

## Research Article

# The Role of the Teacher in Reducing Post Disaster Trauma in Early Childhood

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**Abstract.**

Natural disasters often occur in Indonesia, taking a toll. It is undeniable that anyone can become a victim of natural disasters, including early childhood. One of the impacts caused by the victim is a traumatic feeling that can occur at any time. Early childhood education teachers need to have a role as counselors in helping children who experience symptoms of trauma. Teacher skills are needed in aspects of learning in schools. This paper intends to reveal the role of teachers in reducing trauma after natural disasters in early childhood. The results of community empowerment through group play therapy training then carried out a pre-post test. The results showed that there were differences in knowledge related to the group play therapy method before and after.

**Keywords:** group play therapy, post disaster trauma, early childhood teacher

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## 1. Introduction

Children around the world are affected by natural disasters, including hurricanes, floods, tornadoes, earthquakes, forest fires, landslides and sandstorms, winter and severe storms, heat waves, volcanoes and tsunamis [1] West Java is on the path of tectonic earthquakes because the base of the earth that forms the West Java mainland is part of the Eurasian plate that collides with the Indo-Australian plate. There are three faults that stretch across West Java, namely the Cimandiri Fault, the Lembang Fault, and the Baribis Fault. Earthquake Natural Disasters are often one of the disasters that often occur in Indonesia. The path traversed by the Lembang fault in Lembang District is a densely populated and potentially dangerous residential area. One of the potential natural disasters in West Java is precisely in a densely populated area in the northern part of Bandung City [2]. The presence of fault activity in the Lembang Fault can cause

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earthquakes. The Regional Disaster Management Agency (BPDB) of West Bandung Regency reported that there had been a landslide in the Lembang sub-district, precisely within a radius of about three kilometers from Lembang Square or from a number of tourist destinations in Lembang. The impact of this landslide is damage to residential houses, damaged roads and buried soil and rocks that cause road closures. In addition to environmental impacts, there are also impacts for early childhood, namely the trauma they receive after the disaster.

Based on an interview with the association of early childhood education teachers (read: HIMPAUDI) management in the Lembang sub-district on October 29, 2019, several problems were found, including: lack of teacher knowledge about post-disaster therapy, lack of skills in making post-disaster therapy activities, lack of ability in compiling steps for post-disaster therapy activities, and teachers did not know about group play therapy and the media used in the therapy.

One of the efforts to overcome trauma in children is group play therapy. Play therapy is a way of helping troubled children cope with the difficult events they face [3]. Play is used as a medium of communication because it is the way children understand their world. Play therapy is used in therapy by both therapists and clinicians as a means to help children deal with their emotional and behavioral problems[4].

## 2. Trauma And Post Traumatic Stress Disorder

Trauma is a serious physical or emotional event that causes substantial physical and psychological damage to a person over a relatively long period of time [5] [6]. While psychological trauma in psychology is defined as severe and sudden anxiety due to events in a person's environment that exceeds the limits of his ability to survive, overcome or avoid. In addition, trauma is an emotional condition that develops after an unpleasant, sad, frightening, worrying and upsetting traumatic event, such as: rape, war, family violence, accidents, natural disasters and certain events that make the mind depressed [7]. Psychic trauma occurs when a person is faced with a stressful event that causes a sense of helplessness and is felt to be threatening. A common reaction to traumatic events and experiences is to try to remove them from consciousness, but the image of the event remains in memory.

Trauma in this case is called post-traumatic stress disorder (PTSD), which is a psychological disorder that occurs and appears after a disaster occurs and is more dangerous than the stress experienced during a disaster [8]. If it is not detected and left untreated,

it can lead to serious medical and psychological complications that are permanent in nature which ultimately interfere with the social life and work of the sufferer [9]

Horrible events experienced by individuals become memories that decorate the network of emotional structures. These symptoms are a sign that the amygdala has been overstimulated, forcing a vivid memory of an event to continuously penetrate consciousness. Any traumatic event can instill triggering memories in the amygdala, for example: surviving a sinking ship, bombing, fire, earthquake, being robbed, raped, and so on [10], [11]. Among all these events, events such as surviving a sinking ship, rape and robbery tend to cause Post Traumatic Stress Disorder (PTSD) in individuals compared to other dangerous events [11][12][10]. The reason is that in these incidents (rape and robbery) only individuals are the objects of violence, while in other violent incidents (eg fires and earthquakes) many people are the objects.

Children tend to be more susceptible to PTSD than older people. This is based on the fact that children are less capable of dealing with danger than their parents. In other words, the younger a person is, the less likely he is to be able to deal with danger, and the more likely he is to develop PTSD.

Furthermore, what drives PTSD is fear conditioning (conditioning of fear [11], namely conditioning something that was not initially feared into something scary for the individual. This fear conditioning is done by adults to children. For example, a child a two year old who is afraid to see a cat because he has been scratched by a cat. After that event, parents always scare their children by showing a cat, or when their child hears a cat's voice. These ways are conditioning fear in children, which in the end the child will be afraid to hear the cat's voice, let alone see the cat.

When related to the previous explanation with a behavioristic view, traumatic behavior is formed through learning experiences, especially fear conditioning carried out by the environment. Individual behavior is the result of his experience [13], and thus the traumatic behavior experienced by individuals is the result of learning or the product of his experience. Therefore, to eliminate traumatic behavior or other misbehavior, it is also eliminated through relearning.

## 2.1. Techniques and procedures in play therapy

There are many techniques that can be used for play therapy, including:

1. Symbolic play techniques are games that symbolically allow children to express their emotional life through play

2. Play techniques using natural media [14] revealed that play therapy can be performed on children from all countries using sand, stones, palm leaves, snow or ice crystals. This is considering that natural materials have meaning for children and have therapeutic value
3. Drawing and art techniques According to Shaw [15] painting by hand has a therapeutic function and creates catharsis. The finger painting could project and express fantasy and free association [16]
4. Storytelling, role playing, and imagery techniques Removing inner conflicts, introducing healthier ways of adaptation, with the aim of generating insight, instilling values and problem-solving skills.
5. Board games Suitable for children in the latent period to develop achievement, competence, mastering the environment, and self-esteem.
6. Electronic techniques electronic games can be a tool to develop problem solving skills, control aggression, improve thinking skills, cooperation and interpersonal values

## 2.2. Procedure in play therapy

In play therapy the application of the client-centered concept can be carried out on individual clients as well as groups, so that the forms of child-centered play therapy and child-centered group play therapy are known. In addition, with the orientation of time efficiency, play therapy is developed in short term duration, but in critical or traumatic cases requiring more frequency, a short term intensive form is designed [17]). In order for the implementation of play therapy to be more effective, filial therapy was developed by Landreth [17] for parents, for 10 weeks the parent-child relationship was strengthened through didactic and dynamic components. Parents help in introducing simple concepts and methods related to disaster mitigation as well as the delivery of Al-Quran and hadith and mahfudzot related to mitigation which are mixed through discussion and storytelling methods and interesting media so that children feel happy and can convey ideas and ideas related to mitigation comfortably and create meaningful learning [18]. Parents gain skills regarding child-centered play therapy such as reflecting on feelings, showing acceptance, and setting appropriate boundaries. This therapy provides emotional support for parents and develops healthier parenting skills. Currently, play therapy is required to consider cost-effectiveness, be more goal-oriented, and limit therapy time. Thus play therapy therapists develop research on short term play therapy in order to

be able to prove the effectiveness of play therapy as a rhythm for children based on empirical evidence and also to refute the notion that play therapy requires a long-term commitment. Short term play therapy is a form of treatment consisting of less or equal to 12 sessions with a duration of 30-45 minutes per session, and is carried out once a week.

### 3. Method

The method of implementing this activity is carried out through the training method. As for the flow of the Semester Program Preparation Training for PAUD Teachers in Raising Critical Awareness of the Pre-Disaster Lembang Fault, the following steps are taken: (a) participant recruitment, (b) initial test, (c) ice breaking, (d) learning contract, (e) the activity process, which includes material presentation (enrichment), simulation of task implementation plans, execution of tasks, practice, reflection on the results of working on assignments, presentation of material (reinforcement), (f) final test (posttest), and (g) the results of the activities in the form of teacher performance/professionalism.

#### 3.1. Result and Discussion

The stages of group play therapy practice include relating, releasing, recreating, re-experiencing, and resolving. The relating stage aims to help children relate their thoughts and feelings to current behavior. The games that are exemplified at this stage are chain message games, glass water relay, and storytelling. The following is an example of a relating simulation, which is a chain message simulation presented in Figure 1

The releasing stage aims to help release the child's emotions. Children can express emotions and release tension through play. The game simulation carried out is guessing the style and blowing the ball as shown in Figure 2.

After the child releases the tension, the next stage is the recreating stage. At this stage the child resurfaces unpleasant events that interfere with his thoughts and emotions to create awareness. Some of the games that enter the recreating stage are one paper stand and a flour relay as shown in Figure 3 below.

The re-experiencing stage aims to help children develop an understanding of the events experienced in the past and relate that understanding to their current emotions and behavior. Examples of games that are carried out are poisonous lakes and a landslide themed montage.



**Figure 1:** chain message.



**Figure 2:** Play inflatable ball.

The last stage is the resolving stage. This stage helps children to solve problems and conflicts by practicing new behaviors and ways of playing. The therapist can give hope to the child. The games carried out are the sarong relay and the tray relay as shown in Figure 4 below.

The training activity for teachers in the Lembang area on February 18, 2022, was attended by 17 participants from several schools in the surrounding Lembang sub-district. The knowledge assessment of the participants of the limited trial before the training was carried out through a pre-test consisting of 10 questions. After the training



**Figure 3:** Playing flour relay.



**Figure 4**

was conducted, participants were also asked to do a post-test with the same questions to find out whether the participants' knowledge increased. the test results showed that all participants experienced an increase in scores after the training.

However, to be sure, we will examine the difference in the scores using the paired t-test. First of all, the difference between the pre-test and post-test scores was tested for normality using the Kolmogorov-Smirnov test. At the 95% confidence level, Kolmogorov Smirnov (KS) calculates  $0.125 < 0.329$  (KS Table on DF 17 {degree of freedom with



Figure 5: tray relay.

number of samples 17)). Therefore, the data on the difference between the pre-test and post-test scores was normally distributed.

TABLE 1: Kolmogorov-Smirnov Test Results for the Difference in Participants' Values.

Statistik	Var I
N Sampel	17
Mean	3,058823529
Simpangan Baku	1,675954513
$D_n =$	0,124562368
KS Tabel	0,32984845

Because the data is normally distributed, the data is then tested using the t-Paired test. This test is performed using the T.TEST function available on Ms. Excel. From the calculation results obtained p-value of  $1.21522 \times 10^{-9}$ . With a 95% confidence degree, because the p-value is less than 0.05, this means that there is a significant difference between the knowledge of participants before and after the training.

This group play therapy method has succeeded in reducing the level of anxiety [4], [19], [20] and has a significant impact on children affected by disasters [21]. This therapy can also have an influence on children's independence and religious values [22]. Parental involvement in play therapy produces a better effect than the involvement of play therapists [23], [24].



## 4. Conclusion

Some suggestions related to the findings in community service activities include the need to develop learning plans that contain the application of group play therapy that can be used by early childhood teachers, the need for the practice of implementing identification and counseling with early childhood traumatized children; and the existence of pilot early childhood education that implements pre-disaster education.

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