

# PLAYING THERAPY CAN REDUCE POST TRAUMATIC STRESS DISORDER (PTSD) IN POST-EARTHQUAKE CHILDREN

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## ARTICLE INFO

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## ABSTRACT

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Earthquakes lead to Post Traumatic Distress Disorder (PTSD), which is psychological stress trauma after a disaster. Management of PTSD in children is playing therapy. This study aimed to determine the effect of Playing Therapy on Post Traumatic Stress Disorder (PTSD) in children aged 7-12. This research was an experimental research with one group pre-test and post-test design. Thirty-five respondents had PTSD symptoms after the earthquake in Malunda, Majene. The research instrument used was a questionnaire. This study found a significant decrease in PTSD, with p-value = 0.001 = 0.05. It can be concluded that playing therapy affected decreasing Post Traumatic Stress Disorder (PTSD) in children aged 7-12 years who were the earthquake victims in Mekkatta Village, Malunda District.

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## KEYWORDS

*Playing Therapy, Post Traumatic Stress Disorder, earthquake, Children.*

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## **INTRODUCTION**

Friday, January 15, 2021, West Sulawesi was rocked by an earthquake measuring 6.2 on the Richter Scale with the epicenter of the earthquake in Majene and Mamuju districts. Aftershocks also often repeat on a smaller scale (Geological Agency, 2021). The disaster caused residents to evacuate to emergency tents that were fully stocked, and some to the houses of their closest relatives who were not affected by the disaster, so that psychologically it was needed little by little to raise the enthusiasm of the community, especially the enthusiasm for learning for children as a result of the natural disaster.

Disasters are natural events that can happen at any time. Indonesia is a country that is very vulnerable to natural disasters. Be it natural disasters, or disasters caused by human-made damage (Widyastuti et al., 2019). Disaster events that often occur are earthquakes, fires, hurricanes, tsunamis, landslides, volcanic eruptions, flash floods, droughts, etc.

The post-earthquake disaster was followed by psychological trauma for both adults and children (Saturi, 2021). After the earthquake, victims find it difficult to distinguish aftershocks by using vibrations like a large vehicle passing, so they are worried that a bigger aftershock will occur. So that the impact of disasters does not become large on children, it is necessary to focus on handling them to be able to overcome them (Humble et al., 2019). Viewed from the psychological aspect, the condition of children is vulnerable to psychological disorders caused by traumatic memories when a disaster occurs which is called Post Traumatic Stress *Disorder* (PTSD) (Pratiwi, 2017). If not handled properly, the impact will be felt until the child reaches adulthood. PTSD can be cured if it is detected immediately and gets the right treatment (Widyastuti et al., 2019).

Handling PTSD in children is different from the prevention carried out in adults, for children several approaches used are play therapy models (Handoyo et al., 2020). Where play therapy is a therapy that can help children when disaster trauma occurs, reduce sadness and divert problems experienced by playing (Pramardika et al, 2020). Play therapy is used to express feelings, make peace with emotional conflicts, increase self-awareness, reduce anxiety, and increase self-esteem (Rizkia, et al., 2020).

The results of other similar studies also revealed that coloring play therapy is effective in reducing hospital stress for school-age children. Playing drawing and coloring therapy is considered more suitable because it uses a relaxation-based approach model compared to singing game activities, marbles and snakes and ladders are games based on the happiness method. Based on this background, the researchers were interested in knowing how the

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influence of play therapy on post-traumatic stress disorder (PTSD) in post-earthquake children (Lailiyati, 2018).

### METHOD

This research was conducted in Mekkatta village, Aholeang and Rui hamlets, Malunda district. The data collection process in this study was carried out from June 2021 to July 2021. This study focused on the population of school age children 7-12 years old in Mekkatta Village, Malunda District, namely 35 school children from the Aholeang and Rui refugee posts in April 2021 with the total sampling method.

The design in this study was a one group pre-test post-test design. The independent variable is play therapy intervention, especially drawing and the dependent variable is PTSD. PTSD was measured using the Strengths and Difficulties Questionnaire (SDQ). Filling out the questionnaire was done by first providing an explanation of the purpose and benefits of the research, after that the respondents were asked to fill out informed consent. In this study using statistical analysis with the paired T-Test test method, where the analysis process looks at changes in variables before being given an intervention and after being given an intervention with a significance level used the value of  $\alpha = 0.05$  using the SPSS 16 application.

### RESULTS AND DISCUSSION

Table 1. Characteristics of respondents based on age and gender in school-age children (7-12 years) after the earthquake in Aholeang and Rui hamlets, Malunda sub-district.

Characteristics	Frequency (f)	Percentage (%)
<b>Age</b>		
7 years	8	22,9
8 years	6	17,1
9 years	6	17,1
10 years	6	17,1
11 years	3	8,
12 years	6	17,1
Total	35	100.0
<b>Jeniskelamin</b>		
Male	15	42,9

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Female	20	57,1
Total	35	100.0

Table 2 . Effect of Play Therapy with a decrease in the level of Post Traumatic Stress Disorder (PTSD) in children aged 7-12 years who are earthquake victims in Mekkatta Village, Malunda District.

Variablel	category	N	Mean	Mean Difference	Uji <i>Normalitas Kolmogorov-smirnov</i>	CI 95%		<i>P value</i>
						upper	Lower	
PTSD	Pre	35	.5.886	.667	1.94	-4.530	-7.241	.000
	post	35	.10.286	.668	1.74	-8.928	-11.643	

From the results of the statistical test results of the paired T-test above. The results obtained are p value of  $0.001 < 0.05$  which means that there is an effect of Play Therapy with a decrease in the level of Post Traumatic Stress Disorder (PTSD) in children aged 7-12 years who are earthquake victims in Mekkatta Village, Malunda District. Based on data on the characteristics of respondents on the sex and age of school children (7-12 years) after the earthquake in Aholeang and Rui Hamlets, Malunda District, it shows that there are 8 respondents aged 7 years and 6 people aged 12 years, and at least 11 years old. year as many as 3 people. In this study, it was dominated by 20 girls (57.1) and 15 boys (42.9).

This study is in line with research conducted by Triasari et al., (2020), who examined the provision of play therapy to reduce traumatic stress in children affected by the earthquake in Lombok, concluding that age is an important factor in children's understanding of disasters. In this study, more respondents were male than female, as well as the results of research conducted by Rusmana et al., (2020), also more respondents were male.

The problem with PTSD is a disorder in the form of anxiety in a person that arises after an event that is considered to be life-threatening and physical. The results shown in table 2 show that the description of PTSD before and after the pretest result is .624 and the post-test result is .942 with a value of  $= 0.05$ . The obtained value of  $\text{sig} = .942 > = 0.05$ . It can be seen that in the pretest and posttest the sig value is greater than the value of , meaning that the distribution of the data is normal. In both data analysis, it can be concluded that all data are normally distributed.

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The treatment model for victims who experience PTSD, especially children, the approach taken is more using the model by playing, or also known as play therapy. Giving therapy to children with PTSD is considered more effective when using play therapy (Jiggetts et al., 2021)

In the play therapy process, what is used is a drawing game that can be done directly in starting the topic (Lailiyati, 2018). This is considered to help the child to feel more comfortable in dealing with the problem of his traumatic experience.

Play therapy is an alternative to providing interventions that are quite effective in helping to relieve PTSD symptoms of disaster victims, especially in children. Giving this therapy can be given a variety of choices of types of games and also can easily adjust the game to the conditions of the group according to the target (children) of disaster victims and the surrounding environment (Rizkia, et al., 2020).

Drawing and coloring is play therapy can provide opportunities for children to express feelings freely and therapeutically. Children who get therapy are able to express what they feel at that time through pictures or paintings. By drawing or giving color to the picture, you can respond to the pleasure of the child, because school-age children are basically very imaginative and active in the process of their daily activities. In addition, even though children are still undergoing treatment in hospital, they can still continue to develop their fine motor skills (Pertiwati et al., 2021).

In this study, there was a decrease in the percentage of PTSD levels before and after giving playing therapy drawing and coloring. The PTSD before giving play therapy drawing and coloring was -5,886 while post trauma stress disorder after giving play therapy was -10,286 the average difference between post trauma stress disorder before and after giving play therapy was 4.4.

The effect of play therapy on reducing PTSD in children aged 7-12 years who were earthquake victims in Mekkatta Village, Malunda District, found a p value of 0.001 which was smaller than 0.05 (p value  $0.001 < 0.05$ ) which showed that there was an effect of Play Therapy. with a decrease in the level of Post Traumatic Stress Disorder (PTSD) in children aged 7-12 years earthquake victims in Mekkatta Village, Malunda District.

Play therapy coloring pictures is considered one type of effective play therapy that can help children change behavior in receiving hospital care (Suparto, 2013). In giving this coloring play therapy, children can express their feelings, thoughts, imagination, and can develop children's creativity. Through playing activities, coloring pictures is expected to

make children more comfortable and happy and problems of stress and tension can be overcome (Rizkiya, et al., 2020).

This is in line with the results of research by Rusmana et al, (2020) using the literature review method concluded that from the process of experimental studies (pre and posttest) that were carried out and provided interventions on 10 patient samples, the results obtained were that by using image coloring therapy as a game therapeutic can reduce stress, anxiety, and means of communication in children, and the results obtained in 8 patients showed positive behavioral changes after the intervention.

## **CONCLUSION**

Based on the results of research that has been carried out by researchers, it can be concluded that from 35 children aged 7-12 after the earthquake in Aholeang and Rui hamlets, Malunda sub-district, there were 20 girls (57.1) and 15 males ( 42,9) The picture of PTSD before play therapy is that it has a lower media value (medium value) than after play therapy. There is an effect of Play Therapy with a decrease in the level of Post Traumatic Stress Disorder (PTSD) in children aged 7-12 years who are earthquake victims in Mekkatta Village, Malunda District.

Play Therapy drawing and coloring is an activity that is very suitable for school age children, because drawing and coloring is a fun activity, besides that drawing and coloring activities can give children skills and patience.

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