

e-ISSN : 2686-3308 (Online) | p-ISSN : 2685-8703 (Print) https://ejournal.uinfasbengkulu.ac.id/index.php/hawa



The Impact of Disaster on Children's Mental Health

Desi Afriyanti 1*, Meilani Safitri², Keyla Aulia Alnov³, Emil Apriansah⁴, Estiek Seftiyani⁵

STIKes Raflesia, Depok City, Indonesia

Jl. Mahkota Raya 32-B, Komplek Pondok Duta I Jl. Mahkota Raya No.32 B, Tugu, Kec. Cimanggis, Kota Depok, Jawa Barat 16451, Indonesia

Article Info: Received: december 09, 2024; Revised: December 26, 2024; Accepted: December 31, 2024

Keywords	Abstract				
Disaster; Children; Mental health	The impact of natural disasters on children's mental health is significant, with many experiencing disorders such as PTSD, depression, and anxiety that impact children's resilience and mental health post-disaster. This research was conducted in 2024. The literature search showed that from 392 initial results, only five articles met the inclusion criteria for further analysis, with various research designs reflecting the impact of disasters on children's mental health in Indonesia. Evaluation of the quality of the research showed that the articles were well classified, providing important insights into the topic under study. Research shows that children, especially girls, are particularly vulnerable to psychological disorders such as PTSD after experiencing a disaster, with symptoms including excessive fear and difficulty sleeping. The research findings concluded that natural disasters have a significant impact on children's mental health, with many experiencing disorders such as PTSD, depression and anxiety, and the importance of psychosocial interventions and disaster preparedness education to help them cope with trauma and increase mental resilience.				
Kata Kunci	Abstrak				
Bencana; Anak-anak; Kesehatan mental	Dampak bencana alam terhadap kesehatan mental anak-anak sangat signifikan, banyak yang mengalami gangguan seperti PTSD, depresi, dan kecemasan yang berdapmak pada ketahanan dan kesehatan mental anak-anak pasca bencana. Penelitian ini dilaksanakan pada tahun 2024. Penelusuran literatur yang dilakukan menunjukkan bahwa dari 392 hasil awal, hanya lima artikel yang memenuhi kriteria inklusi untuk dianalisis lebih lanjut, dengan beragam desain penelitian yang mencerminkan dampak bencana terhadap kesehatan mental anak-anak di Indonesia. Evaluasi kualitas penelitian menunjukkan bahwa artikel-artikel tersebut memiliki klasifikasi yang baik, memberikan wawasan penting mengenai topik yang diteliti. Penelitian menunjukkan bahwa anak-anak, terutama perempuan, sangat rentan terhadap gangguan psikologis seperti PTSD setelah mengalami bencana, dengan gejala yang mencakup rasa takut berlebihan dan kesulitan tidur. Temuan penelitian diperoleh kesimpulkan bahwa bencana alam memiliki dampak signifikan terhadap kesehatan mental anak-anak, dengan banyak yang mengalami gangguan seperti PTSD, depresi, dan kecemasan, serta pentingnya intervensi psikososial dan pendidikan kesiapsiagaan bencana untuk membantu mereka mengatasi trauma dan meningkatkan ketahanan mental.				

* Corresponding author: Desi Afriyanti. [™] desiafriyanti21@gmail.com STIKes Raflesia, Depok City, Indonesia

How to Cite (APA Style):

Afriyanti, D., Safitri, M., Alnov, K. A., Apriansah, E., & Seftiyani, E. (2024). The Impact of Disaster on Children's Mental Health. *Jurnal Hawa: Studi Pengarus Utamaan Gender dan Anak, 6*(2), 196--202. http://dx.doi.org/10.29300/hawapsga.v6i2.6810



INTRODUCTION

Volcanic eruptions, earthquakes, and floods are examples of natural disasters that affect children's mental health (Annisa et al., 2024). Disasters not only cause physical and material losses but also affect the mental health of vulnerable groups, including children (Khobibah, 2023). Current data shows that 30% of children affected by the disaster experience post-traumatic stress disorder (PTSD), and another 20% experience depression and anxiety (Susanti, 2024). The WHO report shows that 16% of children aged 10 to 19 years have a mental disorder, which includes a variety of mental health problems that can be exacerbated by a catastrophic event (Azizah et al., 2022).

The frequent floods in Indonesia are a clear example of how the impact of disasters affects children's mental health. Research shows that children who experience flood disasters may have PTSD, anxiety, depression, and other mental disorders. A study in Denmark found that 45% of flood victims experienced PTSD, and 30% experienced depression (Susanti, 2024). In addition, children who participated in psychosocial support programs, such as play therapy, showed a reduction in PTSD symptoms by up to 50% within six months after the disaster (Aini, 2024).

The current focus of research is on child resilience after disasters. A child's ability to adapt and recover from a traumatic event is known as resilience. Children who have strong psychological resilience tend to be able to cope with post-traumatic stress well. Conversely, children who do not have sufficient psychological resilience are at risk of developing more severe mental disorders (Anika et al., 2019; Hasanudin et al., 2019). Psychosocial interventions such as play therapy and emotional support can help children cope with trauma and rebuild a sense of security. Research in regions such as Lombok and Palu has shown this (Aini, 2024; Hasanudin et al., 2019).

Greater focus should be given to disaster prevention education about children's mental health. Children can be better mentally and emotionally prepared to face disasters by teaching them about disasters and how to deal with them (Roza et al., 2020). Learning about disaster preparedness is expected to increase children's awareness and preparedness and reduce negative impacts on their mental health (Pratama et al., 2022). Studies show that children who participate in disaster preparedness programs have a 40% lower risk than children who do not (Azizah et al., 2022; Roza et al., 2020).

Therefore, it is important to understand the negative impact of disasters on children's mental health and create a plan that helps children during their recovery. Disaster response must improve children's resilience and mental health through psychosocial support, education, and community-based interventions (Susanti, 2024; Aini, 2024; Hasanudin et al., 2019).

This article aims to conduct a Systematic Literature Review (SLR) on the impact of disasters on children's mental health in the context of mental health. SLR is a systematic and comprehensive research method that identifies, evaluates, and synthesizes previous studies relevant to a specific research topic. By presenting a systematic and detailed literature review, this article is expected to provide valuable insights for educators, researchers, and educational practitioners in understanding the impact of disasters on children's mental health and how to overcome them. For this reason, in this literature review, the author tries to dig deeper into the information and research results about the impact of disasters on children's mental health, what impacts will arise on children's mental health due to disasters, and find out how to effectively overcome or reduce the impact of disasters on children's mental health, so that it can then be applied in various areas that are vulnerable to disasters or at risk of disasters in overcoming and preventing the impact of disasters on children's mental health.

METHOD

This research is a type of research that uses the Systematic Literature Review (SLR) method, where this research method is a systematic and objective research method for collecting, evaluating, and synthesizing relevant evidence from various previously published literature sources (Suciati, Mailili, & Hajerina, 2022). The selected literature sources by the required research keywords are then reviewed, and the selected journals are structured according to the steps set out in the systematic literature review method (Triandini et al., 2019). This study uses three stages of Systematic Literature Review (SLR) according to (Choifah et al., 2022), namely:

Planning

To determine the impact of disasters on children's mental health, the authors utilized a systematic review of disaster nursing articles, the first step of which was planning. A comprehensive literature search was conducted in two databases to obtain relevant evidence. The database search used Google Scholar & PubMed, published from 2019 to 2024. Disaster impact, mental health, and children were the keywords used in this literature review. Conducting

The conducting stage is the implementation stage in Systematic Literature Review (SLR) research. The search for articles according to the criteria and suitability with keywords began at this stage. At this stage, 392 articles matched these keywords: the impact of disasters, mental health, and children. After selection according to the inclusion and exclusion criteria of the existing articles, 38 articles were selected. The inclusion criteria applied to this literature are journals with clear SINTA and SCOPUS, journal publications in the last 5 years, types of qualitative, quantitative, and descriptive research, and the Preferred Reporting Item for Systematic Review and Meta-Analysis (PRISMA) to evaluate each article. The criteria for including an article are as follows: the article must be thoroughly reviewed, the text can be downloaded in full, the content is relevant to the research topic, and the research design must be at least qualitative (includes observation, interview, or grounded theory) and quantitative (includes survey, questionnaire or experiment), and there is also mixed methods research and evaluative research. The language used must be Indonesian or English. Exclusions include articles that have an abstract or do not qualify as good articles, such as introductions, methods, results, discussions, implications, references, review articles, and irrelevant articles. After the selection process, the next step is synthesizing data to analyze and evaluate research results from various articles. Data synthesis in this literature will be presented narratively.

Reporting

The reporting stage is the last in the Systematic Literature Review (SLR) method. At this stage, researchers put the results of analysis and evaluation from the review of journals into writing based on a predetermined format. Five articles were selected for review after being evaluated according to the criteria.

RESULTS AND DISCUSSION

Result

Literature searches from the Google Scholar database from 2019 to 2024 use the selected search keywords: disaster impact, mental health, and children. The selection of full-text articles was the first step, which resulted in 392 results. The second step is to identify 140 articles from the collected research results, with the title of each article by the desired study. After meeting the inclusion criteria, five articles must be considered. Diagram 1 shows literature search strategies.

The included research includes several studies conducted in Indonesia. According to the analysis of five articles, two journals had a descriptivequantitative research design, one journal had a quantitative-qualitative design, one journal had a qualitative design, and one journal had a quantitative design.

After evaluating the quality of the research on five articles, the articles were classified as good (high), and data was extracted. Data is extracted by analyzing data based on the author's name, title, objectives, research method, and results, especially by grouping important data in articles. The results of data extraction are shown in Table 1.

Table 1. Data Extraction

Author/Year	Literature Title	Journal	Method	Sample	Result
Ulfah Nur Hanifah & Arum Pratiwi (2020)	Gambaran Kecemasan Anak Dengan <i>Post-</i> <i>Traumatic</i>	Jurnal Ilmu Keperawatan Jiwa Vol. 3 No. 2, Hal. 173 - 184	The research was carried out using a quantitative descriptive method with a	The sample was 60 children but there were 30 children who were indicated to be	The results of the study showed that 23.3% of children experienced severe PTSD and severe PTSD of 16.7% which was only experienced by girls.

197 | Jurnal Hawa: Studi Pengarus Utamaan Gender dan Anak, Vol. 6, No. 2, Desember 2024

Author/Year	Literature Title	Journal	Method	Sample	Result
	Stress Disorder Sebagai Dampak Bencana Alam Angin Puting Beliung		survey approach, using a CPSS questionnaire. The analysis used was univariate and descriptive analysis. The sampling technique used is quota sampling	traumatized with the age of 2-12 years.	Symptoms: <i>Re-experiencing symptoms</i> , avoidance and <i>hyper arousal</i> .
Zurriyatun Thoyibah, Meidiana Dwidiyanti, Misroh Mulianingsih, Winda Nurmayani, & Reza Indra Wiguna (2019)	Gambaran Dampak Kecemasan dan Gejala Psikologis pada Anak Korban Bencana Gempa Bumi di Lombok	Journal of Holistic Nursing and Health Science Vol. 2 No. 1	is quota sampling. The research was conducted using a mix- method method, which included filling out the RCMAS-2 (Revised Children's Manifest Anxiety Scale; second edition) questionnaire for quantitative analysis and in- depth interviews with parents and teachers	The sample was 47 children aged 6-8 years from the earthquake.	The results showed that there were symptoms of normal anxiety (85.11%) and clinical anxiety (14.89%) in children affected by the earthquake, which can lead to PTSD, as well as changes in children's behavior felt at home and at school. Based on the results of in-depth interviews with parents and teachers at school, it was found that children affected by the earthquake expressed fear of entering the house due to the earthquake event, experienced sleep disturbances such as nightmares and immediately cried at school if they hear a loud noise, and it was found that attitude changes such as irritability and more sensitivity.
Engelbertus Nggalu Bali, Irul Khotijah, Stevanya Wollo, Sartika Kale, & Vanida Mundiarti (2021)	Pendampin gan Psikososial Anak Korban Bencana di Sekolah Alam Manusak	KELIMUTU Journal of Community Service (KJCS) Vol. 1 No. 1	The research was conducted using singing, playing, and storytelling methods. The techniques used are interviews and observation (quantitative). The implementation stages include preliminary studies, method	Sample with a total of 15 children victims of the Tropical Cyclone (Seroja) disaster	The results of the study show that the method of singing, playing, and telling stories is very effective in minimizing the psychological disorders of children of disaster victims

Afriyanti, D., et al.,

	Title	Journal	Method	Sample	Result
			identification, activity implementation, and evaluation		
Suherman, Cintya Melinda, Alikha Aulia, Tiara Fadya, & Sekar Kamilya (2023)	Trauma Pasca Gempa Cianjur pada Psikis	Jurnal Hawa: Studi Pengarus Utamaan Gender dan Anak Vol. 5 No. 2	The research was conducted using a qualitative approach method with a descriptive method, which involved collecting data through interviews, observations, and questionnaires	The sample was 2 students in grades 3 and 4 with the initials MG and MIA, who experienced post- earthquake trauma	The results of the study showed that students experienced mild to severe trauma, which affected their learning process at school.
					The result of the interview with a student named MG is that MG always feels afraid of another earthquake, cannot be alone, besides that MG also admitted that he sometimes hears the sound of an ambulance siren in his head. As for the second student, MIA sometimes feels nauseous and vomits if he starts to shadow when the earthquake occurs.
					MIA admitted that her trauma bothered her so much that even when she was at school, she could not be alone and had to be in a crowd because her trauma appeared more often when she was alone
Intan Cynthia Tamara Sihotang & Untung Sudharmono (2024)	Tingkat Kecemasan Pasca Gempa Bumi Pada Anak di Sekolah Dasar	Journal Nutrix Vol. 8 No. 1	The research method used is quantitative descriptive with <i>accidental</i> <i>sampling</i> techniques. The instruments used are	The sample was 269 school- age children who were victims of the earthquake, with the majority aged 6 to 10 years as many as 178 children (66.3%) and 91 children (33.7%) from 10 years to 18 years old	The results of the study showed that the majority of children experienced mild anxiety (Score 14 – 20) as many as 135 children (50.19%) and 56 children (20.82%) experienced moderate anxiety (Score 21 – 27)
			using the Hamilton Anxiety questionnaire		
			<i>Rating</i> (HARS), where this instrument		
			is a measure of anxiety level		

Discussion

According to research (Hanifah & Pratiwi, 2020), the girls interviewed from Puron Village, Bulu District, Sukoharjo Regency, still remember the tornado disaster and can tell what they experienced. They also consider the incident scary, even rain, cloudy, and windy. They experience excessive fear, cold sweat, pale faces, heart racing, and closed ears. After conducting interviews, it can be concluded that respondents experience severe PTSD symptoms. These findings are consistent with the findings of previous research (Anam, Martiningsih, & Ilus, 2016), which stated that women have more PTSD symptoms than men because women are more susceptible to psychological stress, including PTSD. They consider disasters scary, so women's perceptions become narrow and easily worried. So that they are vulnerable to PTSD. From the study, it can be seen that women are more susceptible to PTSD than men. In addition, studies conducted in Sweden show that between 15.5-24.5% of adolescent girls experience trauma in their lives (Nilson et al., 2010).

According to research conducted (Thoyibah, Dwidiyanti, Mulianingsih, Nurmayani, & Wiguna, 2019) there is an opinion that is in line with the research conducted (Hanifah & Pratiwi, 2020), children experience the following: they feel alone when they are in crowded places, worry when they are about to sleep, have trouble sleeping at night, have nightmares, are irritable, sweaty hands, and have difficulty focusing on their schoolwork.

A study by (Bali, Khotijah, Wollo, Kale, & Mundiarti, 2021) found that methods of playing, singing, and telling stories can help children victims of disasters minimize psychological disorders. Studies conducted by (Cahyo et al., 2013) support this, namely that singing has many educational benefits that can encourage children's growth and development and to communicate and build relationships with peers. Children can express happiness when participating in singing activities while reducing the trauma they experience due to disasters, such as fear, anxiety, anxiety, and other psychological symptoms that are harmful to their development. In children with certain disorders or diseases, play activities help their emotional, cognitive, and social development. Play has many other benefits, such as preventing a stress response that can lead to injury and maintaining creativity and optimism. Interesting storytelling activities increase children's motivation. In addition, storytelling activities help children develop social-emotional, interpersonal, intrapersonal, and moral-religious skills. (Bali, Khotijah, Wollo, Kale, & Mundiarti, 2021).

conducted research by (Suherman, In Melinda, Aulia, Fadya, & Kamilya, 2023), one of the students named MG was interviewed because she was always afraid of earthquakes again, so she could not be alone. In addition, he admitted that he sometimes hears ambulance sirens ringing in his head. After eating ginger candy and sour, MG felt more comfortable and calm. According to MG, the use of prescribed medications has helped reduce trauma by 40%. MG is a very active and intelligent student during learning. Interviews with MIA students showed they felt nauseous or vomited when imagining an earthquake. Because the trauma bothered him so much, MIA admitted it and sought psychiatric treatment. Because trauma often occurs when MIA is alone, even at school, she is required to be in the middle of a crowd. The results of her medical examination showed that MIA often visited a psychiatrist, and her trauma was reduced.

The interview results showed that both students said that vibration was a factor that influenced the occurrence or recurrence of the trauma. This statement is supported by a study conducted on children and adolescents in Turkey (Salcioglu & Başoglu, 2008), showing an increase in depression, PTSD, and fear due to earthquakes. As a result, they lose control of their fears due to the unexpected and uncontrollable vibrations of the earthquake. Among the psychological effects felt by the victim, especially in the majority of children, is very severe mental trauma. Behavioral symptoms are shown, such as excessive fear, anxiety, not wanting to sleep in the house, difficulty sleeping, and withdrawal (Astuti, 2006).

An additional study was conducted (Sihotang & Sudharmono, 2024) with a sample of 269 children between the ages of 6 and 18. A total of 135 children (50.19%) and 56 children (20.82%) experienced moderate anxiety (score 21–27). In addition, the study shows that children affected by disasters feel afraid. It was found that 42,94% of children felt sad about the suffering they experienced. In addition, 37.27% of children woke up early in the morning because they were worried about the next earthquake. As a result of this event, 36.9% of children experienced changes in emotions or moods. If the child's daily environment is disturbed, as many as 35.22% of children become dissatisfied with their previous hobbies, and around 28.16% lose the desire to do their activities. Children who experience disasters experience negative feelings, which causes them to be very anxious. As many as 41.36% of these children became afraid and irritable. Previous studies (Pratiwi et al., 2023) have shown that unaddressed and persistent fear causes anxiety.

CONCLUSION

This literature review examines the impact of natural disasters on children's mental health, highlighting that events such as earthquakes, floods, and volcanic eruptions can cause serious mental disorders, including PTSD, depression, and anxiety. About 30% of children affected by the disaster reported experiencing PTSD, while 20% showed signs of depression and anxiety. Women are more at risk of developing PTSD than men. Psychosocial interventions, such as play, singing, and storytelling therapy, are known to help alleviate PTSD symptoms, and children's resilience plays an important role in their ability to cope with trauma. In addition, disaster preparedness education is emphasized to improve children's mental readiness to face future disasters.

As suggestions for future research related to the impact of disasters on children's mental health, some things that can be considered are as follows (1) Expand the research population by involving more respondents of child victims of disasters to get a more comprehensive picture of the impact of disasters on children's mental health in different contexts; (2) Identify supporting factors that effectively reduce the impact of disasters on children's mental health, such as medication, play therapy, singing therapy, or storytelling therapy. This can help in more effective recovery of children's mental health; (3) Conduct direct comparisons between children affected by floods and children affected by other disasters, such as tsunamis, earthquakes, landslides, or volcanic eruptions, to see the differences in the impact of disasters on children's mental health.

By considering the suggestions above, future research can make a more in-depth contribution to

understanding the impact of disasters on children's mental health.

REFERENCES

- Ahmed, S. K., Saied, A. A., & Nashwan, A. J. (2024). The Impact of The 2023 Türkiye-Syria Earthquakes On The Mental Health of Children. *The International Journal of Social Psychiatry : Advance Online Publication.* https://doi.org/10.1177/00207640241278983
- Anam, A. K., Martiningsih, W., & Ilus, I. (2016). Post-Traumatic Stress Dissorder Of Kelud Mountain's Survivor Based On Impact Of Event Scale-Revised (IES-R) In Kali Bladak Nglegok District Blitar Regency. Journal of Ners and Midwifery), 3(1), 046-052. https://doi.org/10.26699/jnk.v3i1.art.p0 46-052
- Annisa, D. F., Erwinda L., &Syahputra, Y. (2024). The Effectiveness of Group Counseling using Self Talk Techniques to Reduce Procrastination of Post-Earthquake Traumatized Students. *Indonesian Journal of Guidance and Counseling Studies*, 1(2), 65-73. https://ojs.aeducia.org/index.php/ijgcs/arti cle/view/85
- Astuti, B. (2006). Layanan bimbingan dan konseling bagi korban gempa bumi di Yogyakarta. Jurusan Psikologi Bimbingan, Pendidikan, Yogyakarta. Pendidikan dan Fakultas Ilmu Universitas Negeri.
- Bali, E. N., Khotijah, I., Wollo, S., Kale, S., & Mundiarti, V. (2021). Pendampingan Psikososial Anak Korban Bencana di Sekolah Alam Manusak. *KELIMUTU Journal of Community Service* (KJCS), 1(1), 1-7. https://doi.org/10.35508/kjcs.v1i1.5526
- Cahyono, W. Dkk. (2013). Dukungan Psikososial: Membangun Desa Tangguh, Dari Kita, Oleh Kita, dan Untuk Kita. Dalam Pusat Krisis Fakultas Psikologi UI, JDC, dan USAID. Dukungan Psikogis Awal. Depok: Pusat Krisis Fakultas Psikologi UI.
- Hanifah, U. N., & Pratiwi, A. (2020). Gambaran Kecemasan Anak Dengan Post-Traumatic Stress Disorder Sebagai Dampak Bencana Alam Angin Puting Beliung. Jurnal Ilmu Keperawatan Jiwa, 3(2), 173. https://doi.org/10.32584/jikj.v3i2

- Khan, Y. S., Khan, A. W., & Alabdulla, M. (2023). The Psychological Impact of The Turkey-Syria Earthquake On Children: Addressing The Need For Ongoing Mental Health Support And Global Humanitarian Response. *European journal of psychotraumatology*, 14(2). https://doi.org/10.1080/20008066.2023.2249 788
- Khobibah, K., Rosiana, H., Ruspita, M., Sapartinah, T., Astyandini, B., Setiasih, S., & Isharyanti, S. (2023). Pelayanan Kesehatan Pada Korban Banjir Sebagai Upaya Rehabilitasi Pasca Bencana. *LINK*, 19(2), 69-74. http://dx.doi.org/10.31983/link.v19i2.9137
- Kurt, A., Topan, A., & Akkoç, B. (2024). The Relationship Between Media Exposure And Mental Health In Children Following Kahramanmaraş Earthquakes In Turkey. *Journal of Pediatric Nursing*, 78, 7–13. https://doi.org/10.1016/j.pedn.2024.05.037
- Nilson, D., Gustafsson, P. E., & Svedin, C. G. (2010). Self-reported potentially traumatic life events and symptoms of post-traumatic stress and dissociation. *Nordic Journal of Psychiatry*, 64(1), 19–26.

https://doi.org/10.3109/080394809032 64846.

- Oerther, S., Manspeaker, S., Wix, A., Oerther, D., & Marsit, C. (2024). The Effects of Wildfires on the Mental and Physical Health of School-Age Children in North America: A Scoping Review. Journal of child and adolescent psychiatric nursing : official publication of the Association of Child and Adolescent Psychiatric Nurses, Inc, 37(4). https://doi.org/10.1111/jcap.70002
- Pratiwi, S. L., Ramdhani, R. N., Taufiq, A., & Sudrajat, D. (2023). Hubungan Antara Konsep Diri dengan Kecemasan Sosial pada Mahasiswa Bandung. *KONSELING EDUKASI* . *Journal of Guidance and Counseling*, 7(1), 94. https://doi.org/10.21043/konseling. v7i1.1859
- Salcioglu, E., & Başoglu, M. (2008). Psychological effects of earthquakes in children: prospects for brief behavioural treatment. *Wold Journal Pediatrics*, 4(3), 165-172. https://doi.org/10.1007/s12519-008-0032-8 Schonfeld, D. J., & Demaria, T. (2024). Mental Health

Impact of Pandemics and Other Public Health Emergencies in Children. *Pediatric clinics of North America*, 71(3), 455–468. http://dx.doi.org/10.1016/j.pcl.2024.01.015

- Sihotang, I. C., & Sudharmono, U. (2024). Tingkat Kecemasan Pasca Gempa Bumi Pada Anak di Sekolah Dasar. *Nutrix Jurnal, 8*(1). https://doi.org/10.37771/nj.v8i1.1096
- Suherman, M. M., Melinda, C., Aulia, A., Fadya, T., & Kamilya, S. (2023). Dampak Trauma Pasca Gempa Cianjur pada Psikis Anak Sekolah Dasar Islam Kreatif Muhammadiyah Cianjur. *Jurnal Hawa: Studi Pengarus Utamaan Gender dan Anak*, 5(2). http://dx.doi.org/10.29300/hawapsga.v5i2.4 722
- Thoyibah, Z., Dwidiyanti, M., Mulianingsih, M., Nurmayani, W., & Wiguna, R. I. (2019). Gambaran Dampak Kecemasan dan Gejala Psikologis pada Anak Korban Bencana Gempa Bumi di Lombok. *Journal of Holistic Nursing and Health Science*, 2(1), 31-38. http://dx.doi.org/10.29300/hawapsga.v5i2.4 722
- Vergunst, F., & Berry, H. L. (2022). Climate change and children's mental health: a developmental perspective. *Clinical Psychological Science*, 10(4), 767-785. https://doi.org/10.1177/21677026211040787