

PSYCHOLOGICAL INTERVENTIONS IN ADDRESSING POSTTRAUMATIC STRESS DISORDER AMONG NATURAL DISASTER SURVIVORS: A SYSTEMATIC LITERATURE REVIEW

Intervensi Psikologis Dalam Mengatasi Post-Traumatic Stress Disorder Pada Penyintas Bencana Alam: Tinjauan Literatur Sistematis

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ABSTRACT

Background: Natural disasters can have psychological consequences for survivors, both short-term and long-term, such as post-disaster stress and the development of post-traumatic stress disorder (PTSD). Various psychological therapies have been applied to reduce PTSD symptoms in disaster survivors. **Purpose:** To review the interventions and effectiveness of psychological therapies applied to survivors of natural disasters with PTSD, based on previous studies. **Methods:** This study used a systematic literature review method, drawing data from Google Scholar, PubMed, and Scopus databases. Article searches were conducted using the PRISMA method. A total of 9 articles were selected based on predetermined inclusion and exclusion criteria. **Results:** Psychological therapy interventions, such as five-finger hypnotic therapy, SEFT, art, and play, are effective in reducing PTSD symptoms in natural disaster survivors in Indonesia. **Conclusion:** Psychological therapy is necessary to address post-disaster PTSD, ensuring the mental and emotional well-being of disaster survivors. This research can serve as a basis for developing psychosocial intervention policies in Indonesia, particularly in planning more comprehensive disaster mitigation.

Keywords: natural disaster, psychological intervention, survivor, PTSD, trauma therapy

ABSTRAK

Latar belakang: Kejadian bencana alam dapat menimbulkan konsekuensi psikologis, baik jangka pendek maupun jangka panjang pada penyintasnya, seperti munculnya keadaan stres pascabencana hingga berkembangnya stres pascatrauma (Post Traumatic Stress Disorder/PTSD). Berbagai terapi psikologis telah banyak diterapkan untuk mengurangi dan menurunkan tingkat gejala PTSD pada penyintas bencana. **Tujuan:** Menelaah ragam intervensi serta efektivitas terapi psikologis yang telah diterapkan pada penyintas pascabencana alam dengan PTSD berdasarkan hasil penelitian terdahulu. **Metode:** Penelitian ini menggunakan metode tinjauan literatur sistematis yang mengambil data dari basis data Google Scholar, PubMed, dan Scopus. Pencarian artikel menggunakan metode PRISMA. Sebanyak 9 artikel dipilih berdasarkan kriteria inklusi dan eksklusi yang telah ditentukan. **Hasil:** Intervensi terapi psikologis, seperti terapi hipnotik lima jari, SEFT, seni, dan bermain, berpotensi efektif dalam mengurangi gejala PTSD pada penyintas bencana alam di Indonesia. **Kesimpulan:** Terapi psikologis dalam mengatasi PTSD pascabencana alam perlu dilakukan, agar kesehatan mental dan jiwa para penyintas bencana tetap terjaga. Penelitian ini dapat menjadi dasar dalam pengembangan kebijakan intervensi psikososial di Indonesia, khususnya dalam perencanaan mitigasi bencana yang lebih komprehensif.

Kata Kunci: bencana alam, intervensi psikologis, penyintas, PTSD, terapi trauma

INTRODUCTION

Geographically, Indonesia is located at the intersection of three major tectonic plates: Indo-Australian, Eurasian, and Pacific plates. This convergence of plates creates a region of heightened seismic activity, known as the Pacific Ring of Fire (Gunawan, 2023). The Indonesian archipelago's geographical location renders it susceptible to natural disasters. This vulnerability can have serious physical, emotional, social, and psychological implications for disaster survivors. One of the psychological effects of natural disasters is trauma. According to the KBBI (Big Indonesian Dictionary), trauma is defined as a psychological condition or behavior that deviates from normal, arising from intense psychological pressure or significant physical injury. The psychological implications of natural disasters are multifaceted, with trauma being a significant contributing factor to the development of various psychological disorders, including stress. Psychological trauma and post-disaster stress have been demonstrated to exacerbate pre-existing conditions and trauma experienced by survivors. Stress is a psychological disorder defined by feelings of anxiety or mental tension due to the presence of challenging circumstances (WHO, 2023).

Stress disorders that arise as a result of a traumatic event are also known as post-traumatic stress disorder (PTSD). PTSD can persist for extended periods, ranging from months to decades, with symptoms manifesting after a considerable delay, often several months or years following the initial exposure to a traumatic event (Rahmanishati *et al.*, 2021). Post-traumatic stress disorder (PTSD) can develop following exposure to a distressing event that is perceived as extreme, threatening, and life-threatening, such as a natural disaster (Rohmah, 2021).

According to the World Health Organization (2013), the global prevalence of PTSD in the general population prior to disasters was approximately 10% for mild to moderate mental disorders and 2-3% for severe disorders. However, following the occurrence of disasters, the estimated prevalence of mental health disorders exhibited a significant increase, with 15-20% of individuals experiencing mild to moderate disorders and 3-4% encountering severe ones. These figures are considerably higher than the global prevalence prior to the disaster. The reliability of these prevalence estimates is contingent upon the nature of the disaster and the extent of exposure (Idris *et al.*, 2020). On a global scale, the prevalence of PTSD is estimated to reach 200 million people. Concurrently, data from the Indonesian National Mental Health Survey indicates that approximately 2.45 million adolescents are afflicted with mental health disorders, with 0.5% of them experiencing PTSD, which is equivalent to around 12,250 adolescents in Indonesia (Pasha *et al.*, 2023).

According to the provisions stipulated in BNPB Regulation No. 5 of 2017 concerning the Preparation of Post-Disaster Rehabilitation and Reconstruction Plans, the implementation of psychological and social recovery efforts to serve communities affected by disasters is of paramount importance. The objective of these efforts is to facilitate the restoration of these communities' social and psychological conditions, thereby enabling them to resume their pre-disaster state of normalcy. The recovery process encompasses a range of intervention modalities, including psychosocial support programs, targeted psychological interventions, counseling services, family consultations, and guidance in trauma healing through the implementation of systematic and structured psychological therapy methods (Shalahuddin *et al.*, 2022).

Various types of psychological interventions to treat PTSD have been widely applied. Globally, CBT (Cognitive Behavioral Therapy) and EMDR (Eye Movement Desensitization and Reprocessing) therapy have been proven effective and are recognized worldwide in the treatment of PTSD. However, their implementation in the field often faces obstacles, such as a limited number of trained professionals, which limits the application of these therapies, especially for disaster survivors in remote areas (Sesilia *et al.*, 2024).

Conversely, local interventions in Indonesia are more readily implementable due to their alignment with the cultural, spiritual, and local wisdom of the community. Examples of such interventions include five-finger hypnotherapy, SEFT, art, and play. According to the findings of Rahmawati *et al.* (2025), the implementation of SEFT therapy and stress management techniques resulted in a significant reduction in the community's PTSD score, from 41.25% to 11.25%. Research conducted by Rahmawati *et al.* (2024) also demonstrates a decrease in PTSD symptoms following the administration of five-finger hypnosis therapy. As demonstrated by Ardilla *et al.* (2019) and Anggraini & Martini (2020), empirical evidence suggests that art- and play-based interventions may also be effective in reducing symptoms and scores of PTSD in research samples, as indicated by statistical test results.

This article aimed to systematically review various psychological interventions that have been applied to natural disaster survivors with PTSD complaints, as well as to understand the effectiveness of these interventions in helping the psychological recovery process of disaster survivors. There have not been many studies discussing the effectiveness of various types of psychological therapy in Indonesia. Previous

studies have mostly focused on general medical or social interventions, and have not sufficiently described the specific effectiveness of various psychological therapy approaches.

The results of this study were expected to contribute to the development of a more comprehensive post-disaster management strategy. This strategy was to be oriented towards the psychosocial needs of survivors and provide more effective psychosocial interventions to minimize the psychological impact of natural disasters on survivors.

METHOD

Literature Search Strategy

This study used the Systematic Literature Review (SLR) method, which is a method for systematically identifying, evaluating, and interpreting all research results relevant to the research question, specific topic, or phenomenon that is the focus of the study (Kitchenham, 2014; Larasati, 2021). In this study, the researcher used the PICOS (Population, Intervention, Comparison, Outcomes, and Study Design) framework to determine the inclusion and exclusion criteria to make it easier for the researcher to ensure the suitability of the articles with the research objectives.

The inclusion criteria used are: 1) Articles/journals discussing psychological interventions for PTSD; 2) The research subjects are natural disaster survivors; 3) Quantitative, qualitative, or mixed-methods research designs; 4) Articles/journals published within the last 5 years (2020 - May 2025); 5) Articles/journals are accessible and the full text is available; and 6) Research conducted in Indonesia. The exclusion interventions are: 1) Articles/journals discussing PTSD caused by factors other than natural disasters; 2) Articles/journals that only discuss PTSD without discussing

psychological interventions; 3) Publications that are not accessible in full text; and 4) Research conducted outside Indonesia.

The article search was conducted using Boolean operators, with the keywords (PTSD OR “post-traumatic stress disorder”) AND (“natural disaster” OR “disaster survivor” OR “post-disaster” OR ‘survivor’) AND (“psychological intervention” OR “psychological therapy” OR “psychosocial support”). The article screening stages used the Preferred Reporting Items for Systematic Reviews & Meta-Analyses (PRISMA) method, which consists of identification, screening, feasibility testing, and inclusion (Wijayanti & Purwani, 2024). The databases

used in the article search included Google Scholar, PubMed, and Scopus. Based on the inclusion and exclusion criteria, as well as the predetermined keywords, 9 articles were found to meet the desired criteria.

As for the assessment of article quality, researchers used critical appraisal based on the Joanna Briggs Institute (JBI). Data extraction was carried out systematically, and the results were compiled in a table containing article details (research title, researcher name, and year of research), research methods, sample size, type of therapy used, and research results. The synthesis results are shown in the form of a flowchart in Figure 1.

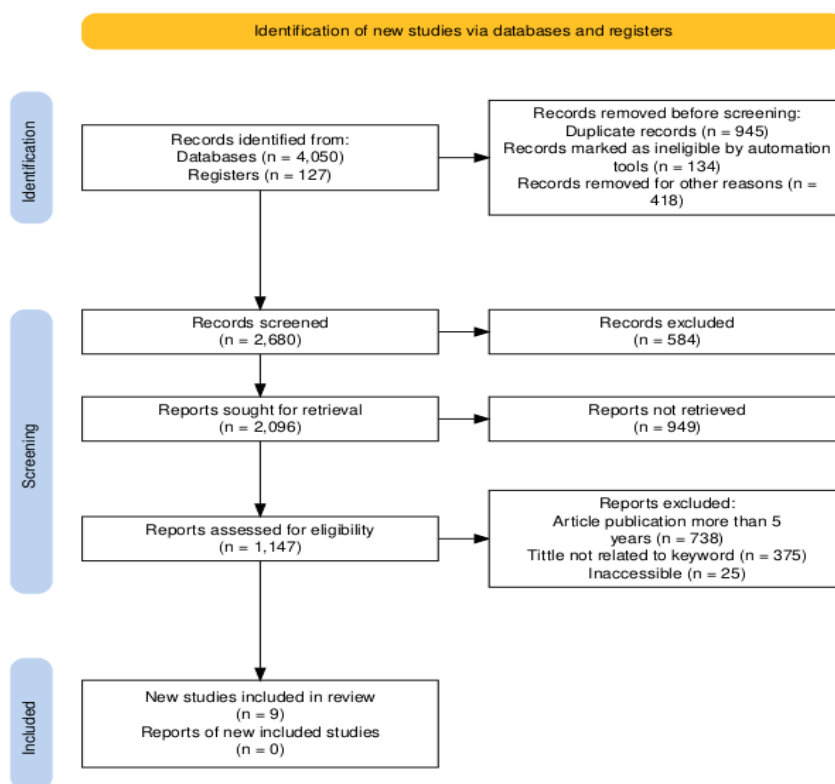


Figure 1. Results of article synthesis using the PRISMA method

The PRISMA diagram illustrates the article selection process for Systematic Literature Reviews. Of the total 4,177 articles found, 1,363 articles were removed due to duplication and irrelevance to the desired topic, leaving 2,814 articles for further

screening. After the screening process, 584 articles were removed because they did not meet the desired criteria, leaving 2,230 articles. In the next stage, 1,083 articles were excluded because they did not meet publication criteria, such as inappropriate

publication years or the unavailability of full texts, leaving 1,147 articles for further evaluation. From this evaluation, 9 articles that met the criteria were finally included in the review, ensuring that only relevant and high-quality articles were included.

RESULT

Based on the results of literature searches using the PRISMA method, nine articles were obtained, as follows:

Table 1. Literature Review Results

Research Title, Researcher, & Year	Research Method	Number of Samples	Types of Therapy Used	Result
<i>Pengaruh Latihan Hipnosis Lima Jari Terhadap Post Traumatic Stress Disorder Pada Penyintas Gempa Bumi Di Kabupaten Cianjur.</i> (The Effect of Five-Finger Hypnosis Training on Post-Traumatic Stress Disorder in Earthquake Survivors in Cianjur Regency)	Quasi-Experiment	59 respondents divided into a control group and a treatment group	Five Finger Hypnosis Therapy	There was a decrease in PTSD scores after the therapeutic intervention was carried out. Statistical test results showed that there was an effect of five-finger hypnotherapy on the reduction of PTSD symptoms in earthquake survivors. This was evidenced by the Wilcoxon Test value with Asymp.Sig 0.00 or <0.05 and the Mann-Whitney U test. (<i>p-Value</i> = 0.00, α 5%).
Hafid, et al. (2022) <i>Efektivitas Terapi Hipnotik Lima Jari Pada Gangguan Stres Pasca Trauma Pasca Bencana.</i> (The Effectiveness of Five-Finger Hypnotherapy in Treating Post-Traumatic Stress Disorder Following a Disaster)	Quasi-Experiment	60 respondents were affected by the eruption of Mount Semeru in the Relocation Area of Lumajang Regency.	Five Finger Hypnosis Therapy	Statistical test results show that there was a decrease in PTSD symptoms after the five-finger hypnotherapy intervention. Based on the results of the study, it was proven that five-finger hypnotherapy was effective in reducing post-traumatic stress disorder after a disaster. This was evidenced by the Wilcoxon test value with a p-value of 0.039, α 5%.
Rahmawati, et al. (2024). <i>Efektifitas Model Terapi Modalitas dan Komplementer Seft terhadap Penurunan Tingkat Stres Pasca Bencana Pada Remaja Penyintas Bencana Gempa Bumi di Ponpes Minhajul Karomah Kabupaten Cianjur.</i> (Effectiveness of Seft Complementary and Modal Therapy Model on Reducing Stress Levels After Disaster Among	Quasi-Experiment	42 respondents consisting of adolescent survivors of the earthquake at the Minhajul Karomah Islamic boarding school in Cianjur Regency.	SEFT Modality and Complementary Therapy	The statistical test results show that there is a difference before and after the SEFT intervention. Based on these research results, it is proven that SEFT is effective in reducing trauma levels (PTSD) in post-disaster survivors. This is evidenced by the results of the analysis using a paired sample-T with a value of (<i>p-Value</i> = 0.00, α 5%).

Continuation of Table 1. Literature Review Result

Research Title, Researcher, & Year	Research Method	Number of Samples	Types of Therapy Used	Result
Adolescent Earthquake Survivors at Minhajul Karomah Islamic Boarding School in Cianjur Regency Hidayah, <i>et al.</i> (2024).				
Art Therapy <i>Sebagai Trauma Healing Pada Anak Pasca Bencana Erupsi Gunung Semeru</i> (Art Therapy as Trauma Healing for Children After the Eruption of Mount Semeru) Amilia, <i>et al.</i> (2022).	Assistance and training	Students in grades 3 to 6 at SDN Sumbermujur 03 and students at the emergency school.	Art Therapy	Art therapy for survivors of the Mount Semeru eruption has shown positive results. This therapy helps children express their feelings through pictures, stories, and poetry, allowing them to be more open and able to communicate well.
<i>Trauma Healing Anak Pasca Bencana Gempa Bumi Cianjur 2022 Dengan Metode ART Therapy.</i> (Trauma Healing for Children After the 2022 Cianjur Earthquake Using the ART Therapy Method) Fayed, <i>et al.</i> (2023).	Community service with a qualitative approach	56 respondents consisting of children aged 4–8 years old who were affected by the earthquake from Kampung Kramat, Sukamulya Village, Sugenang Subdistrict, Cianjur Regency.	Art Therapy	Through art therapy involving various media such as pictures, stories, songs, and poetry, they became more open and able to communicate effectively. This shows significant benefits in their emotional recovery.
Optimizing Mental Health Cadres In Disaster Response: Stress Management and Spiritual Emotional Freedom Technique (SEFT) in Agricultural Communities. (Rahmawati <i>et al.</i> , 2025)	Quantitative pre-experimental	80 respondents (people who received therapeutic intervention from assigned cadres)	SEFT Therapy	The application of SEFT therapy intervention has successfully reduced PTSD symptoms in the research sample from 41.25% to 11.25%. This is evidenced by an increase in post-test scores (76.6%) compared to pre-test scores (50%).
Implementation of Psychosocial Support Services through Play Therapy and PHBS for Children After the Mount Semeru Eruption Disaster in Sumber Mujur Village, Lumajang Regency, East Java.	Participatory Learning and Action (PLA)	29 respondents consisting of child survivors of the post-eruption of Mount Semeru.	Play Therapy	Children demonstrated increased awareness and adherence to health practices after participating in Psychosocial Support Services (LDP) activities. They also served as agents of change in their communities by educating others about the importance of healthy living (PHBS). Through this psychosocial support,

Continuation of Table 1. Literature Review Result

Research Title, Researcher, & Year	Research Method	Number of Samples	Types of Therapy Used	Result
				interventions not only focus on restoring daily behaviors but can also play a crucial role in the healing process of PTSD in child disaster survivors.
The Effectiveness of Person-Centered Art Therapy in Reducing Post-Traumatic Stress Disorder (PTSD) Symptoms in Earthquake Survivors in Lombok. Rizkya, <i>et al.</i> (2020).	Concurrent embedded approach	4 female respondents in the 22–29-year age category felt the direct impact of the earthquake, both physically and psychologically.	Art Therapy	The provision of Person-Centered Art Therapy intervention was effective in reducing PTSD symptoms in research subjects who were earthquake survivors in Lombok, as seen from the decrease in PTSD symptom scores in the four participants.
Therapy Play as a Trauma Healing Effort by the Cianjur Community for Child Survivors of the 2022 Cianjur Earthquake Disaster. Maliadani & Asmawati. (2024).	Descriptive qualitative	The 100 respondents consisted of children directly affected by the Cianjur earthquake in Cirumput Village, Cugenang District, Cianjur Regency.	Play Therapy	Trauma healing activities by the KM Cianjur community showed positive results, marked by reduced anxiety and fear, as well as increased joy, interaction, communication, and socialization among child disaster survivors.

DISCUSSION

The Effect of Five-Finger Hypnotic Therapy on Post-Disaster PTSD

Five-finger hypnotic therapy is a therapeutic method that uses the power of the mind to support the entire recovery process, maintain balanced health, and produce a calm and relaxed state of mind. Patients undergoing five-finger hypnotic therapy can experience reduced muscle tension, increased focus, reduced fear, and a more relaxed state (Hartono *et al.*, 2019). Five-finger hypnotic therapy involves placing the fingers together and imagining something pleasant and calming. Five-finger hypnotic therapy can affect breathing patterns, pulse rate, heart rate, and blood pressure (Rahmawati *et al.*, 2024).

Rahmawati *et al.* (2024) conducted research on the effectiveness of five-finger hypnotic therapy on post-disaster PTSD. The results showed a p-value of 0.039 ($p < 0.05$),

thus concluding that H1 was accepted, indicating a difference in PTSD levels before and after the five-finger therapy intervention. This explanation also aligns with research conducted by Hafid *et al.* (2022), which demonstrated a difference in PTSD scores between the control and treatment groups after receiving five-finger hypnosis therapy. This explanation was supported by the results of the Mann-Whitney U test.

The advantage of this therapy compared to other therapies is that five-finger hypnosis therapy does not require special equipment or complex facilities; it only uses the fingers and positive imagination. A disadvantage of this therapy is that its effectiveness is highly dependent on the individual. Not all PTSD survivors respond well to therapy, so the success of five-finger hypnosis is influenced by the individual's level of suggestibility and ability to enter a state of relaxation (Rahmawati *et al.*, 2024).

The Effect of Modality Therapy and Complementary SEFT on Post-Disaster PTSD

Modality therapy is a nursing care method implemented in institutions and the community and aims to support mental health and provide therapeutic effects (Ermawati, 2010; Libriatanti, 2019). Post-disaster psychosocial problems can be addressed through various forms of psychological intervention, one of which is the application of the Spiritual Emotional Freedom Technique (SEFT) therapy method. SEFT is an emotional management method that integrates spiritual aspects including prayer, sincerity, and surrender, accompanied by stimulation of the body's meridian points, which is believed to help relieve emotional stress and accelerate the psychological recovery process (Hidayah *et al.*, 2024).

Research conducted by Hidayah *et al.* (2024) explained that SEFT therapy has been proven effective in reducing stress levels in post-disaster earthquake survivors. This was demonstrated by statistical test results with a p-value of 0.0001 ($p < 0.05$), indicating high statistical significance. Although the study focused on general stress, the results remain relevant in the context of PTSD, as post-disaster stress is a major risk factor for the development of PTSD symptoms. The application of SEFT modality and complementary therapy interventions with a stress management approach is considered suitable for adolescents who are earthquake survivors, because this method can be carried out independently after training.

Research conducted by Rahmawati *et al.* (2025) also showed that SEFT therapy can reduce PTSD symptom levels in the study sample, from 41.25% to 11.25% in post-disaster survivors. The advantage of this therapy is that stimulation of the body's meridian points can help release negative emotions, reduce muscle tension, and

increase a sense of calm. The success of SEFT depends heavily on the patient's ability to apply five key principles: Confidence, Focus, Sincerity, Surrender, and Gratitude. If the patient does not fully understand or internalize these principles, the therapy's effectiveness can be reduced (Hidayah *et al.*, 2024).

The Effect of Art Therapy on Post-Disaster PTSD

Art therapy is a combination of art and psychology. It utilizes art media, creativity, and artwork as tools to express and manage feelings, resolve emotional conflicts, increase self-awareness and self-esteem, and reduce anxiety and stress (Malchiodi, 2007; Rizkya *et al.*, 2020). Art therapy can take the form of activities such as drawing, storytelling, crafting, and writing and reading poetry (Amilia *et al.*, 2022).

Art therapy can help natural disaster survivors manage their mental health. Research by Amilia *et al.* (2022) showed positive results regarding the effect of art therapy on behavioral changes in child survivors of the Mount Semeru eruption. Before the therapy intervention, the children tended to exhibit moody and easily panicked behavior, whereas after the therapy, they appeared more cheerful and open in interacting with their surroundings. These results also align with research conducted by Fayed *et al.* (2023). It intervened with child survivors of the 2022 Cianjur earthquake using art therapy utilizing various media, such as drawings, stories, songs, and poetry.

Another study, conducted by Ardilla *et al.* (2019), showed a statistically significant reduction in PTSD levels ($p=0.000$). This suggests that art therapy has an impact on reducing PTSD symptoms in child earthquake survivors in Gunungsari District.

A study conducted by Rizkya *et al.* (2020) demonstrated that art therapy was effective in reducing PTSD scores in mothers in Semokan Hamlet, measured using the PTSD Symptom Scale. In their research, Rizkya and colleagues implemented five stages of art therapy: Expressing the Self, Self-Understanding, Empowering Self, Experimentation and Risking, and Having Faith. These stages of therapy can help children express themselves openly and better recognize and understand themselves.

The advantage of art therapy is that it can be implemented in various forms, such as drawing, writing, poetry, singing, storytelling, or crafting. The variety of interventions allows it to be easily tailored to the patient's age and needs. A disadvantage of art therapy is that it requires the patient to actively participate in the creative process. Individuals who are uncomfortable with art or have barriers to self-expression may struggle to achieve the maximum benefit from this therapy (Sholiha, 2022).

The Effect of Play Therapy on Post-Disaster PTSD

Play therapy is a therapeutic approach based on systematic theories in psychology, emphasizing the role of play as a means to help clients address and resolve the problems they face. The goal of this therapy is to help children overcome psychological issues and support their growth and development, aligning with their ongoing developmental tasks and achieving optimal outcomes. (Anggraini & Martini, 2020).

Research by Aini *et al.* (2024) showed that providing play therapy to children can reduce the trauma they experience and improve their problem-solving skills through their ability to express their emotions, interact socially with those around them, and develop greater empathy for others. These results are also supported by

previous research by Anggraini & Martini (2020), which found that PTSD symptoms in the subjects were recorded at 37.82 before play therapy, and decreased to 25.69 after therapy, based on measurements using the PTSD Symptom Scale for DSM-V (CPSS-V SR). These results indicate that play therapy has been proven effective in reducing trauma levels in child survivors of natural disasters.

This is further supported by research conducted by Maliadani & Asmawati (2024), which found that play therapy can have a positive impact on children, reflected in changes in their behavior and daily activities, such as the reappearance of joy, improved social relationships, a restored appetite, and reduced anxiety or fear before bedtime or rest. The play therapy implemented in this study included a variety of fun and educational games, such as snakes and snakes, cat and mouse, guessing games, train games, and various types of games related to learning and general knowledge, such as quizzes on Islamic knowledge and other general topics.

Group games such as snakes and snakes, cat and mouse, and trains can help improve social interaction, reduce feelings of isolation, encourage cooperation, and create a sense of security and togetherness in child disaster survivors. These activities can be an option for restoring a sense of control and self-confidence. Meanwhile, games like guessing pictures and quizzes can train concentration, stimulate cognitive function, and provide positive experiences that can suppress traumatic memories in child disaster survivors.

The advantage of this therapy is that it can be implemented with children, as play is a natural activity for them. This therapy method is fun, non-threatening, and easily accepted. Play therapy relies on children's ability to express their feelings and experiences through play. A disadvantage of

this therapy is that not all children respond the same way. Children who tend to be passive may have difficulty interacting or feel uncomfortable expressing themselves. Therefore, the type of game chosen must be tailored to the characteristics, psychological state, and needs of the children (Pratiwi, 2017).

CONCLUSION AND SUGGESTION

Psychological therapy is essential for addressing PTSD after a natural disaster to maintain the mental health and well-being of disaster survivors. This study identified nine relevant articles published between 2019 and May 2025, which demonstrated that various psychological therapy methods, such as hypnosis, SEFT (Self-Treatment-Based Therapy), art therapy, and play therapy, have been proven effective in reducing PTSD symptoms and supporting emotional and psychological recovery.

This research can contribute to the development of psychosocial intervention policies in Indonesia, with an emphasis on comprehensive disaster mitigation planning that specifically focuses on preventing and alleviating PTSD symptoms in disaster survivors. Recommendations for future research include exploring the combination of this therapy with other approaches to determine the most effective methods. Furthermore, it is important to consider the application of this therapy in the culturally diverse Indonesian context, so that interventions can be tailored to local values and beliefs, which can increase the therapy's acceptability and effectiveness.

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AUTHOR CONTRIBUTION

Author Dian Wahyu Wardani was responsible for data collection, data analysis, manuscript writing, literature review, and referencing. Author Jayanti Dian Eka Sari was responsible for research design, data analysis, and manuscript revision.

CONFLICT OF INTEREST

The authors declare there are no conflicts of interest.

DECLARATION OF ARTIFICIAL INTELLIGENCE (AI)

The researchers acknowledge the use of ChatGPT to search for synonyms or equivalents of several terms found in referenced journals to reduce the level of plagiarism in the preparation of this manuscript. All AI-generated content has been rigorously reviewed, edited, and validated to ensure accuracy and originality. Full responsibility for the final content of the manuscript rests with the authors.

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