Effect of Play Therapy With Puzzle On The Level Concentrations of Mental Retardation Children In SLB C Ruhui Rahayu Samarinda

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Abstract: Background: Mental retardation is understood as a form of limitations in functioning themselves with a below-average IQ of 70. One of the problems in children with mental retardation is difficulty in concentrating (concentration). Children have difficulty concentrating, fast switching, less responsive and less well in completing the task. This problem can be addressed through play therapy. Games that can be used as a therapy is therapy to play puzzle is an educational game designed to explore the potential of children, including the ability to concentrate. Method: Pre-Experimental Desigins with one group pre test and post test design. The sample in this study 27 children. Sampling using probability sampling with the kind of simple random sampling technique. The analysis is wicoxon. Results: The Wilcoxon test value ρ value 0.000 <α 0.05, which means that Ho was rejected and Ha accepted. These results indicate that there are significant play therapy with a puzzle on the level of concentration of mentally retarded children at SLB C Ruhui Rahayu Samarinda. Conclusion: Based on the results of this study concluded that there are significant play therapy with a puzzle on the level of concentration of mentally retarded children at SLB C Ruhui Rahayu Samarinda.

1 INTRODUCTION

Children with special needs are children with special characteristics. These children are usually different from ordinary children and do not always show mental, emotional or physical disabilities. One of the children with special needs often encountered in the community is a child with mental retardation, or is often familiar with other words tunagrahita. Spiritual regeneration is a term for mentally retarded individuals with limited intelligence capabilities, below the average IQ of 70 or below 70.

According to a World Health Organization (WHO) study in 2009, the number of children with mental retardation in the world accounts for 3% of the total population. Between 2006 and 2007, there were more than 80,000 people in Indonesia with low intelligence. This number increased rapidly in 2009 with 100,000 patients. In 2009, this increased by approximately 25% (Ministry of Health, 2009).

The prevalence of mental retardation is about 1% in a population. In Indonesia mental retardation is a big problem because 1-3% of the population of Indonesia suffers mental retardation, which means from 1000 population estimated 30 population suffers mental retardation with 80% light mental retardation, moderate mental retardation 12%, very mental retardation weight 1%.

Based on data recorded by the Directorate of Fostering PK-LK Dikdas East Kalimantan Province in 2011/2012 children who experienced mental retardation in East Kalimantan from elementary school to junior high school as many as seven hundred forty three children, while for data of children with mental retardation in Samarinda year 2011/2012, for elementary level recorded as many as one hundred sixty eight children and junior high level as much as sixty five children. So the total of mentally retarded children in Samarinda is two hundred and thirty three children.

Patients with mental retardation is very difficult to concentrate. This problem because children
experience difficulty in focusing, where the range of attention narrow and quickly switch, so less responsive in accepting the task and less well in completing the task. The intended concentration is to focus all the power of attention on a situation. In this concentration mental involvement in detail is necessary, so as not to pay attention to it (Sadirman, 2007). The more severe the degrees of retardation, the lower the ability to remember.

They have difficulty focusing on relevant stimuli during the learning process (Mary Beirne-Smith, R. F. 2003). To deal with problems in children mental retardation can be through therapy. Types of therapy that can be used in dealing with the problems of children with tunagrahita, among others, reading therapy, behavioral therapy, speech therapy, socialization therapy, music therapy, brain gym therapy, and play therapy. Play therapy can be used in sharpening the ability of children retardation concentration, through play activities all aspects of child development are developed so as to train children’s intelligence. One of the games that can be used as a therapy for children mental retardation that is playing puzzle therapy. Puzzle play therapy is an educative game designed to explore the abilities of children, including the ability of children to concentrate.

On December 3, 2015, the researcher conducted a preliminary survey to find the data of mental retardation children at SLB C Ruhui Rahayu. From the results of the preliminary survey in obtaining data of elementary school children from grade one to sixth grade amounted to forty-three students. Children who have mental retardation of forty children and three other children have autism. The result of interview with one of SLB teacher C Ruhui Rahayu said, do not provide special service of therapy in handling child of mental retardation. The schools only provide general subjects such as mathematics, Indonesian, IPA, and others. Subjects are matched to the grade level of the child.

Puzzle play therapy is expected to help overcome the problem of mental retardation child concentration. Therapy to play puzzle on improving mental retardation children concentration in SLB C Ruhui Rahayu Samarinda has never been done. Based on the above background, researchers interested to examine the “Influence of Puzzle Play Therapy Against Mental Retardation Concentration Children Level at SLB C Ruhui Rahayu Samarinda”.

2 METHODS

This study used experimental design of pre-experimental descendants using one group pre test and post test design to get more accurate result, because it can compare with the condition before given treatment.

This research was conducted at SLB C Ruhui Rahayu Samarinda. The population of mentally retarded children is 40 children who follow the education at SLB Ruhui Rahayu Samarinda with 10% precision then the sample according to the study amounted to twenty eight children. Sampling in this research using probability sampling method with simple random sampling technique.

3 RESULTS

Category Level Concentration Before Playing Therapy By Puzzle respondents first measured the concentration category scores. Here are the pre test results: Based on table 3.1 the results of the concentration level category before the play therapy with the puzzle of the number of 27 respondents who entered in the low concentration category there are nine children with percentage 33.3%, eighteen other children included in the category of moderate concentration with a

<table>
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<tr>
<th>Concentration Level</th>
<th>concentration before</th>
<th>concentration after</th>
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<tr>
<td></td>
<td>Frekuensi ( \Sigma )</td>
<td>Presentase %</td>
</tr>
<tr>
<td></td>
<td>Frekuensi ( \Sigma )</td>
<td>Presentase %</td>
</tr>
<tr>
<td>Low</td>
<td>9</td>
<td>33,3</td>
</tr>
<tr>
<td>Medium</td>
<td>18</td>
<td>66,7</td>
</tr>
<tr>
<td>High</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
<td>100,0</td>
</tr>
</tbody>
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<table>
<thead>
<tr>
<th>Variable</th>
<th>Nilai ( z )</th>
<th>P Value</th>
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<tr>
<td>Before Puzzle therapy</td>
<td>-4,623</td>
<td>0,000</td>
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percentages of 66.7%, and no children are included in the high category. The results of the data after being given play therapy was an increase in five children with moderate concentration category with the percentage of 18.5% and twenty two other children included in the high concentration category with the percentage of 81.5%. Wilcoxon test result with the value of \( \alpha = 0.05 \) got the value of \( Z \) equal to -4.623 with \( p \) value 0.000. Because the value of \( p \) Value <value of \( \alpha \), then \( H_0 \) is rejected, it means there is a significant change between the value of concentration level category before and after given playing therapy with puzzle at SLB C Ruhui Rahayu Samarinda.

4 DISCUSSION

Based on the data above shows before the treatment with puzzle with nine children included in the low category with the percentage of 33.3%, eighteen children entered in the category of moderate concentration with the percentage of 18% and no children included in the category of high concentration levels. After the play therapy with the puzzle there is an increase in concentration that is there are five children with medium concentration level with the percentage of 18.5%, high concentration level category there are twenty two children with percentage of 81.5%, and there is no children who fall into category low. This means that children who enter the category of low concentration levels before doing puzzle therapy is now increasing and included in the category of moderate or high concentration levels. So even with the category of moderate concentration levels before doing puzzle play therapy increased and included in the category of high concentration levels.

Mental retardation is a state of stalled or incomplete mental development, characterized primarily by the occurrence of skill constraints during development, affecting overall intelligence, such as cognitive, linguistic, motor and social abilities.

The American Association on Mental Deficiency (AAMD), defines mental retardation encompassing two major dimensions of adaptive behavior and intelligence. Mental retardation is defined as a condition in which general intellectual functioning below the normal average is accompanied by a deficiency or constraint in adaptive behavior that arises in the period of development.

Melly (2010) expresses the benefits of playing puzzles among other things, fine motor training (the ability of hand muscles and fingers), improves cognitive skills (ability to learn and solve problems), and improves social skills. Puzzles can train hand and eye coordination of the child to match the puzzle pieces and arrange them into one whole picture. Playing a puzzle requires perseverance, patience and takes time to think.

One of the problems with a child’s mental retardation is that it is distracted by his concentration because it is easily disturbed by the situation around him. Factors that affect concentration include anxiety, depression, anger, worry, fear, hatred and resentment, a noisy and messy learning environment, physical health condition, boredom for lessons or schooling. This is also what the child mentions in mental retardation. Concentration problems in child mental retardation can be handled by providing educational games. Landreth (2001) argues that playing as therapy is one of the tools used in helping children overcome the problem, because for children to play is a symbol of verbalization.

A puzzle game is an educational game that requires patience and persistence of children in assembling it. Some of the benefits of playing a puzzle are like improving thinking skills and getting kids to concentrate, training hand and eye coordination to match puzzle pieces and composing them into a single image, improving cognitive skills, and learning to socialize if one puzzle is played by two or more children.

Su’udi (2011) reveals that puzzle is an activity that is one of the tools that can mencerdaskan cognitive ability, so as to improve the imagination and creativity of logical thinking.

Researchers berwaysumi type of puzzle that is suitable for children mental retardasi is Jigsaw puzzle. Because this type of Jigsaw puzzle can be played in all ages. However, it should be noted in the provision of this puzzle must be considered at the level of ability of players, especially in children. Jigsaw puzzles provide benefits such as improving eye coordination, increasing motivation and concentration. If the puzzle game is played continuously slowly mentally the child will get used to be calm, diligent, and patient in accomplishing something.

Playing a puzzle will train the child’s memory of the image on the puzzle. Children will be memorized and trained to unite puzzle pieces easily to the right place. The satisfaction he gets when he finishes the puzzle is one of the
motivating generators to try new things for him. Match one color to another, or match one picture to another, the brain will release the hormone dopamine.

When placing the puzzle piece in the right position and completing the whole picture, it encourages the production of dopamine, a neurotransmitter in the brain that regulates mood and affects concentration and motivation. Dopamine is a neurotransmitter that forms in the brain and other organs. Neurotransmitter is a compound that delivers signals or stimuli between nerve cells with other cells. In the brain (central nervous system) dopamine has a role in regulating movement, learning, memory, emotion, pleasure, sleep, and cognition. So in the completion of the puzzle game, the child's brain is trained to stay focused concentrate on completing the game (Parenting, 2012). So with the therapeutic playing of a puzzle performed continuously will increase the concentration of mental retardation children.

4 CONCLUSION

From result of bivariate analysis got significant value 0.000 which mean there is difference of value of level category of concentration before doing play therapy with value of level category of concentration after doing play therapy. Judging from the result p value 0.000 <α 0.05 which means Ho rejected and Ha received. So it can be concluded that there is influence play therapy with puzzle to the level of mental retardation children concentration in SLB C Ruhui Rahayu Samarinda.

Based on the results of research conducted can be given some suggestions to related parties related to:

1. Expected to the principal or the head of the foundation for the development of children with special needs, especially in people with mental retardation to apply the therapy to play puzzle on certain days in school. For example 2 or 3x a week for ± 30 minutes.

2. For parents who have mentally retarded children the results of this study can be applied at home as a kind of educational games and train children's motor and help children in centralizing perhatiannya.

3. For the next researcher the results of this study can be used as refrensi materials and if you want to do the same research with this research can use the control or comparison group.

5 ACKNOWLEDGEMENT

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