S E R V I R E
Jurnal Penelitian dan Pengabdian
Vol. 6, No. 2 (2026): 230-265
DOI: 10.46362/servire.v6i2.476

Pendekatan Partisipatif Berbasis Komunitas untuk Mendukung Pemulihan Emosional Anak Usia Dini Pasca Banjir Bandang

A Community-Based Participatory Approach to Supporting Early Childhood Emotional Recovery After Flash Floods

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Submitted: 2 July 2025 I Revision: 8 September 2026 I Accepted: 1 October 2026 I Published: 5 November 2026

Citation (APA Style):
Warmansyah, J., Hannia, N.R., Juliani, R.P.T., Fajria, R., Jafi, L.K., Ulya, A., Liana, G.R., & Jumiarti, D. (2026). A Community-Based Participatory Approach to Supporting Early Childhood Emotional Recovery after Flash Floods. *SERVIRE: Jurnal Pengabdian Kepada Masyarakat*, *6*(2): 230-267. https://doi.org/10.46362/servire.v6i2.476.

Abstrak: *Banjir bandang dapat menimbulkan dampak emosional berkepanjangan pada anak usia dini, termasuk ketakutan, kecemasan, menarik diri, dan menurunnya partisipasi sosial. Program pengabdian kepada masyarakat ini bertujuan mendukung pemulihan emosional anak usia dini melalui pendekatan partisipatif berbasis komunitas (Community-Based Participatory Approach atau CBPA) di Nagari Sungai Jambu, Kabupaten Tanah Datar, Sumatera Barat, Indonesia. Program ini secara langsung melibatkan 10 anak usia dini serta melibatkan 40 orang tua atau pengasuh, 35 mahasiswa fasilitator, dan tiga dosen pembimbing sebagai peserta dan aktor pendukung komunitas. Intervensi meliputi asesmen partisipatif komunitas, edukasi pengasuhan psikososial, pendampingan keluarga, dan kegiatan psikososial berbasis bermain yang dirancang untuk memberikan rasa aman secara emosional serta menyediakan kesempatan bagi anak untuk mengekspresikan diri dan berinteraksi secara sosial. Data dikumpulkan melalui observasi partisipatif, wawancara semi-terstruktur, catatan lapangan, dan dokumentasi program, kemudian dianalisis secara tematik. Lima tema utama ditemukan, yaitu ketakutan dan kecemasan terkait bencana yang masih berlangsung pada anak; keluarga sebagai sumber utama keamanan emosional; perubahan praktik pengasuhan setelah edukasi psikososial; komunikasi dan bermain sebagai sarana ekspresi dan pemulihan emosional; serta dukungan komunitas sebagai fondasi resiliensi. Hasil observasi dan keterangan peserta menunjukkan meningkatnya kesadaran orang tua terhadap kebutuhan emosional anak, penggunaan komunikasi suportif dan praktik pengasuhan responsif yang lebih baik, serta meningkatnya kesempatan bagi anak untuk mengekspresikan emosi dan terlibat dalam aktivitas bermain serta interaksi sosial. Dengan demikian, program ini memperkuat kapasitas orang tua dan menciptakan lingkungan keluarga serta komunitas yang mendukung pemulihan emosional anak, sekaligus mendorong keterlibatan kolaboratif dalam pemulihan pascabencana.*

Kontribusi: *Program pengabdian kepada masyarakat ini berkontribusi melalui pengembangan model berbasis komunitas untuk mendukung pemulihan emosional anak usia dini setelah banjir bandang dengan menempatkan keluarga dan anggota komunitas sebagai mitra aktif, bukan sekadar penerima dukungan psikososial. Kerangka CBPA menunjukkan bagaimana asesmen komunitas, penguatan kapasitas orang tua, dan kegiatan bermain yang berpusat pada anak dapat diintegrasikan ke dalam dukungan pascabencana yang responsif terhadap kebutuhan lokal. Program ini juga menegaskan pentingnya kolaborasi perguruan tinggi dan komunitas dalam memperkuat sistem dukungan keluarga serta menciptakan kondisi yang berkelanjutan bagi pemulihan emosional anak di komunitas terdampak bencana.*

Kata Kunci: *pendekatan partisipatif berbasis komunitas; pemulihan emosional; anak usia dini; dukungan psikososial; banjir bandang.*

Abstract: Flash floods can have prolonged emotional consequences for young children, including fear, anxiety, withdrawal, and reduced social participation. This community service program aimed to support the emotional recovery of young children through a Community-Based Participatory Approach (CBPA) in Nagari Sungai Jambu, Tanah Datar Regency, West Sumatra, Indonesia. The program directly involved 10 young children and engaged 40 parents or caregivers, 35 university student facilitators, and three lecturer supervisors as participants and community support actors. The intervention comprised participatory community assessment, psychosocial parenting education, family mentoring, and play-based psychosocial activities designed to provide children with emotional security and opportunities for expression and social interaction. Data were collected through participatory observations, semi-structured interviews, field notes, and program documentation and analyzed thematically. Five themes emerged: persistent fear and disaster-related anxiety among children; the family as the primary source of emotional security; changes in parenting practices following psychosocial education; communication and play as pathways for emotional expression and recovery; and community support as a foundation for resilience. Observations and participant accounts indicated increased parental awareness of children's emotional needs, greater use of supportive communication and responsive parenting practices, and increased opportunities for children to express emotions and engage in play and social interaction. The program therefore strengthened parental capacity and created supportive family and community environments for children's emotional recovery, while fostering collaborative engagement in post-disaster recovery.

Contribution: This program contributes a community-centered model for supporting young children's emotional recovery following flash floods by positioning families and local community members as active partners rather than passive recipients of psychosocial support. The CBPA framework demonstrates how community assessment, parent capacity building, and child-centered play can be integrated into locally responsive post-disaster support. The program also highlights the role of university–community collaboration in strengthening family support systems and creating sustainable conditions for children's emotional recovery in disaster-affected communities.

Keywords: community-based participatory approach; emotional recovery; early childhood; psychosocial support; flash floods.

INTRODUCTION

Hydrometeorological disasters increasingly shape the social and environmental realities of communities across the world. Climate change, land degradation, deforestation, and rapid environmental transformation have intensified the frequency and severity of floods and flash floods in many regions, particularly in developing countries where vulnerability remains high.[1] These events disrupt livelihoods, damage

[1] Sophie Boehm, Rebecca Carter, Kelly Levin, Intergovernmental Panel on Climate Change (IPCC), Climate Change 2022 – Impacts, Adaptation and Vulnerability (Cambridge: Cambridge University Press, 2023), 1285-2272; Sri Rahayu et al., "Disaster Mitigation Based on Minangkabau Indigenous Knowledge

infrastructure, and alter the conditions through which individuals and communities sustain everyday life. Recent studies have also highlighted that the consequences of disasters extend beyond physical destruction and economic losses, affecting social relationships, psychological well-being, and community resilience over extended periods of time.[2]

Indonesia faces substantial exposure to hydrometeorological hazards. Floods, flash floods, and landslides account for a significant proportion of disaster events reported annually, with many occurrences linked to changing rainfall patterns, watershed degradation, and environmental pressures.[3] West Sumatra represents one of the provinces frequently affected by flash floods, locally known as galodo, which have repeatedly disrupted settlements, agricultural activities, and community livelihoods.[4] Although disaster recovery efforts in Indonesia have increasingly incorporated resilience and risk-reduction perspectives, recovery practices and research continue to place substantial emphasis on physical, infrastructural, and economic restoration, while psychosocial recovery particularly among young children remains comparatively less examined.[5]

Children experience disasters differently from adults due to their developing

in Social Studies Learning," Jàmbá Journal of Disaster Risk Studies 18, 2026): 1-13; S. K. Naik et al., "Land Degradation: A Global Challenge to Environmental Sustainability and Livelihood Security," in Ecological Solutions to Agricultural Land Degradation (Singapore: Springer Nature Singapore, 2025), 1–27; Borah et al., "Wellbeing in the Aftermath of Floods: Findings from a Qualitative Study in Bongaigaon District of Assam, India," Wellbeing, Space and Society 4 (2023): 100147.

[2] Ling He et al., "Regional Economic Impact of Flood Disasters in Yangtze River Economic Zone: A TERM Model with a Decomposition Analysis Approach," *International Journal of Disaster Risk Reduction* 120 (2025): 105346; Thijs Endendijk et al., "Enhancing Resilience: Understanding the Impact of Flood Hazard and Vulnerability on Business Interruption and Losses," *Water Resources and Economics* 46 (2024): 100244; Ann V. Sanson and Ann S. Masten, "Climate Change and Resilience: Developmental Science Perspectives," *International Journal of Behavioral Development* 48, no. 2 (2024): 93–102.

[3] BNPB, "Banjir Dan Longsor Sumatera 2025 [GIS Dashboard]." (2025); Susilowati and Dyah Indriana Kusumastuti, "Hydrometeorological Disaster Mitigation Through Rainfall Intensity Mapping Using IDF in Sumatera Island, Indonesia," *International Journal of Design & Nature and Ecodynamics* 19, no. 2 (2024): 571–579.

[4] Irfan Pramono and Endang Savitri, "Flash Flood in Arau Watershed, West Sumatera: A Mitigation Study," *MATEC Web of Conferences* 229 (2018): 03002.

[5] Muhammad Anggri Setiawan et al., "Tropical Cyclone Seroja's Aftermath: Flash Flood Inundation Modeling and Recovery Efforts in Rural Coastal Lembata, East Nusa Tenggara Province, Indonesia," *Tropical Cyclone Research and Review* 14, no. 4 (2025): 323–339; Nasri Nasri et al., "Ecological Disaster in Northern Sumatra: How Extreme Rainfall and Land-Cover Disturbance Triggered Widespread Flash Flooding," *Jurnal Penelitian Kehutanan Wallacea* 14, no. 2 (2025): 111–121; Budi Gustaman, Gani A. Jaelani, and Fadly Rahman, "The Impossible Disaster: Narrative of the Flash Flood Disaster in Sangiang (Indonesia) in 1980 Based on Oral Tradition, Geological Studies, and Media Reports," *Southeast Asian Studies*, 2026, 26012.

cognitive, emotional, and social capacities. Natural disasters can disrupt children's emotional security, social relationships, sense of safety, and daily routines, particularly during early childhood when emotional regulation and social competence are still emerging.[6] Disaster experiences are frequently associated with fear, anxiety, uncertainty, emotional withdrawal, and other psychosocial difficulties among children.[7] Children are therefore considered one of the most vulnerable groups to disaster-related risks and long-term consequences,[8] highlighting the importance of emotional recovery within post-disaster support efforts. For young children, post-disaster distress may be expressed not only through fear and anxiety but also through changes in emotional regulation, attachment-related behaviours, withdrawal, sleep, play, and social interaction. Recent research on children exposed to disasters has emphasized that these responses may persist beyond the immediate emergency period and can influence children's adjustment when supportive environments are unavailable.[9]

Contemporary perspectives on disaster recovery increasingly recognize psychosocial well-being as an essential component of resilience. Recovery involves more than restoring physical environments; it also includes rebuilding emotional security, social connectedness, and adaptive capacities within families and communities.[10] Studies focusing on early childhood have shown that supportive environments help children process difficult experiences, express emotions, and regain confidence after disruptive events.[11] From an emotional regulation perspective,

[6] Carolyn Kousky, "Impacts of Natural Disasters on Children," *The Future of Children* 26, no. 1 (2016): 73–92.

[7] Grace Spencer and Jill Thompson, "Children and Young People's Perspectives on Disasters – Mental Health, Agency and Vulnerability: A Scoping Review," *International Journal of Disaster Risk Reduction* 108 (2024): 104495.

[8] Susan L. Cutter, "The Forgotten Casualties Redux: Women, Children, and Disaster Risk," *Global Environmental Change* 42 (2017): 117–121.

[9] Madelaine R. Abel, Erin P. Hambrick, and Eric M. Vernberg, "Talking with Children About Natural Disasters: Maternal Acknowledgment, Child Emotion Talk, and Child Posttraumatic Stress Symptoms," *Child & Youth Care Forum* 50, no. 5 (2021): 947–68; Ann S. Masten, "Resilience of Children in Disasters: A Multisystem Perspective," *International Journal of Psychology* 56, no. 1 (2021): 1–11.

[10] Cüneyt Çalışkan and Sarp Üner, "Disaster Literacy and Public Health: A Systematic Review and Integration of Definitions and Models," *Disaster Medicine and Public Health Preparedness* 15, no. 4 (2021): 518–527; Amir Khorram-Manesh et al., "Education in Disaster Management: What Do We Offer and What Do We Need? Proposing a New Global Program," *Disaster Medicine and Public Health Preparedness* 10, no. 6 (2016): 854–873.

[11] Natalie Conrad Barnyak and Jacqueline M. Myers, "Picturebooks About Disasters: Incorporating Interactive Read-Alouds to Support Young Children's Social-Emotional Learning," *Early Childhood Education Journal* 52: 1423–1432; Salsya Iffana Syaharra, Meliana Sari, and Shakib Ahmed, "Development of Interactive Smart Poster Media for Sexual Education Introduction to Children Aged 5–6 Years," *Journal*

recovery among young children involves opportunities to recognize, express, and gradually regulate distress within relationships that provide safety and predictability. In post-disaster settings, these regulatory processes are closely intertwined with responsive adult interaction, supportive routines, and opportunities for play and social engagement.[12] Interactive storytelling, guided conversations, play-based experiences, and emotionally responsive interactions provide opportunities for children to make sense of experiences that may otherwise remain confusing or distressing.

Family relationships occupy a central position within children's recovery processes. Social Learning Theory explains that children acquire behavioural patterns, emotional responses, and coping strategies through interactions with significant others, particularly parents and caregivers.[13] Sociocultural perspectives likewise emphasize that development occurs through participation in social interactions and shared cultural practices.[14] Family members often become children's primary source of reassurance when disasters disrupt familiar routines and environments. Emotional support, attentive communication, and responsive caregiving create conditions that help children rebuild feelings of safety and trust. Research addressing young children's learning and development continues to highlight the importance of adult guidance and supportive relationships during periods of uncertainty and transition.[15] This suggests that supporting children's emotional adjustment cannot be separated from strengthening the adults and social environments surrounding them. An intervention directed only at children may address immediate emotional expression but may have

of Early Childhood Education and Teaching (JECET) 1, no. 1 (2025): 11–18; Riko Sianipar and John Komba, "Enhancing Early Childhood Cooperative Play Skills Through a Social Intervention Program," *Journal of Early Childhood Education and Teaching (JECET)* 1, no. 2 (2023): 78–89.

[12] Arsema Abebe, Yilkal Simachew, and Tefera Darge Delbiso, "Effect of Ready-to-Use Therapeutic Foods on Time to Recovery among Children with Severe Acute Malnutrition in Ethiopia: A Prospective Cohort Study," *BMC Pediatrics* 23, no. 1 (2023): 340; Suvi T. Kangas et al., "Post-Recovery Relapse of Children Treated with a Simplified, Combined Nutrition Treatment Protocol in Mali: A Prospective Cohort Study," *Nutrients* 15, no. 11 (2023): 2636.

[13] Anwar Rumjaun and Fawzia Narod, "Social Learning Theory—Albert Bandura," 2020, 85–99.

[14] A.A. Margolis, "Zone of Proximal Development, Scaffolding and Teaching Practice," *Cultural-Historical Psychology* 16, no. 3 (2020): 15–26.

[15] Wei-Hsiang Huang and Hui-Ling Chen, "Developing a Disaster Literacy Curriculum for Young Children: Integrating Social Learning Theory and the Zone of Proximal Development," *Early Childhood Education Journal* 54, no. 4 (2026): 3201–3225; Amelisa Wulandari et al., "Enhancing the Success of Toilet Training for Children Aged 2-3 Years at the UIN Mahmud Yunus Batusangkar Laboratory Daycare," *Journal of Comunity Service in Early Childhood Education* 1, no. 1 (2025): 9–20; Syarfina Syarfina and Jhoni Warmansyah, "Online Training on Writing Scientific Articles in Early Childhood Education for Accredited Sinta Journals," *Journal of Comunity Service in Early Childhood Education* 1, no. 1 (2025): 1–8.

limited reach if parents and other community actors lack the knowledge, confidence, and practical strategies needed to sustain supportive interactions in everyday life.

Educational and community-based initiatives have increasingly contributed to disaster-related learning and resilience-building efforts. Existing scholarship has examined disaster preparedness education,[16] disaster literacy,[17] digital learning innovations,[18] game-based disaster learning,[19] and school-based risk reduction programs.[20] These studies have contributed valuable insights into preparedness, awareness, and risk reduction. Recent studies and reviews further suggest that psychosocial responses to disasters among children require attention to relational and developmental contexts, yet evidence specifically addressing family-supported emotional recovery among young children in community-based post-disaster programs remains limited.[21] Limited evidence is available regarding how parents interpret children's emotional responses, how community participation shapes recovery processes, and how psychosocial support is experienced within everyday family life following disasters.

The 2024 flash flood in Nagari Sungai Jambu, Tanah Datar Regency, West Sumatra, created significant challenges for young children and their families. A preliminary community needs assessment based on initial discussions and observations identified several emotional and behavioural concerns among young children. Parents reported persistent fear, anxiety, increased dependency, and reluctance among children to

[16] Avianto Amri et al., "Pathways to Disaster Risk Reduction Education Integration in Schools: Insights from SPAB Evaluation in Indonesia," *International Journal of Disaster Risk Reduction* 73 (2022): 102860.

[17] Aldila Rahma, Fanny Rizkiyani, and Dianti Yunia Sari, "Exploring Disaster Literacy: Early Childhood Education Teachers' Perspective on School Safety," *Early Years*, 2025, 1–19.

[18] Syamsul Bachri et al., "Developing an Education Support System for Disaster Management through an Ethnoscience-Based Digital Disaster Learning Module," *International Journal of Disaster Risk Reduction* 100 (2024): 104214.

[19] Adelia Maulida et al., "Roblox-Based Tsunami Survival Game: A Tool to Stimulate Early Childhood Disaster Preparedness Skills," ed. P. Pertiwi et al., *E3S Web of Conferences* 447 (2023): 02003.

[20] Muzani Muzani et al., "The Obstacles Hierarchy of School Disaster Preparedness Implementation in Mount Sinabung Area, Indonesia," *Frontiers in Education* 7 (2022).

[21] Tara Powell, Jenna M. Muller, and Greta Wetzel, "Evidence-Based Interventions for Children and Families During Disaster Recovery: Trends, Lessons Learned, and Future Directions," in *Ortiz, S.E., McHale, S.M., King, V., Glick, J.E. (Eds) Environmental Impacts on Families. National Symposium on Family Issues, Vol 12.* (Springer, Cham, 2023), 23–39; Mariam Rahmani, Ashraf Muzwagi, and Andres J. Pumariega, "Cultural Factors in Disaster Response Among Diverse Children and Youth Around the World," *Current Psychiatry Reports* 24, no. 10 (2022): 481–91; Subhasis Bhadra, "Psychosocial Support for Protection of Children in Disasters," in *Child Safety, Welfare and Well-Being* (Singapore: Springer Singapore, 2022), 453–482.

participate in routine activities. Parents also reported that heavy rainfall, thunder, and changes in the surrounding environment could trigger emotional reactions several months after the disaster. Many parents remained uncertain about appropriate strategies for responding to their children's emotional needs while managing their own recovery. The community also lacked a coordinated family and community-based psychosocial support activity for young children. The identified needs called for an intervention that could strengthen parental capacity and provide children with safe opportunities for emotional expression, play, and social interaction.

Children's emotional adjustment after disasters develops within caregiving relationships and broader social environments.[22] Interventions that focus exclusively on children may not adequately address family and social conditions that influence children's adjustment following traumatic experiences.[23] Community-based psychosocial interventions can strengthen the capacity of parents, caregivers, and local actors to respond to children's emotional needs.[24] Participatory approaches can incorporate local knowledge and community priorities into intervention planning and implementation, which is particularly relevant in post-disaster settings where needs and available resources may change over time.[25] Community-Based Participatory Approaches (CBPA) involve community members in identifying needs, implementing activities, and reflecting on intervention processes and outcomes.[26] The present program applied CBPA through community assessment, parent engagement, family

[22] Amethyst Freibott-Kalt et al., "Children, Disasters, and Place Attachment: A Contemporary Framework for Understanding Crisis in Context," *Current Psychiatry Reports* 27, no. 11 (2025): 613–621; Erdinc Ozturk et al., "Social Trauma and Disaster Psychology: The Impact of Earthquakes on Children's Mental Health from the Perspective of Dissoanalysis Theory and Modern Psychotraumatology," *Novel Forensic Research* 2, no. 3 (2023): 57; Lisa Stribley et al., "Post-Disaster Social Connectedness in Parent–Child Dyads: A Qualitative Investigation of Changes in Coping and Social Capital of Rural Australian Families Following Bushfires," *The British Journal of Social Work* 55, no. 1 (2025): 5–24.

[23] Tara Powell, Flora Cohen, and Maegan Ramchal, "Children's Coping in Disasters: Developments, Challenges, and Future Directions," *Current Psychiatry Reports* 28, no. 1 (2025): 3.

[24] Malizgani Paul Chavula et al., "The Role of Community-Based Volunteers in Integrating Interactive Playful Parenting Interventions for Early Childhood Development in Rural Community Systems for Health in Zambia: A Qualitative Study," *BMC Primary Care* 26, no. 1 (2025): 402.

[25] Bonnie Maria van Dongen et al., "Building Community Capacity to Stimulate Physical Activity and Dietary Behavior in Dutch Secondary Schools: Evaluation of the FLASH Intervention Using the REAIM Framework," *Frontiers in Public Health* 10 (2022): 926465.

[26] Elaine Hoi Yee Chow and Agnes Tiwari, "Perceptions of Abused Chinese Women on Community-Based Participatory Approach Programme in Addressing Their Needs," *International Journal of Qualitative Studies on Health and Well-Being* 19, no. 1 (2024): 38564773; Phillip H. Chen et al., "Leveraging a Community-Based Participatory Approach to Improve Linkage to Care for HBV," *Clinical Liver Disease* 21, no. 4 (2023): 117–121.

mentoring, child-centred play activities, and collaboration among families, university students, lecturers, and local stakeholders.[27]

Recent disaster-related studies have largely addressed preparedness, disaster risk reduction, disaster literacy, and resilience-building among children and communities.[28] Fewer studies have examined how families and communities support young children's emotional adjustment during the post-disaster period. The literature also provides limited insight into how parents interpret children's post-disaster emotional responses and how community participation can be incorporated into family-centred psychosocial support for young children.[29] The present program addresses this gap by integrating early childhood emotional support, family capacity building, and community participation within a CBPA framework. Parents and community actors were positioned as active partners in creating supportive environments for children's emotional adjustment following a flash flood. The program provides context-specific evidence from a disaster-affected community in West Sumatra, Indonesia, by approaching post-disaster emotional support as a family- and community-supported process rather than solely as an individual child outcome.

Accordingly, this community service program aimed to explore how a Community-Based Participatory Approach could support family and community responses to young children's emotional experiences following the flash flood. Specifically, the program sought to: (1) identify parents' and community members' perceptions of children's post-disaster emotional responses; (2) strengthen parents' and caregivers' capacity to provide emotionally responsive support; and (3) facilitate child-centred play and social

[27] Kurniawan et al., "Strengthening Early Childhood Motor Development through Structured Educational Play and Outdoor Learning"; Eli Sabrifha, Retno Wasari, and Thabo Mokoena, "Revolutionizing Education: 10 Innovative Teaching Strategies for the 21st-Century Classroom," *Journal of Educational Teaching and Trends* 1, no. 1 (2025): 56–66.

[28] Qingchen Fu and Xing Zhang, "Promoting Community Resilience through Disaster Education: Review of Community-Based Interventions with a Focus on Teacher Resilience and Well-Being," ed. Md Nazirul Islam Sarker, *PLOS ONE* 19, no. 1 (2024): e0296393; Martha Keswick et al., "From Storytelling to Resilience: A Transdisciplinary Approach to Empowering Children in Disaster Risk Reduction," *International Journal of Disaster Risk Reduction* 131 (2025): 105881.

[29] Joanna Vivek et al., "Lived Experiences of Caregivers with Special Children during Flash Floods in Tamil Nadu, India," *Discover Public Health* 23, no. 1 (2026): 353; Susanti Niman et al., "Children and Their Experiences about Seasonal Flood Disasters in Indonesia : Qualitative Study," *Vulnerable Children and Youth Studies* 19, no. 1 (2024): 140–157; Putri Rhamelani et al., "Family-Centered Psychosocial Interventions for Disaster-Affected Children Across Developmental Stages: A Scoping Review," *Risk Management and Healthcare Policy* Volume 19: 1–21; Eva A. Bogdan et al., "Holding Together after Disaster: The Role of Social Skills in Strengthening Family Cohesion and Resilience," *Family Relations* 72, no. 4 (2023): 2194–2214.

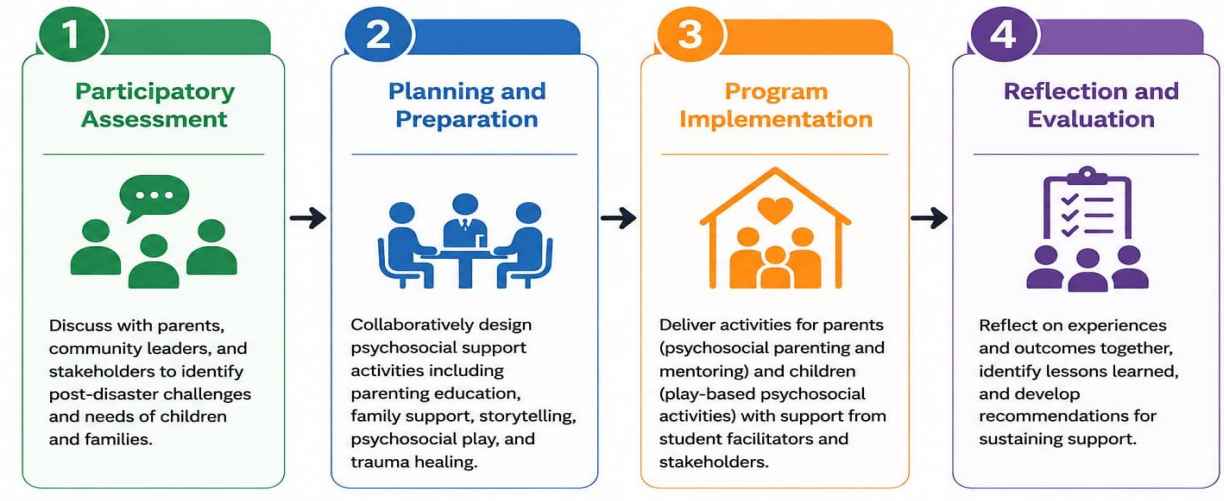
activities that create opportunities for emotional expression and interaction. The program also examined how collaboration among families, university facilitators, lecturers, and community members could contribute to locally responsive post-disaster psychosocial support.

METHODS

Community Service Design

This community service program adopted a Community-Based Participatory Approach (CBPA) to support the emotional recovery of young children affected by the flash flood disaster in Nagari Sungai Jambu, Tanah Datar Regency, West Sumatra, Indonesia. The approach engaged parents, community members, facilitators, and local stakeholders in identifying needs, planning activities, implementing interventions, and evaluating outcomes. Through active participation and shared responsibility, the program strengthened psychosocial support and community involvement in children's recovery processes.

Figure 1. Community Service Design Based on the Community-Based Participatory Approach (CBPA).



Community Setting and Participants

The program was conducted over three consecutive days, from 20 to 22 June 2025, in Nagari Sungai Jambu, a community affected by the flash flood disaster in Tanah Datar Regency, West Sumatra, Indonesia. Participants included 40 parents or caregivers of young children as the primary beneficiaries, 10 early childhood children who engaged in psychosocial play activities, 35 members of the Early Childhood Islamic

Education Student Association (HMPS PIAUD) who served as facilitators, and three lecturer supervisors responsible for program coordination and mentoring. The program implemented parenting education, family support, mentoring, and structured play-based psychosocial activities to promote emotional expression, emotional regulation, and social engagement among children. Student facilitators supported program implementation under lecturer supervision, while community leaders and local stakeholders contributed to planning, coordination, and implementation activities, strengthening community participation, local ownership, and the sustainability of psychosocial recovery efforts within the affected community.

Data Collection

Data collection followed qualitative procedures consistent with participatory community-based research. Multiple sources of evidence were used to capture participants' experiences and perceptions of the intervention.

Participatory Observation

Participatory observations were conducted throughout program implementation. Observations focused on children's emotional expressions, parent–child interactions, participant engagement, communication patterns, and behavioral responses during intervention activities. Facilitators documented observations through structured field notes prepared immediately after each activity session.

Table 1. Family-Centred Interview Topic Guide.

Topic Domain	Guiding Questions
Children's Emotional Responses Following the Disaster	How did your child react immediately after the flash flood? What emotional changes did you observe? Were there changes in sleeping, eating, or playing behaviors? What situations appeared to trigger emotional reactions?
Family Recovery Experiences	What challenges did your family face during recovery? How did family members support one another? What support was most helpful? What difficulties remained unresolved?
Parents' Understanding of Children's Emotional Needs	What did you understand about children's emotional responses before the intervention? What new knowledge did you gain? Which information was most useful? How did your understanding change?
Parenting Practices and Emotional Support	How do you respond when your child feels afraid or anxious? What strategies do you use to provide emotional support? What changes occurred after participating in the program? What challenges did you encounter?
Parent–Child Communication	How has communication with your child changed? How does your child express emotions at home? What activities strengthened your

	relationship? What improvements have you observed?
Experiences During the Intervention	Which activities were most beneficial? How did the parenting sessions support you? What was your child's response to play-based activities? What aspects should be improved?
Perceived Outcomes	What positive changes have you observed in your child? How has your family benefited from the program? What signs indicate emotional recovery? What support remains necessary?
Community Support and Sustainability	How has the community supported recovery efforts? What additional support is needed? How can similar programs be sustained in the future? What recommendations would you provide?

Semi-Structured Interviews

Semi-structured interviews were conducted with six parents selected purposively based on their active participation throughout the intervention. Interviews were conducted following completion of program activities to explore participants' experiences, perceptions of change, and reflections regarding children's emotional recovery. Interviews lasted between 30 and 60 minutes and were audio-recorded with participants' consent. The interview guide consisted of several thematic domains designed to explore emotional recovery experiences, parenting practices, family communication, intervention experiences, and perceived outcomes.

Data Analysis

Interview recordings were transcribed verbatim and analyzed together with observation notes, facilitator journals, and documentation records. Data were analyzed using thematic analysis procedures. The analytical process involved repeated reading of transcripts, open coding, categorization of codes, identification of recurring patterns, and development of overarching themes. Thematic analysis followed the six phases: familiarization with the data, generation of initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report[30]. The analysis combined inductive and deductive coding. Inductive codes were developed from participants' accounts and observations, while deductive codes were informed by concepts related to psychosocial recovery, family resilience, emotional support, and child development. The research team reviewed the developing themes against the

[30] Virginia Braun and Victoria Clarke, "Toward Good Practice in Thematic Analysis: Avoiding Common Problems and Be(Com)Ing a Knowing Researcher," *International Journal of Transgender Health* 24, no. 1 (2023): 1–6.

complete dataset to ensure that the interpretations remained grounded in the collected evidence.

Both inductive and deductive coding approaches were employed. Inductive coding enabled themes to emerge directly from participants' experiences, whereas deductive coding was informed by concepts related to psychosocial recovery, family resilience, emotional support, and child development. Emerging themes were reviewed collaboratively by the implementation team to strengthen analytical rigor and consistency.

Trustworthiness and Ethical Considerations

Trustworthiness was strengthened through triangulation of semi-structured interviews, participatory observations, facilitator field notes, and program documentation. The four data sources were examined together during the analysis to identify convergent and divergent accounts. Interview data provided parents' perspectives on children's emotional responses and changes in parenting practices, while observations and facilitator field notes documented children's engagement, emotional expression, communication, and interactions during program activities. Program documentation was used to provide contextual information and support interpretation of the implementation process. When differences occurred between parent accounts and facilitator observations, the research team reviewed the relevant data in context rather than treating one source as more authoritative than another. Interpretations were developed through discussion among the research team, with attention to the researchers' roles as program facilitators and observers.

Ethical considerations were prioritized because the program involved young children and families affected by a flash flood. Parents or legal guardians were informed about the purpose and procedures of the program and provided consent for their children's participation and for the collection of relevant observation and documentation data. Participation was voluntary, and participants were informed that they could decline to participate in interviews or documentation activities. Activities were conducted in a supportive environment, and facilitators avoided requiring children to recount distressing disaster experiences or participate in activities when signs of discomfort were observed. Children's identities were protected by removing

personally identifying information from research records and reports. Pseudonyms were used when quotations were presented in the findings. Audio recordings of interviews were obtained only with participants' consent and were treated as confidential research data. Photographs and other program documentation were used only for purposes covered by the consent provided by parents or guardians and were handled by the research team with attention to children's privacy and protection.

RESULT

Analysis of the interview data revealed five interrelated themes describing the emotional recovery experiences of young children following the flash flood disaster and the role of families and communities in supporting this process. The themes include: (1) persistent fear and disaster-related anxiety among children, (2) family as the primary source of emotional security, (3) transforming parenting practices through psychosocial education, (4) communication and play as pathways for emotional recovery, and (5) community support as a foundation for recovery and resilience. Together, these themes illustrate that children's emotional recovery was shaped by the interaction between individual experiences, family support, psychosocial interventions, and community participation.

Persistent Fear and Disaster-Related Anxiety Among Children

The interviews revealed that fear and anxiety remained the most frequently reported emotional responses among children following the flash flood disaster. Although the intensity of emotional reactions varied among families, parents consistently described children's heightened sensitivity to environmental conditions associated with the disaster. Rainfall, thunder, strong winds, and memories of the flood often triggered feelings of insecurity and fear, even after the emergency phase had passed. These findings indicate that the disaster experience continued to shape children's emotional responses long after physical recovery efforts had been initiated.

Several participants reported that children became visibly anxious whenever heavy rain occurred. Rainfall was no longer perceived as an ordinary weather event but rather as a reminder of the traumatic experience. DW explained that her child continued to experience fear whenever rain and thunder occurred because these conditions

reminded the child of the flood disaster. The child often became worried and sought reassurance from family members.

> *"There was definitely fear and anxiety because it was the first disaster my child had ever experienced. At that time the electricity went out, there were strong vibrations around the house, and everything felt frightening. Even though there were no major emotional changes afterwards, whenever it rains or there is thunder, the child becomes anxious again and seems to remember what happened during the flood." (P01 – DW)*

A similar experience was reported by AM, who observed that fear remained closely associated with rainfall. According to her account, children often monitored environmental conditions and preferred staying close to their parents whenever the weather became unstable.

> *"Whenever it starts raining, the children immediately become worried. They keep looking outside because they are afraid the water will come again. They do not want to be far from us and prefer staying close to their parents. We were worried because their psychological condition was affected and we were afraid the trauma would stay with them for a long time." (P05 – AM)*

Parents also described changes in children's daily behaviour. Some children became less interested in outdoor activities, preferred remaining close to family members, and demonstrated greater emotional dependency than before the disaster. WD explained that her child temporarily avoided outdoor play and interacted less frequently with peers following the disaster.

> *"After the flood, my child did not want to play outside for some time. Interaction with friends also decreased because the child was still afraid. When heavy rain came, the fear returned. After several trauma-healing activities were conducted, the children gradually became more cheerful and started interacting again." (P02 – WD)*

Similar observations emerged from AN interview, where she noted that her child became more hesitant to leave the home environment and displayed greater caution when interacting with the surrounding environment.

> *"The fear was still there, although not as strong as before. Socially my child could still interact with others, but leaving the house became less frequent. I was worried that the fear would reduce my child's confidence and willingness to play outside." (P03 – AN)*

The duration of these emotional responses varied considerably. While some parents observed improvements within a relatively short period, others reported that fear persisted for several months or even longer. AM described how some children

continued to demonstrate signs of trauma more than a year after the disaster, particularly during periods of heavy rainfall.

> *"For some children, the trauma lasted a long time. More than a year later, there were still children who became frightened whenever it rained. The fear did not disappear immediately because the disaster had left a strong impression on them." (P05 – AM)*

These findings suggest that emotional recovery is not an immediate outcome of disaster response but rather a prolonged developmental process. Children's emotional experiences were shaped by their direct exposure to the disaster, the meanings they attached to environmental cues, and the quality of support available within their family and community environments.

Figure 2. Semi-Structured Interviews with Parents and Caregivers During Data Collection.



Family as the Primary Source of Emotional Security

A recurring finding across all interviews was the critical role of families in supporting children's emotional recovery. Parents consistently described themselves as the first and most trusted source of comfort for children experiencing fear and uncertainty. Emotional recovery frequently occurred through everyday interactions within the family rather than through formal therapeutic interventions. Parents viewed emotional support as an essential responsibility and actively sought ways to restore children's sense of security following the disaster.

Many participants reported that children actively sought physical closeness during periods of anxiety. Parents responded by hugging children, staying physically close, and repeatedly reassuring them that they were safe. AM explained that when the disaster occurred, parents instinctively prioritized protecting and comforting their children through physical affection and continuous emotional reassurance.

> "*The first thing we did was save the children, hold them close, and reassure them that they were safe. We hugged them and told them not to be afraid because we would always be there for them. Every day we kept reminding them that everything would be okay." (P05 – AM)*

DW similarly emphasized the importance of remaining close to children and reassuring them that the feared event would not occur again.

> *"Usually I stay beside my child and tell them that what they are afraid of will not happen again. I try to make them feel safe and reassure them that everything is under control. Being physically present beside them is the most important strategy." (P01 – DW)*

Several parents also highlighted the importance of family communication in helping children process emotional experiences. Open conversations provided opportunities for children to express fears, discuss experiences, and seek clarification regarding events they did not fully understand. PT explained that communication became increasingly important following the disaster because children often wanted to share their worries and daily experiences with their parents.

> *"We talk every day, especially after Maghrib. Children tell us what happened during the day, what made them happy, and what made them upset. Through communication we can understand what they are feeling and help them overcome their fears." (P06 – PT)*

WD likewise described the importance of patience and attentive listening when responding to children's emotional difficulties.

> *"When children are anxious or upset, we should not become angry. We should hug them, ask them gently what happened, and listen carefully. Children today need patience. If parents become harsh, children will not want to talk about their feelings." (P02 – WD)*

Beyond emotional reassurance, families actively created positive experiences that could help children move beyond traumatic memories. Some parents intentionally took children outside the disaster-affected area to expose them to new experiences and reduce their focus on frightening memories.

> *"One week after the disaster, I took my child outside the village. We visited places where children could play and enjoy themselves. I wanted my child to see something different and slowly forget the frightening memories of the flood." (P03 – AN)*

The findings position families as the primary protective environment during post-disaster recovery. While external support contributed to recovery efforts, parents remained the individuals most directly involved in rebuilding children's sense of safety, trust, and emotional stability.

Figure 3. Family Mentoring and Parenting Education Activities.



Transforming Parenting Practices Through Psychosocial Education

Participation in the psychosocial support program contributed to meaningful changes in parents' understanding of children's emotional needs. Many participants acknowledged that prior to the intervention they possessed limited knowledge regarding trauma responses, emotional regulation, and appropriate strategies for supporting children following disasters. Although parents had attempted to help children using their own experiences and instincts, the educational sessions provided a more systematic understanding of children's psychological needs.

Parents frequently stated that the educational sessions provided practical guidance that could be applied immediately within the family environment. DW reported gaining new insights into managing children's emotional reactions during post-disaster situations and learning alternative strategies for reducing anxiety.

> *"Before joining this activity, I only knew a few ways to help children deal with fear. After participating, I learned more about how to manage children's emotions after a*

disaster. There were strategies and solutions that I had never thought about before, and now I feel more confident supporting my child." (P01 – DW)

AM similarly explained that the program expanded parental understanding regarding child development and emotional support practices.

"We gained new knowledge from this activity. Sometimes we think we already understand children, but there are many things we do not know. The explanation about children's emotional development and anxiety helped us understand our children better and taught us new ways to support them." (P05 – AM)

One particularly significant finding involved shifts in parental attitudes toward communication and emotional support. Participants described becoming more aware of the importance of patience, emotional responsiveness, and supportive dialogue. WD repeatedly emphasized that children should be approached gently and patiently rather than through authoritarian approaches.

"Children today are different. We cannot educate them in the same way previous generations were educated. We need patience, gentle communication, and understanding. Being harsh only makes children withdraw, whereas patience helps them express what they feel." (P02 – WD)

The educational sessions also encouraged parents to reflect critically on their existing parenting practices. Several participants explained that they had previously relied primarily on intuition and personal experience when responding to children's emotional difficulties. The program introduced evidence-informed approaches that strengthened parental confidence and expanded their repertoire of supportive parenting strategies. The findings indicate that psychosocial education functioned not only as a source of information but also as a catalyst for reflective learning. Parents became more conscious of children's emotional needs and more intentional in their efforts to provide psychological support during recovery.

Communication and Play as Pathways for Emotional Recovery

The interviews highlighted communication, storytelling, and play-based activities as important mechanisms supporting children's emotional recovery. Parents frequently described these activities as effective because they aligned with children's developmental characteristics and allowed emotional expression to occur naturally. Rather than discussing traumatic experiences directly, children often communicated their emotions through stories, games, and interactions with trusted adults.

Communication emerged as a central strategy within many households. Several participants reported intentionally increasing conversations with children after the disaster. These interactions provided opportunities for children to discuss fears, ask questions, and receive reassurance from trusted adults.

> *"Every Maghrib we spend time talking together. Children tell stories about what they experienced, what they are worried about, and what happened during the day. Through those conversations we can understand their feelings and help them overcome their fears." (P03 – AN)*

Storytelling was repeatedly identified as one of the most beneficial components of the program. Parents perceived storytelling not only as a source of entertainment but also as a tool for strengthening emotional bonds and helping children process experiences.

> *"The storytelling activity was very useful because it showed us a simple way to communicate with children. Stories help children relax, become interested, and open up about their feelings. It is something we can easily do at home before bedtime." (P04 –YY)*

Figure 4. Storytelling and Play-Based Psychosocial Activities.



AM similarly reported that storytelling demonstrations provided practical ideas that could be incorporated into daily parenting routines.

> *"One thing I learned from this program is the importance of storytelling. Sometimes children are more interested in listening to stories than direct advice. Through storytelling, we can teach values, reduce anxiety, and create a closer relationship with children." (P05 – AM)*

Play-based activities generated similarly positive responses. Parents observed that children became more relaxed, enthusiastic, and socially engaged during games, group activities, and interactive sessions facilitated by students and volunteers.

> *"The children were very enthusiastic. They laughed, played together, and interacted with their friends. Activities like these are exactly what children need after a disaster because they help them feel happy again and reduce the fear they have been carrying." (P05 – AM)*

These findings suggest that communication and play functioned as complementary pathways through which emotional recovery occurred. Both approaches encouraged emotional expression, strengthened social relationships, and promoted resilience among children affected by disaster experiences.

Community Support as a Foundation for Recovery and Resilience

The final theme concerns the broader social environment that supported children's recovery. Parents consistently described the contributions of community members, volunteers, educational institutions, religious organizations, university students, and local authorities as important elements within the recovery process. Recovery was viewed not solely as a family responsibility but as a collective effort involving multiple stakeholders.

Many participants referred to trauma-healing programs conducted by universities, community organizations, and educational institutions. These initiatives were widely viewed as beneficial because they provided opportunities for children to socialize, participate in enjoyable activities, and receive psychosocial support.

> *"There were many trauma-healing activities after the disaster. Different groups came to help children recover emotionally. Those activities were very useful because they reduced children's anxiety and helped them regain confidence." (P01 – DW)*

Community solidarity also emerged as an important source of resilience. Parents frequently described increased cooperation, mutual assistance, and collective responsibility during the recovery period.

> *"One positive thing that came from the disaster was how closely the community worked together. People helped each other, supported affected families, and cared for children. We became more united and more concerned about one another." (P05 – AM)*

Participants expressed strong support for the continuation of similar programs. Many believed that parenting education, storytelling, psychosocial activities, and community mentoring should be conducted regularly rather than as one-time interventions.

> *"Activities like this should continue. They should not stop after one visit. Parents and children still need education and support. Programs involving storytelling, parenting, and activities for children are very beneficial for our community." (P05 – AM)*

DW expressed a similar expectation regarding sustainability.

> *"We hope university students and facilitators can continue activities like this, perhaps every few months. Besides helping children, these activities provide valuable knowledge for parents and strengthen community relationships." (P01 – DW)*

The findings indicate that recovery extended beyond individual children and families. Recovery was embedded within community relationships and collective action. Consistent with the principles of the Community-Based Participatory Approach, meaningful recovery occurred when families, facilitators, community leaders, educational institutions, and local organizations worked collaboratively to support children's emotional well-being and resilience following disaster experiences.

DISCUSSION

The findings indicate that the emotional effects of flash flood disasters extend beyond the emergency phase and continue to influence young children's well-being. Persistent fear and anxiety triggered by rainfall and other disaster-related cues suggest that children remain vulnerable to prolonged emotional distress after traumatic experiences. This finding is consistent with previous studies reporting that disasters may generate lasting psychological impacts, including fear, insecurity, and emotional sensitivity among children.[31] Because young children are still developing emotional regulation and coping capacities, supportive environments become essential for

[31] Kousky, "Impacts of Natural Disasters on Children"; Spencer and Thompson, "Children and Young People's Perspectives on Disasters – Mental Health, Agency and Vulnerability: A Scoping Review," 73–92.

recovery. Importantly, the findings reflect parents' reported experiences and observations during the program and should not be interpreted as evidence of clinically assessed trauma or long-term emotional recovery.

Families emerged as the primary source of emotional security during the recovery process. Parents supported children through reassurance, physical closeness, and open communication, helping them regain feelings of safety and predictability. This finding aligns with attachment theory, which highlights the protective role of secure caregiver-child relationships in promoting emotional regulation during stressful situations.[32] The results also show that psychosocial parenting education strengthened parents' understanding of children's emotional needs and increased their confidence in providing appropriate support.[33] Parenting interventions can enhance caregivers' capacity to respond effectively to trauma-related emotional difficulties and support children's emotional adjustment following adverse experiences.[34] Recent evidence from disaster-affected settings similarly indicates that involving caregivers in psychosocial interventions can strengthen family-level support for children's emotional adjustment.[35]

Communication, storytelling, and play-based activities were identified as important mechanisms supporting emotional recovery.[36] These approaches enabled children to express emotions, rebuild confidence, and strengthen social interactions in ways that were consistent with their developmental characteristics. Previous research similarly highlights play as a natural medium through which children process

[32] John Bowlby, *A Secure Base: Parent Child Attachment and Healthy Human Development* (New York, NY: Basic Books., 1988), 140.

[33] Wardani Purnama Sari, Febi Nuris Putra, and Faisal Razak, "Blending Pendagogy and Technology: How Digital Tools Enhance Teaching and Learning Outcomes," *Journal of Educational Teaching and Trends* 1, no. 1 (2025): 14–27; Salmiah Salmiah, Nabila Nabila, and Vann Sok, "From Theory to Practise: Applying Constructivism, Behaviorism, and UDL in Diverse Classrooms," *Journal of Educational Teaching and Trends* 1, no. 1 (2025): 42–55.

[34] Abigail Gewirtz, Marion Forgatch, and Elizabeth Wieling, "Parenting Practices as Potential Mechanisms for Child Adjustment Following Mass Trauma," *Journal of Marital and Family Therapy* 34, no. 2 (2008): 177–192; Tria Marini, Elsa Sriwahyuni, and Ibnu Alrafi Anwar, "Parenting Seminar on Positive Childrearing t o Enhance Parents ' Understanding in Early Childhood Education," *Journal of Comunity Service in Early Childhood Education* 2, no. 1 (2026): 273–288.

[35] Gwen V. Mitchell et al., "Understanding and Addressing the Emotional Impact of Disasters on Children and Families," in *Pediatric Considerations in Disaster Settings* (Cham: Springer Nature Switzerland, 2025), 239–272; Jazzmyn S. Ward et al., "The Mutual Influence of Parent–Child Maladaptive Emotion Regulation on Posttraumatic Stress Following Flood Exposure.," *Journal of Family Psychology* 38, no. 6 (2024): 945–955.

[36] Jhoni Warmansyah and Evi Selva Nirwana, "The Effect of Storytelling Methods and Self-Confidence Children's Expressive Language Skills," *Ta'dib* 26, no. 1 (2023): 29.

experiences and develop coping strategies following adversity.[37] The positive responses observed during intervention activities demonstrate the value of integrating play-centered psychosocial support into post-disaster recovery programs for young children.

The findings further underscore the importance of community participation in strengthening recovery outcomes. The involvement of parents, community members, local leaders, university students, and facilitators created a collaborative support system that extended beyond individual families. This reflects the principles of Community-Based Participatory Approaches, which emphasize collective engagement and shared responsibility in addressing community challenges.[38] In this program, community participation influenced the intervention beyond attendance by contributing to the identification of children's emotional needs, coordination of activities, and adaptation of support to the local context. This participatory process also increased opportunities for families and local actors to contribute to decisions about how psychosocial activities were implemented within the community. Viewed through Bronfenbrenner's ecological perspective, children's recovery was shaped by interactions among family, community, and broader social systems.[39] These findings suggest that effective post-disaster interventions should integrate family-based psychosocial education, play-centered activities, and community participation to promote children's emotional well-being and strengthen long-term community resilience. However, the three-day implementation period means that the program can only demonstrate short-term opportunities for support and engagement, rather than sustained community-led psychosocial recovery. University students also played an important operational role in implementing the community-based activities.[40] They

[37] Dewi Fitriani, Rani Puspa Juwita, and Mazeni Binti Ismail, "Play-Based Community Service Program to Develop Early Childhood Motor Skills," *Journal of Comunity Service in Early Childhood Education* 2, no. 1 (2026): 257–272; Sianipar and Komba, "Enhancing Early Childhood Cooperative Play Skills Through a Social Intervention Program"; Swiya Nath and Dénes Szücs, "Construction Play and Cognitive Skills Associated with the Development of Mathematical Abilities in 7-Year-Old Children," *Learning and Instruction* 32 (2014): 73–80.

[38] Nadina R Luca, Marsha Smith, and Sally Hibbert, "A Community-Based Participatory Research Approach to Understanding Social Eating for Food Well-Being," *Emerald Open Research* 1, no. 10 (2022): 1–21.

[39] Urie Bronfenbrenner and Pamela A. Morris, "The Bioecological Model of Human Development," in *Handbook of Child Psychology* (Wiley, 2007).

[40] Vita Komaril Hilaliyah, "Fostering Early Childhood Entrepreneurship Spirit through Market Day Activities," *Ranah Bakti: Journal of Community Service* 1, no. 1 (2025): 22–30; Lisanul Husniati et al., "Empowering TPA (Qur ' Anic Centers) through the Integration of Community-Based Non-Formal Education in Jorong Cubadak," *Ranah Bakti: Journal of Community Service* 1, no. 1 (2025): 1–11.

assisted with play-based activities, interacted directly with children, supported communication with parents, and documented children's participation and responses under lecturer supervision. Their involvement provided additional human resources for the program while creating opportunities for university students to develop practical experience in community engagement and early childhood psychosocial support. Their contribution should be understood as part of the implementation mechanism rather than as an independently measured factor influencing children's emotional recovery.

The short duration of the program also presents challenges for sustaining community-led psychosocial support.[41] Continued implementation would require ongoing involvement from local institutions, trained early childhood educators, community organizations, and local government agencies, together with institutional resources and funding. Without such support, activities initiated through a university-led community service program may be difficult to maintain after the intervention period.[42] At the local policy level, BPBD and early childhood education authorities could incorporate child-focused psychosocial support into post-disaster recovery planning, provide capacity-building for PAUD teachers and caregivers, and establish referral mechanisms for children who continue to experience significant emotional difficulties. Collaboration among disaster management agencies, PAUD institutions, families, universities, and community organizations could provide a more continuous support structure for children and families affected by disasters.[43]

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[41] Deri Gusmita et al., "Enhancing Early Childhood Memory in Hadith Memorization Through Movement-Based Training," *Journal of Comunity Service in Early Childhood Education* 1, no. 1 (2025): 21–32,

[42] Yudha Aviratri et al., "Strengthening National Character through Literacy : STPHBK and Kayuh Literasi Collaboration," *Journal of Comunity Service in Early Childhood Education* 1, no. 2 (2025): 81–96; Putri Cahya Oktaviyana et al., "Field Implementation of a Local Wisdom-Based Practicum Module for Character Education in Early Childhood Learnin," *Journal of Comunity Service in Early Childhood Education* 1, no. 2 (2025): 97–112; Adela Kharima Diyenti et al., "Educational Program for Early Childhood Teachers to Enhance Awareness of Child Growth and Development Detection," *Journal of Comunity Service in Early Childhood Education* 1, no. 2 (2025): 113–128.

[43] Cahyorini Wulandani et al., "Implementing Project-Based Steam Instructional Approach in Early Childhood Education in 5.0 Industrial Revolution Era," *Indonesian Journal of Early Childhood Educational Research* 1, no. 1 (2022): 29–37; Roudhohtin Hasanah, Umi Masturoh, and Bilkisu Garba Ilah, "Development of 'Religion Mazes For Kids' Educational Tools to Enhance the Religious and Moral Values of Children Aged 4-5 Years," *Indonesian Journal of Early Childhood Educational Research* 3, no. 1 (2024): 1-12; Masri Rafita and Rani Puspa Juwita, "Developing a Local Wisdom-Based E-Book to Instill Moral Values in Kindergarten Children," *Journal of Islamic Education Students (JIES)* 5, no. 1 (2025): 236; Siti Hadijah and Akhmad Ramli, "Digital-Collaboration-Based Change Management in the Implementation of the Merdeka Curriculum within the Framework of Civil Society 5.0," *Journal of Islamic Education Students* 5, no. 2 (2025): 440–460.

CONCLUSION

This study indicates that young children's post-disaster emotional adjustment is a multidimensional process shaped by the interaction of children's emotional experiences, family support, psychosocial parenting practices, communication and play-based activities, and community participation. Although fear, anxiety, and emotional vulnerability were still reported approximately 13 months after the flash flood, parents' accounts and program observations identified responsive caregiving, increased parental understanding of children's emotional needs, storytelling and play, and collaborative community engagement as processes perceived to support children's emotional adjustment. Within the Community-Based Participatory Approach (CBPA), the involvement of families, community members, university students, lecturers, and local stakeholders created supportive conditions for emotional expression, family engagement, and community-based psychosocial support. Given the three-day implementation period and the absence of longitudinal follow-up, the findings should be understood as evidence of perceived supportive processes rather than proof of intervention effectiveness or long-term emotional recovery. The findings suggest that post-disaster support for young children may benefit from integrating family-centred psychosocial support, developmentally appropriate play-based activities, and sustained community collaboration within local recovery systems.

Acknowledgements: The authors gratefully acknowledge the support of the Head of Nagari (Wali Nagari) Sungai Jambu and village officials, as well as the participation of parents, children, community leaders, HMPS PIAUD students, and lecturer supervisors. Their collaboration and commitment were essential to the successful implementation of this community-based psychosocial intervention program.

Competing Interests: The authors declare that they have no financial or personal relationships that may have inappropriately influenced the research, analysis, or writing of this article.

Ethical Considerations: Ethical approval for this community service program was obtained from the relevant institutional authority of Universitas Islam Negeri Mahmud Yunus Batusangkar (Approval Number: 04/Un.25/ORMAWA.F.I.10/PP.4/06/2026, dated June 2026). All participants provided informed consent prior to participation. Participants were informed of the program's purpose, the voluntary nature of participation, the confidentiality of their responses, and their right to withdraw at any time without penalty. All data were anonymized and handled confidentially.

Credit Authorship Contribution Statement: JW: JW: Conceptualization, methodology, project administration, supervision, data analysis, writing – original draft, and writing – review & editing. NRH, RPJ, RF, LKJ, AU, GRL: Intervention implementation, data collection, field assistance, participant engagement, and program documentation. DJ: Writing – review & editing, language refinement, and manuscript validation.

Funding Information: This community service program received financial support from Universitas Islam Negeri Mahmud Yunus Batusangkar through the DIPA funding allocation (Contract Number: SP

DIPA-025.04.2.424069/2026, dated 1 December 2025). The funder had no role in the program design, data collection, analysis, interpretation, or manuscript preparation.

Data Availability: The data supporting the findings of this community service program are not publicly available because they contain potentially identifiable information obtained from participants. Relevant data may be made available by the corresponding author upon reasonable request, subject to confidentiality and ethical considerations.

AI Use Disclosure: Generative AI (Chatgpt 3.5) tools were used in the grammatical checking of this manuscript and Figure 1. The authors take full responsibility for the accuracy, originality, and integrity of the content presented.

Disclaimer: The views and interpretations expressed in this article are those of the authors and do not necessarily reflect those of their affiliated institutions, editors, or publisher.

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