for 12 weeks (Fadlillah, 2019).

Aminah's research (2021) also showed that treatment at the Rumah Mentari Foundation in Sidoharjo District, Pringsewu Regency included the application of therapists to children, designed to allow the therapist to focus on the problems the child was experiencing (Santosa, 2019). The treatment takes place in a small room with tables, chairs, play equipment, and follows a fixed schedule. Referring to theories on the use of play therapy, almost all children with autism were able to improve their social interaction with the environment after 3 months of play therapy.

Then Wahyudi (Mud et al., 2021) Think there are many types of constructive play such as match-unloading, match-making and free build. One form of play used in this study is constructive play, where children are free to use their imaginations (Sari, 2018).

Iskandar et al. (2020) found play therapy as a way to improve social skills in children with autism. Assessments of social interaction skills before and after play therapy revealed significant differences in social interaction skills in children with autism before and after play therapy. Associative play therapy found to be effective in improving social skills in children with autism (Setiawan, 2019) (Suci, 2020).

Then the results of the study in the SLB Autism Lab UM showed that cutting skills had an effect on fine motor skills in children with autism grade VIII, as indicated by an increase in the mean post-pre-test level.

The results of the (Palakua, 2020) showed that children with autism were able to overcome problems with putting on and taking off socks after receiving occupational therapy. While there are many improvements, it is very helpful for SLB teachers with an occupational therapy level to be able to practice these skills (Solama & Hipson, 2021).

Then based on late December 2021 at Nu_Kids Integrated Therapy (a reference center for the treatment of children with autism, which aims to develop the language skills and independence of children with autism so that they can become independent individuals and be able to have contact with normal children by the end of December) Preliminary study to be conducted in 2021). Overall, the number of children with autism being treated in the future is quite large, with an average of 50 children (ages 1-12) per month. The average child has difficulty connecting with other children; 1) Never or rarely makes eye contact; 2) Likes being alone, somewhat distant; 3) Difficulty expressing needs; prefers gestures or gestures over words; 4) Echoes (parrot/repetition) words or phrases, not normal speech); 5) does not respond to verbal cues; acts like a deaf person. Some of the therapies that speech therapists provide here are 45 minutes/session of speech therapy, 45 minutes/session of sensory integration therapy, and 45
minutes/session of occupational therapy. Occupational therapy focuses on activities for 45 minutes/session to train children's behavior (the child's ability to understand and correctly point to pictures or objects), allowing these skills to grow in behavioral development and gradually keep pace with age. Occupational therapy, one of which is play therapy, is a method by which therapists can overcome social interaction problems in children with autism through play, children develop and expand socialization, learn to overcome problems that arise, and increase moral and ethical values make out. Be kind, learn to distinguish right from wrong, and be responsible for what you do. Based on the data obtained, comparative study results and preliminary findings, the researchers were interested in "The effect of the combination of play therapy and speech therapy in NU_Kids Integrated Therapy 1 and 2 on the behavioral development of children with autism spectrum disorder (ASD)."

The purpose of this study was to analyze whether a combination of play therapy and speech therapy can effectively influence the behavioral development of children with autism spectrum disorder (ASD).

**RESEARCH METHOD**

This study uses a pre-experimental design because variables other than the independent variables affect the dependent variable. The study design used was a two-group pre-test design, i.e. two groups of respondents were observed/measured before treatment (treatment) and the development of respondents was observed after treatment (treatment) for more accurate results.

The treatments given were; 1) Group I = speech therapy only; 2) Group 2 = speech therapy combined with play therapy (index cards and puzzles). Continuous treatment for 3 months. This research activity was carried out at NU_Kids Integrative Therapy 1 and 2 sites.

The population in this study included all children with autism who regularly participated in NU_Kids Integrative Therapy 1 and 2 speech therapy. The sample collection in this study adopted a targeted sampling method. Targeted sampling is a method of designating a study sample based on a specific aspect. In this study, children with special needs (ASD) were considered; autistic individuals and families agreed to all prescriptions and treatments for the child following established procedures and schedules. The number of respondents for this study was 32 children. Data processing was performed with the aid of a computer using the statistical software SPSS for Windows version 17.0 and supported by the Microsoft Excel program. The data collected in this study were tested by univariate normality test (Shapiro-Wilk), paired difference test (Wilcoxon) and categorical correlation test (Spearman) and correlation test between variables (One Way ANOVA/One Way ANOVA). test) to analyze.
RESULTS AND DISCUSSION

a. Univariate Analysis
   1. Frequency Distribution of Group I by Autism Category

<table>
<thead>
<tr>
<th>Autism Category Group I</th>
<th>Autism Criteria</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light</td>
<td>1</td>
<td>2</td>
<td>12.5</td>
</tr>
<tr>
<td>Currenty</td>
<td>2</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>Heavy</td>
<td>3</td>
<td>11</td>
<td>68.8</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>16</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1 above shows that most of the children who were given only speech therapy treatment (Group I) had severe autism, namely 11 people (68.8 %).

2. Frequency Distribution of Group II Based on Autism Category

<table>
<thead>
<tr>
<th>Category II Autism</th>
<th>Autism Criteria</th>
<th>Amount</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Light</td>
<td>1</td>
<td>3</td>
<td>18.8</td>
</tr>
<tr>
<td>Currenty</td>
<td>2</td>
<td>4</td>
<td>25.0</td>
</tr>
<tr>
<td>Heavy</td>
<td>3</td>
<td>9</td>
<td>56.3</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>16</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 2 above shows that most of the children who were given combination treatment, namely combination speech therapy with play therapy (flash cards and puzzles) (Group II) had severe autism, namely 9 people(56.3 %).

b. Bivariate Analysis
   1. Normality test

For respondents in Group 1: Speech therapy alone (16 people) and Group 2: Combined speech therapy with play therapy (flash cards and puzzles) the normality test was carried out using the Shapiro – Wilk statistical method because the data had a small sample size. The results of the normality test are shown in;

<table>
<thead>
<tr>
<th>Data source</th>
<th>Group Treatment</th>
<th>Shapiro Wilk</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Development</td>
<td>Speech Therapy</td>
<td>0.000</td>
<td>Abnormal</td>
</tr>
<tr>
<td>Combined Speech Therapy</td>
<td>with Play Therapy</td>
<td>0.038</td>
<td>Abnormal</td>
</tr>
<tr>
<td>(flash cards and puzzles)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Decision-making:
2. Behavioral Development Difference Test

Hypothesis formulation:

H0: There is no difference in the behavior development of respondents before and after being given treatment

H1: There are differences in the behavior development of respondents before and after being given treatment

Decision-making:

- If sig count < 0.05, then H0 is rejected and H1 is accepted
- If sig count > 0.05 then H0 is accepted and H1 is rejected

The data looks at:

<table>
<thead>
<tr>
<th>Behavioral Development (Pretest and Posttest)</th>
<th>Wilcoxon Signed Ranks Test (asymp sig 2-Tailed)</th>
<th>Decision</th>
<th>Wilcoxon Signed Ranks Test (asymp sig 2-Tailed)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild Autism</td>
<td>K1 1,000</td>
<td>No difference</td>
<td>0.317</td>
<td>No difference</td>
</tr>
<tr>
<td>Moderate Autism</td>
<td>0.083</td>
<td>No difference</td>
<td>0.046</td>
<td>There’s a Difference</td>
</tr>
<tr>
<td>Severe Autism</td>
<td>0.046</td>
<td>There is a difference</td>
<td>0.014</td>
<td>There’s a Difference</td>
</tr>
</tbody>
</table>

From Table 5.4 it can be seen that;

For respondents in the Treatment (Speech Therapy Only) category (Group 1); a) a probability value of 1,000 for mild autism (significance > 0.05); b) a probability value for moderate autism 0.083 (significance > 0.05); c) autism weight probability value is 0.046 (significance < 0.05). Degrees were in the first group; only children with the severe autism category showed differences in behavioral development before and after treatment.

Among respondents who received speech therapy combined with play therapy (flashcards and puzzles) (group 2); a) the probability of mild autism was 0.317 (significance > 0.05); b) moderate autism The probability value of autism is 0.046 (significant < 0.05); c) The probability value of autism weight is 0.014 (significant < 0.05). Graduation took place in the second group; children with moderate and severe autism showed differences in behavioral development before and after treatment.
3. **ANOVA test**

a. **Average Behavioral Development of Groups I and II**

<table>
<thead>
<tr>
<th>Table 5</th>
<th>Behavioral Development Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data source</td>
<td>Group</td>
</tr>
<tr>
<td>Treatment</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral</td>
<td>Speech Therapy</td>
</tr>
<tr>
<td>Development</td>
<td>Speech Therapy combination Play Therapy (flash cards and puzzles)</td>
</tr>
</tbody>
</table>

From table 5.5 it can be seen that the average behavior development of groups I and II is different (Group I = 1.56 and Group II = 2.25).

b. **Variance Diversity Test**

Hypothesis;
H0 : the variance of the two groups is the same
H1 : the variance of each group is not the same

Decision-making:
- If sig count < 0.05, then H0 is rejected and H1 is accepted
- If sig count > 0.05 then H0 is accepted and H1 is rejected

<table>
<thead>
<tr>
<th>Table 6</th>
<th>Group Variance Variance Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data source</td>
<td>Group</td>
</tr>
<tr>
<td>Treatment</td>
<td></td>
</tr>
<tr>
<td>Behavioral</td>
<td>Speech Therapy</td>
</tr>
<tr>
<td>Development</td>
<td>Speech Therapy combination Play Therapy (flash cards and puzzles)</td>
</tr>
</tbody>
</table>

From table 6 it can be seen that the variances of groups I and II are homogeneous (same) (sig = 0.142 > 0.05 ; then H0 is accepted and H1 is rejected).

c. **Anova Test**

Hypothesis;
H0 : The difference in the behavior development of the two groups is the same
H1: The difference in the behavior development of each group is not the same

Decision-making:
- If F count > F table, then H0 is rejected and H1 is accepted
- If F count < F table, then H0 is accepted and H1 is rejected

| Table 7 | |
|---------| |
The Effectiveness of the Combination of Play Therapy and Speech Therapy on the Behavioral Development of Children With Autism Spectrum Disorder (ASD)

<table>
<thead>
<tr>
<th>Data source</th>
<th>Treatment</th>
<th>F Count</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behavioral Development</td>
<td>Speech Therapy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speech Therapy combination Play Therapy (flash cards and puzzles)</td>
<td>8,768</td>
<td>Significantly different</td>
<td></td>
</tr>
</tbody>
</table>

From Table 7 it can be seen that the inference results; Calculated F value = 8,768. The alpha value is 5% or 0.05, then Numerator = number of variables − 1, i.e. (2-1 = 1). Denumerator = number of cases − number of variables, i.e. (32-2 = 30). The F table value from the calculation above is 4,17 , which is, the calculated F value is in the rejection area (F arithmetic > F table), then H0 is rejected and H1 is accepted. The conclusion is that the combination of play therapy and speech therapy is very effective in influencing the behavioral development of children with Autism Spectrum Disorder (ASD).

The results of the data analysis are described in the discussion below;

1. **Univariate Analysis**

   Most children who received speech therapy alone (group 1) had severe autism, 11 (68.8%), followed by children who received speech therapy combined with play therapy (flashcards and puzzles) (2nd Group). group)) 9 (56.3%) had severe autism. This suggests that children with severe autism need speech therapy for communication impairment and behavioral development.

   This study is in line with Ismet (2019), which estimated 0.5-2.5% of children under the age of 18 with autism in developed countries, especially in Sweden with severe intellectual disability (severe autism). Speech therapy is considered very important for children with severe autism, as nearly all children with autism have difficulty speaking. Speech therapy can help children with autism develop their behavior.

   (Iskandar & Indaryani, 2020) It is also worth noting that one of the important roles of the speech therapist is to prioritize, design, and deliver therapy to meet the social communication needs of children that shape adaptive behavior. Speech therapists aim to enable children with autism to: initiate useful and functional activities with each social partner and social environment; understand verbal and nonverbal communication in social, academic, and community settings; communicate with each other to build friendships and Web; use and comprehend verbal and non-verbal communication, such as gestures and facial expressions, language or writing, signs or instructions, images and written or written text, for the perfect development of adaptive behaviour.

2. **Bivariate Analysis**

   a. **Normality test**

   The results of the Normality Test using Shapiro-Wilk showed that the sig values for the two groups were 0.000; 0.038, which are all < 0.05, it can be concluded that the research data is not normally distributed.

   b. **Behavioral Development Difference Test**
For respondents with Treatment (Speech Therapy Only) (Group I) category; a) Mild Autism probability value is 1,000 (significance > 0.05); b) Moderate Autism probability value is 0.083 (significance > 0.05); c) Autism Weight probability value is 0.046 (significance < 0.05). The conclusion is in Group I; Only children with severe autism category have differences in behavior development in pre and post treatment.

In respondents with Speech Therapy Treatment combination of Play Therapy (flash cards and puzzles) (Group II) category; a) Mild Autism probability value is 0.317 (significance > 0.05); b) Moderate Autism probability value is 0.046 (significance < 0.05); c) Autism Weight probability value is 0.014 (significance < 0.05). The conclusion is in Group II; children with Moderate and Severe Autism categories have

c. Differences in Pre and Post Treatment Behavioral Development.

The findings of this study are supported by Iskandar et al. (2020), who found that treatment success for people with autism can be achieved through a variety of approaches, including play therapy. Treatment is provided through special attention, training and education for children with autism. Allow autistic children to develop in communication and interaction with their peers. (Fernando, 2021) Speech therapy exercises have also been found to be effective in learning pronunciation and behavioral development for autistic students. The five-step combination therapy, in particular, promotes behavioral development, including: 1) The child's needs are identified when the child is enrolled in the autism school, either by observing the child, interviewing parents, or by studying the child's medical or treatment records. 2) Speech therapy, performed by professionals and teachers themselves. This concept shows the inclusiveness of the school, and the head teacher grasps the treatment that must be given to the children. The homeroom teacher not only provides materials, but also provides treatment. 3) Information therapy, also performed by a therapist, to activate the nerves associated with the child's vocalization. 4) Forms of play therapy; interaction with peers, at each recess and class time, which can give children a desire to be able to converse as friends; and interaction with the school environment, every Friday, such as playing puzzles Arrange flashcards and puzzles.

3. Anova Test

The conclusion is as follows; calculated F-value = 8,768. An alpha value of 5% or 0.05, then numerator = number of variables - 1, so (2-1 = 1), numerator = number of cases - number of variables, so (32-2 = 30). The F-table value calculated above is 4.17, that is, the calculated F-value is within the rejection range (F arithmetic > F-table), then H0 is rejected and H1 is accepted. The conclusion is that a combination of play therapy and speech therapy is highly effective in influencing the behavioral development of children with autism spectrum disorder (ASD).

The results of this study and (Ismet, 2019) They found that play therapy showed significant effects both before and after associative play therapy in children with autism. Children with autism have increased social interaction through traditional cublak-cublak suweng play. This can be seen in eye contact, children can play happily and overcome the social barriers of children with autism.
The results of this study are also consistent with Palakua (2020) who found that the role of parents and speech therapy (combined therapy) had a significant impact on the development of sock putting on and taking off behaviors in children with autism.

The results of research by (Fernando, 2021) It has also been shown that the treatment of children with autism at the Mutia Centre, a combination of language and behavioural therapy using the ABA approach (Applied Behavior Analysis), has made fairly effective progress by helping to develop communication skills and significantly improve resilience. Behavior.

CONCLUSION

Based on the results and discussion, the questions and research objectives can be answered, so it can be concluded that the majority of children who received speech therapy alone (group 1) had severe autism, 11 (68.8%), followed by older Most children receive combination therapy, where speech therapy is combined with play therapy (flashcards and puzzles). (Group 2) also experienced severe autism, 9 (56.3%). This suggests that children with severe autism need speech therapy to help them cope with the behavioral problems they are experiencing. The results of the Shapiro-Wilk normality test were used; the sig value for both groups was 0.000; since the data were not normally distributed, the next method to use was a nonparametric test. Differences in behavioral development using the Wilcoxon signed-rank test (asym sig 2-Tailed) showed that; 1) in the first group; only children with severe autism showed differences in behavioral development before and after treatment; 2) then in the second group group; children with severe and severe autism showed different behavioral development before and after treatment. The ANOVA test results showed that the calculated F table value was 4.17 and the calculated F value was 8.78, which were within the rejection range (F count > F table), then H0 was rejected and H1 was accepted. It was concluded that there were significant differences in language ability between the two groups, and the combination of play therapy and speech therapy was found to be highly effective in influencing the behavioral development of children with autism spectrum disorder (ASD).

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