The Effect of Origami Play Therapy on the Social Skills of Children with Intellectual Disabilities

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Abstract

Children with intellectual disabilities are individuals with intelligence below average, generally have barriers to social skills. Therapy to improve children's social skills is by playing origami therapy. This study aims to determine the effect of origami play therapy on the level of social skills in children with intellectual disabilities. The study was conducted in February 2023. Experimental research design with one group pretest-posttest approach. The total population is 89 students. The sampling technique through purposive sampling obtained 30 samples, data analysis with the Wilcoxon test. The results of social skills research before therapy most respondents had less social skills as much as 19 (63.3%), while after therapy, social skills increased, namely more than half 13 (43.3%) respondents had good social skills. In the statistical test, the result is a $\rho$ value of 0.000, meaning that there was an effect of origami play therapy on the level of social skills in children with intellectual disabilities at Special Education School C Tulungagung. Origami play therapy carried out in groups will cause social interaction between children and peers so that they can improve children's social skills. It is recommended for educators to implement scheduled play therapy so that children's social skills are better.

Keywords: Children with Intellectual Disability, Origami Play Therapy, Social Skills


INTRODUCTION

Indonesia is one of the fourth most populous countries in the world. In 2017 the total population of Indonesia reached around 261,890,900 people (BPS, 2018). The population in Indonesia is very diverse such as ethnicity, race, religion. In addition, Indonesia also not only has a healthy population, but there are also Indonesian residents who experience disabilities. According to Law Number 8 of 2016 concerning Persons with Disabilities, a person with a disability is any person who experiences physical, intellectual, mental, and/or sensory limitations for a long period of time who in interacting with the environment can experience obstacles. Disability is divided into several types including blind, deaf, speech impaired, hearing impaired, hearing impaired, barrel blind, double tuna, and mentally impaired.

Intellectual disabilities is a disorder that occurs in individuals who arise during the development period characterized, experiencing limitations in intellectual function, limitations in adaptive functions such as being unable to meet every developmental and sociocultural standard to become independent and have social responsibility, and limitations in carrying out daily activities. Intellectual impairment, divided into four groups based on adaptive function limitations, among others are mild, moderate, severe, and profound (Wulandary, et al 2018). Hallahan, Kaufman and Pullen (2014), argue that 75% of individuals with intellectual disabilities show social functioning problems.
There are various types of social skills problems known as acquisition deficits, namely children do not know how to do social skills properly, while performance deficits include that children know how to do social skills but do not show correctly these behaviors (Gustaven 2017). The prevalence of children with disabilities in Indonesia based on the 2018 Riskesdas report, children with disabilities amounted to 265,469 children. When viewed per age range, the majority of disabilities are in the range of 15 to 17 years, with a percentage of 4.2%. In East Java Province, it was reported that people with disabilities aged 5-17 years amounted to 34,219 children. While in Tulungagung regency alone there are 1,171 people with disabilities, where the most people with disabilities are mentally impaired with a total of 243 people (BPS JATIM 2019).

The results of Kusumawasti & Erawati's research, (2014) conducted on 170 respondents of parents who have children with intellectual disabilities found that children with intellectual disabilities were unable to carry out social interaction by 53% while children who were able to carry out social interaction as much as 47%. Based on observations made on 30 students at Special Education School C Tulungagung, these students experienced obstacles in social skills such as ineffective communication, tended to be engrossed in themselves, lack of socialization, and rigid with new people and new environments.

The impact of children with intellectual disabilities who have low social skills can cause children to be less able to establish relationships with others, tend to have unpleasant relationships, get negative feedback, have problems with teachers, parents, and be shunned by their friends (Diah Wati, et al 2016). When social skills are limited, individuals will develop low self-confidence, feel ashamed, unhappy, dissatisfied and lonely such as experiencing an inability to join a group and solve problems well (Ozben, 2013). Factors that cause personal self-skills of children with intellectual disabilities difficult to make social adjustments in certain environments, activities, or work are caused by social factors that are less developed as a result of obstacles in their intellectual aspects (RY Ardha 2017).

From this explanation, it can be concluded that social skills are an important aspect of their lives. Therefore, social skills must be developed to prevent poor treatment from the surrounding community. Solutions that can be provided to develop social skills of children with intellectual disabilities are one of them by doing play therapy (D Agustina, 2019). Play therapy is a form of children's play, where they can relate to others, get to know each other, so they can express their feelings according to their needs (Yora 2019). There are two types of games, namely, first active play: playing observing / investigating (exploratory play) for example children will observe games, playing construction (construction play) for example, playing origami can be formed various kinds such as planes, birds, boats, etc., playing drama (dramatic play) for example playing, physical play (Physical play) for example jumping rope. Both play passively: for example by seeing or hearing (Nani, 2018). Of the several types of games, researchers are interested in choosing origami games.

Playing origami is an activity of folding paper so that it forms something, such as the shape of an animal, flower or means of transportation (al-ihsan et Al, 2018). Origami can be used as a medium of teaching, communication with children, improving children's social skills because it can be done together (Rahmani, 2014). By playing origami can foster effective communication in children, cooperation, solving problems, strengthening cognitive abilities, training patience, perseverance, and social interaction of children. Referring to the explanation, it is very important to conduct research that aims to improve the social skills of children with intellectual disabilities through the method of origami play therapy carried out in groups with peers.

**METHOD**

This study used a pre-experimental design with a one group pretest-posttest design. This plan seeks to reveal causal relationships by involving one group of subjects. The group of subjects was observed before treatment, then observed again after treatment. Causal testing is
done by comparing the results of the pretest with the posttest. The design of the research is shown in Figure 1.

![Figure 1](image)

**Figure 1.** Pre-experimental design with a one group pretest-posttest design

O1 = Measurement of social skills before origami play therapy  
X = Origami therapy  
O2 = Measurement of social skills after origami play therapy

The population of this study was all children with intellectual disabilities in Special Education School C Tulungagung totaling 89 students at elementary, junior high, high school levels. The sample selection in this study used purposive sampling techniques and obtained 30 students of Special Education School C Tulungagung who met the inclusion and exclusion criteria. As for the inclusion criteria, namely, children with mild and moderate intellectual impairment. While the exclusion criterion is respondents who are not present 3 times /more when giving play therapy.

In collecting data used for research measuring instruments is an observation checklist sheet which includes 10 indicators to measure students' social skills. The measurement criteria are a minimum value of 10 and a maximum value of 30. The higher the respondent's score, the better his level of social skills.

This research was conducted in groups for 1 week starting from February 20-27, 2023 at Special Education School C Tulungagung. Each meeting is divided into 2 sessions. 15 children in the first session and 15 children in the second session. Each session is 30 minutes long. The stage in this study is the first time researchers collect pre-test data by observing the level of social skills before play therapy, followed by giving therapy, after that researchers collect post-test data on social skills of children with intellectual disabilities after therapy. Furthermore, the data were analyzed using the Wilcoxon test to determine the effect of origami play therapy on social skills in children with intellectual disabilities at Special Education School C Tulungagung.

RESULTS AND DISCUSSION

**Social Skill Level of Children with Intellectual Impairment Before Origami Play Therapy**

Based on Table 1, it can be interpreted that most 19 (63.3%) respondents had a low level of social skills before the intervention of playing origami therapy. Social skills are one aspect of emotional intelligence needed for social interaction in order to adopt moral values from culture and society, including honing interactions with older, younger, and peers (Nugraini & Ramdhani, 2016). In children with intellectual disabilities they have disorders or weaknesses in thinking or reasoning. This lack of ability results in their learning ability and social skills being below average. (Pieter, Herri Zan, 2017).

<table>
<thead>
<tr>
<th>Social Skills</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>6</td>
<td>20.6</td>
</tr>
<tr>
<td>Enough</td>
<td>5</td>
<td>16.7</td>
</tr>
<tr>
<td>Less</td>
<td>19</td>
<td>63.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100 %</strong></td>
</tr>
</tbody>
</table>

According to the results of research conducted by Hallahan, Kaufman and Pullen (2014) found that 75% of individuals with intellectual disabilities show social functioning problems.
The results in this study are in line with the theory above because in this study it was found that most respondents had a less level of social skills. This is because children do not know how to do the right social skills. Children with intellectual disabilities tend to have slower social skills so support is needed from people around them to make children socialize better.

**Social Skill Level of Children with Intellectual Impairment After Origami Play Therapy**

Based on table 2, it can be interpreted that almost half of the respondents, namely 13 (43.3%) respondents, had a good level of social skills after the intervention of playing origami therapy.

**Tabel 2. Distribution of Social Skills of Children with Intellectual Disabilities After Origami Play Therapy**

<table>
<thead>
<tr>
<th>Social Skills</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good</td>
<td>13</td>
<td>43.3</td>
</tr>
<tr>
<td>Enough</td>
<td>10</td>
<td>33.3</td>
</tr>
<tr>
<td>Less</td>
<td>7</td>
<td>23.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100 %</strong></td>
</tr>
</tbody>
</table>

Therapeutic activities that can be given to improve the social skills of children with intellectual disabilities are one of them with origami play therapy. Playing origami is an activity of folding paper so that it forms something, such as the shape of an animal, flower or means of transportation (al-ihsan et Al, 2018). The art of paper folding is an art that is very suitable for children because origami trains children's hand skills. Also neatness in creation. In addition, children will get used to creating new things or innovations. Origami can also be used as a medium of teaching, communication with children, improving children's social skills because it can be done together (Rahmani, 2014).

The theory is in line with research conducted by researchers. Evidenced by the data obtained, the level of social skills of respondents increased after being given origami play therapy which was carried out in groups. Almost half of the respondents had a good level of social skills after being given origami therapy. Most children are able to be active in interacting with peers who are inside and outside the classroom independently, children are more active when playing together with their friends.

**The Effect of Origami Play Therapy on the Level of Social Skills in Children with Intellectual Disabilities**

Based on table 3, it was found that children's social skill levels increased after giving origami play therapy, namely almost half of the total respondents had a good social skill level category as many as 13 (43.3%) respondents.

**Tabel 3. Distribution of social skill levels of children with intellectual disabilities Before and after the administration of origami play therapy.**

<table>
<thead>
<tr>
<th>Social Skills</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>%</td>
</tr>
<tr>
<td>Good</td>
<td>6</td>
<td>20,6</td>
</tr>
<tr>
<td>Enough</td>
<td>5</td>
<td>16,7</td>
</tr>
<tr>
<td>Less</td>
<td>19</td>
<td>63,3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100 %</strong></td>
</tr>
</tbody>
</table>

Based on table 4.4 Statistical test results using the Wilcoxon Sign Rank Test obtained P value < α or 0.000 < 0.05. That is, there is an influence of origami play therapy on the level of social skills in children with intellectual disabilities at Special Education School C Tulungagung.
Social skills are related to the ability to interact with others. According to Wijanarko & Setiawan, (2016), the condition of children greatly affects the level of social skills. Children with mild intellectual impairment tend to have a higher level of social skills than children with moderate intellectual impairment. This is because children with mild intellectual impairment have a higher IQ compared to children with moderate intellectual impairment (Pieter, Herri, Zen, 2017). To be able to improve children's social skills by being given origami play therapy. Origami playing can be done individually but can also be done in groups or together. This origami art is done together so that it will improve interaction and communication as well as approaches between teachers and children (Wulandari, 2013). Simple paper folding activities can help improve hand and eye coordination while strengthening cognitive abilities (Ma'as, 2022).

The above theory is in line with the results of research conducted by researchers that children with mild intellectual impairment tend to have a higher level of social skills than children with moderate intellectual impairment. This is because children with mild intellectual impairment have a higher IQ compared to children with moderate intellectual impairment. And with the provision of origami play therapy in groups the level of children's social skills can increase because in addition to the interaction between peers and therapists, in origami games children are also taught to follow directions, practice patience, work together with groups which is part of social skills. From the observations made by researchers before origami play therapy, most of the children's social skill levels were in the less category. Children are less responsive when friends need help, cannot control emotions, are more engrossed in themselves, and some only join play with groups of friends they already know. Meanwhile, after group play therapy for 6 consecutive days, the child's social skill level increased with children being more responsive if friends need help, can calm friends if friends cry, pay attention when friends talk, can give information to friends with directions, do not fight for toys with friends, and children begin to dare to join play with groups of friends they don't know. Children are more active in interacting independently and with direction.

The results of this study are in line with research conducted by Wulandari D (2018) on children with intellectual disabilities, it was found that before group play therapy, most children with intellectual disabilities had poor social adaptation with an average value of 4.9. Meanwhile, after the intervention, children's social skills improved with an average value of 6.67. Elda May Yora (2019) in her research also stated that before the play therapy intervention, most children had obstacles in social adaptation, while after the intervention most children experienced an increase in social adaptability through play therapy carried out in groups. This is in agreement with M. Satriadi and Farida (2018) in their research stating that play therapy can stimulate children to be active in socializing, because in play therapy there is a sequence of steps to socialize. Children's social skills can be formed through sharing, telling stories, communicating, expressing feelings and the encouragement to discuss and cooperate with peers (Riskayani, et al, 2020).

Based on this study, it is proven that origami play therapy carried out in groups can improve children's social skills. This is because through origami therapy carried out in groups will cause interaction, communication, discussion and cooperation between group friends so that children's social skills can improve. It can be concluded that origami play therapy carried out in groups has a significant influence on the level of social skills of children with intellectual disabilities, so this therapy can be used as an alternative method used in improving the social

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Tabel 4. The results of the Wilcoxon sign rank test analysis of social skills of children with intellectual disabilities before and after origami play therapy

<table>
<thead>
<tr>
<th>Z Score</th>
<th>-3.945b</th>
</tr>
</thead>
<tbody>
<tr>
<td>P Value</td>
<td>0.000</td>
</tr>
<tr>
<td>A</td>
<td>0.05</td>
</tr>
</tbody>
</table>

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skills of children with intellectual disabilities. It is recommended for educators to implement scheduled play therapy so that children's social skills are better.

CONCLUSION
Based on research conducted by researchers, it can be concluded that origami play therapy has a significant influence on the level of social skills of children with intellectual disabilities. Where there is an increase in the level of social skills of children after 6 days of play therapy carried out in groups. Origami therapy carried out in groups will cause social interaction, communication, discussion and cooperation between group friends so that it can improve children's social skills.

RECOMMENDATION
For the next researchers, it is expected to re-research social skills by raising different variables and different environments, to find out and compare which methods are more effectively used to improve social skills. In addition, it is also recommended to ask for help from teachers to accompany and assist when conducting research to make it easier to collect data. Based on recommendations from researchers to the Education Institute, this research can be used as a library reference material as an example for future researchers. For educational institutions to complete books related to improving the quality of nursing services, especially in child nursing, so that children's nursing references are wider and many references are the latest. The use of origami play therapy can be used as an alternative in the selection of effective learning methods to improve the social skills of children with moderate and mild intellectual disabilities.

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