

## **Rising After Disaster: An Analysis of Coping Mechanisms Among Tsunami Survivors 20 Years Later**

**Mahathir Yahaya<sup>1\*</sup>, Mohd Farizi Jamaluddin<sup>2</sup>, Wardatul Hayat Adnan<sup>3</sup>**

<sup>1</sup>School of Social Sciences, Universiti Sains Malaysia, Malaysia

<sup>2</sup>Faculty of Communication and Media Studies, Universiti Teknologi MARA (UiTM), Malaysia

<sup>3</sup>Faculty of Social Sciences and Liberal Arts, UCSI University, Kuala Lumpur, Malaysia

\*Corresponding author: Mahathir Yahaya (mahathiryahaya@usm.my)

### **ABSTRACT**

The tsunami that struck Aceh on 26 December 2004 caused catastrophic destruction and an estimated loss of around 300,000 human lives. This natural disaster not only resulted in extensive physical devastation and total loss of property but also triggered significant psychological issues. Early research indicates that coping strategies play a vital role in strengthening resilience among disaster survivors and in preventing the onset of more severe psychological conditions. This study, therefore, examines the coping strategies used by tsunami survivors who lost family members during the disaster. A total of ten survivors who met the criteria of losing family members were selected using snowball sampling. This study employed a qualitative case study design. In-depth interviews were conducted individually until data saturation was reached. The data were then analysed thematically. Findings reveal that three (3) coping strategies were used by the informants: social support (for example, through cultural and community activities), religious coping involving prayer and other practices, and situational change, such as relocating, pursuing aspirations, and engaging in business. Collectively, these approaches enhanced the survivors' mental and emotional resilience and strengthened their self-confidence, even twenty (20) years after the disaster.

**Keywords:** Tsunami, Coping strategies, Social support, Religion, Disaster

### **1. Introduction**

The Aceh tsunami that occurred 20 years ago transformed the lives of its people. It must be remembered as an event that reminds us of the unpredictability of life and reinforces the essence of humanity and spirituality. Nearly 300,000 residents of Aceh perished. In addition, 74,000 were declared missing as their bodies were never recovered, and almost 500,000 people were displaced after losing homes and property. Severe damage occurred across infrastructure, public facilities, educational buildings, and residential areas — profoundly affecting the people of Aceh. Many women became widows, men widowers, children were orphaned, and wealthy individuals fell into poverty. In March 2005, the Zakat, Infak and Sedekah Board (LAGZIS) recorded that 143,000 children in Banda Aceh had lost their parents.

Undeniably, tsunami survivors experienced unforgettable and traumatic events. Theoretically, individuals who experience disasters and loss of family members are more vulnerable to psychological disorders. Emotional suffering may lead to psychological disturbances and

emotional stress that weaken resilience and hinder the rebuilding of life after disaster (Brave & Maria, 2000). Psychological issues that may arise include severe stress, acute stress, and Post-Traumatic Stress Disorder (PTSD) (Davison & Neale, 1996). Regardless of any terms being referred to, the December 2005 tsunami was a painful experience for the victims. The painful memories persist, and feelings of fear and sadness continue to affect survivors. This raises the question: How have survivors carried their emotional burden all these years? What coping strategies have they relied on to manage psychological distress for 20 years after the disaster?

Coping refers to the cognitive and behavioural efforts individuals use to manage internal and external stressors, as widely discussed by Folkman and Lazarus since the 1980s (Walsh, Fortier & DiLillo, 2010). They identified two types of coping: emotion-focused coping and problem-focused coping. Emotion-focused coping aims to reduce emotional distress (Ben-Zur & Michael, 2007). Lazarus and Folkman (1984) categorised emotion-focused coping strategies into six types: social support, self-control, distancing, positive reappraisal, acceptance of responsibility, and avoidance. Using these techniques helps individuals feel calmer as they face the days ahead. Problem-focused coping strategies, on the other hand, are techniques used to change or manage the source of stress by shifting attention towards another problem (Sander et al., 2007). By concentrating on a different issue, the individual indirectly reduces the stress they are experiencing. These strategies can be classified into two types: confrontation and planned problem-solving.

These concepts can be applied to Acehese survivors of the tsunami disaster. Therefore, this study seeks to explore the coping strategies used by the people of Aceh to manage feelings of fear, sadness, or grief when memories of the tsunami resurface, even 20 years after the tragedy. Therefore, this study explores the coping strategies used by Aceh tsunami survivors to manage feelings of fear, sadness and grief 20 years after the tragedy.

## **2. Methodology**

A qualitative approach was chosen for this study, supported by a case study design. This method enables researchers to obtain rich and complex data (Siti Uzairiah, 2017). Qualitative research focuses on in-depth understanding and explanation of phenomena rather than numerical measurement. This study allows a detailed examination of survivors' coping strategies 20 years after the tsunami. According to Norizan (2016), a case study design is a systematic information and data gathering. Purposive sampling was used to select respondents who met the study criteria. The sample comprised ten (10) tsunami survivors who lost family members and property. Interviews were conducted in three districts: Malang, Melaboh, and Banda Aceh. These areas were most severely affected by the tsunami. All interviews were transcribed for analysis. Thematic analysis was used to systematically identify themes across respondents. A matrix table was developed to compare themes across research questions and respondents. All data were analysed descriptively. The summary of the research methodology that was used is as follows:

Table 1: Summary of Research Methodology

---

Research Method	Qualitative
Research Design	Case study
Sampling Method	Snowball sampling
Respondents	10 tsunami survivors
Data Collection	Face-to-face in-depth interviews
Research instrument	Interview guide (semi-structured)

Data Analysis

Researcher  
Thematic analysis

The study involved 10 Acehnese tsunami survivors who lost family members and property, and experienced psychological distress. Their demographic details are summarised in the table below:

Table 2: Summary of Respondent Demographics

Informant	Gender	Age	District	Losses
1	Man	39	Calang	Home and family
2	Woman	55	Calang	Home and siblings
3	Man	36	Calang	Home and family
4	Man	38	Calang	Home and parents
5	Man	39	Calang	Home and family
6	Woman	45	Banda Aceh	Home and child
7	Man	70	Melaboh	Home, shop and family
8	Man	50	Melaboh	Home and family
9	Man	46	Banda Aceh	Home and family
10	Man	33	Banda Aceh	Family home

#### 4. Findings

The study found that several informants tended to use coping strategies based on social support from the local community. They relied heavily on community activities as a way to ease their stress and sadness when remembering family members who perished in the tsunami. Indeed, the Acehnese place great importance on their cultural traditions, regularly organising cultural activities in their villages as a way to move on from the tragedy. They also actively participate in community events and spend time chatting with the local community.

*“Who wouldn’t feel sad... I am alone. Every day I go to the community hall to lead cultural activities. On cultural nights, we are happy together.”* Informant 1

*“I work during the day, and only at night do I have cultural events. I just watch them there, to cheer myself up. After that, I chat a lot with friends in the village. That’s how I forget what happened.”* Informant 2

*“I think about my family every day. Even until now. But when I hear the village songs, I feel a bit happier. There are gatherings here every night.”* Informant 3

*“My family home was completely destroyed... It’s been 20 years. For 20 years, I’ve been on my own. But it’s alright, I’m always with my friends in the village. There are many gatherings here.”* Informant 7

In addition, some informants used problem-focused coping strategies to ease financial burdens. After losing both property and parents, Informant 4 decided to start an oil palm business. He is now among the most successful palm oil entrepreneurs in Melaboh district. His business not only reduces his financial stress but also allows him to help others in the community. There was also an informant who continued his studies abroad under a university sponsorship. This helped him to move past his traumatic experiences during the tsunami, and he is now a government officer.

*"During the tsunami I was still in school. I climbed a tree and stayed there. When the water receded, I came down. I saw my parents' bodies. I cried. I only had my sister left. I worked on the plantation and sold palm oil. Alhamdulillah."* Informant 4

*"My house, my whole family... gone. I had finished school at that time. After the tsunami many NGOs came to help, including those from abroad. One NGO from a university in Italy came and offered to adopt me. They brought me to further my studies there. Everything was funded. I returned to Aceh and joined the civil service."* Informant 5

Some of the informants sought peace of mind in the mosque. They would spend time alone there, praying and reflecting on the tsunami. Even after 20 years, the mosque remains their place of solace, helping them strengthen themselves and live more meaningfully.

*"On that day... I had just given birth. My baby was three months old. Still so small ... I can hardly talk about it. I was breastfeeding when people outside began shouting. I went out and they told us to run. Everywhere they said run. I ran carrying my baby. My husband wasn't home; he was out of town. I just followed others, not knowing where to go... suddenly the water came hitting me from the side. I held my baby. I saw my baby being submerged. I got stuck on a tree. Oh Allah... I always pray that my heart will not remain this sad. I know it is fate."* Informant 6

*"My whole family died. I am alone. Every day I read the Quran to calm my heart, because I keep imagining my family every day."* Informant 8

*"I was in Jakarta for some matters, then returned to Aceh and found everything gone. I was under immense stress then. No family, no home. I had no direction. Only my uncle was left. He was the one who advised me to return to God. When I pray and recite zikr, my heart feels calm."* Informant 10

Some, however, struggled with negative religious interpretations and feelings of anger towards God following their profound loss. As a result of the tsunami, this informant lost both family and property. Even today, he continues to face severe financial and social hardship.

*"Sometimes I think, why did God choose me to face all this? Fifteen years ago, I had a shop and a family. I still feel the effects of the tsunami today. But whatever it is, I must continue living and keep praying."* Informant 9

## **5. Discussion**

Individuals who experience stress due to traumatic events such as disasters often adopt certain behaviours or thought patterns — consciously or unconsciously — as a way to cope with the pressures arising from their surroundings (Chaplin, 2004). This is consistent with the situation of the tsunami victims in Aceh, who required methods to help them forget the tragedy that claimed the lives of their family members and destroyed their property. Furthermore, with effective coping mechanisms, disaster victims are able to reduce feelings of sadness and regulate unstable emotions, which in turn encourages them to rebuild a better life in the future (Brown et al., 2005). This highlights the importance of identifying coping strategies used by individuals when faced with traumatic events such as those experienced by the Aceh tsunami victims. Findings from this study identified four coping strategies used by the Aceh tsunami survivors, namely social support.

### **5.1. Social Support Coping**

In helping to reduce emotional stress, social support such as that provided by the local community serves as a medium between pressure and happiness. G. Dunn (2010) states that social support is closely related to the meaning derived from daily life. In other words, an individual is likely to have a more meaningful life if they receive social support from their surrounding community, making life more enjoyable and fulfilling.

One characteristic of a developing community is the presence of cultural activities within its social system (Abdullah et al., 2017). This aligns with the findings of this study, which indicate that the people of Aceh use cultural activities within their community system to reduce emotional stress. This is viewed as an emotion-focused coping strategy categorised under social support.

Victims who have experienced psychological pressure because of the tsunami are naturally optimistic in their pursuit of calmness and happiness. However, they cannot achieve this on their own and require social support from the local community. This is important because individuals who fail to obtain social support may develop feelings of low self-worth, feel unappreciated, and subsequently experience emotional stress (Mee Tuan, 2002). This is supported by Mustaffa et al. (2014), who found a significant relationship between social support and the well-being of disaster victims.

Participation in community activities helps tsunami survivors reduce the stress they experience. Harris and Molock (2010) suggest that social support in the form of chatting with friends, engaging in spiritual activities together, and taking part in communal work are suitable coping strategies to prevent psychological distress. According to Dougall, Hyman, Hayward, McFeeley and Baum (2001), a high level of social support helps individuals to think more optimistically and adapt to various forms of stress. This is because social support reduces the likelihood of engaging in risky behaviour when faced with challenging situations. It also encourages individuals to evaluate negative experiences more constructively (Harris & Molock, 2000).

### **5.2. Situation-Changing Coping Strategies (Problem-Focused)**

Problem-focused coping refers to adaptive strategies that emphasise direct actions to deal with the source of stress or the challenges being faced. According to Lazarus and Folkman (1984), this strategy is used when individuals perceive the situation as controllable or changeable through personal effort. This approach involves actions such as planning, seeking information, making decisions, and taking practical steps to change the conditions that are causing stress. Carver,

Scheier and Weintraub (1989) also emphasise that problem-focused coping is effective when individuals have access to resources, support, and opportunities that enable change.

In the context of disasters such as a tsunami, survivors experience stress resulting from the loss of their homes, family members, employment, and the breakdown of social structures. According to Shaw, Uy and Baumwoll (2008), disaster victims often choose recovery strategies based on the resources still available and the level of control they feel they have. Lyons (2009) further shows that long-term recovery strategies involving economic and social restructuring are more effective than short-term interventions. Therefore, problem-focused coping becomes relevant when victims attempt to rebuild their lives through concrete actions that can change their circumstances.

One form of problem-focused coping used by tsunami survivors is starting or restoring palm oil businesses as a source of livelihood. This choice reflects efforts to rebuild economic stability through practical actions that yield measurable results. According to Squires and Tamminga (2016), involvement in commodity agriculture such as palm oil cultivation can increase rural household income and reduce economic vulnerability. Halim, Ramasamy and Noh (2020) found that support in the form of capital, agronomic training, and market access enhances the effectiveness of post-disaster livelihood recovery. This shows that restarting palm oil businesses is a solution-oriented coping strategy with tangible impacts on the lives of tsunami survivors.

Additionally, some survivors chose to continue their education as a form of problem-focused coping. This action aims to strengthen their skills and qualifications so that they have better employment opportunities in the future. According to Muttarak and Lutz (2014), education plays an important role in restoring the resilience of individuals and communities after disasters by increasing human capital. Perrin et al. (2015) show that post-disaster education and vocational training enhance the community's ability to rebuild their lives through new skill development. Therefore, furthering education not only addresses the problem of insufficient skills but also serves as a strategy for building a more stable future.

Both strategies — starting a palm oil business and furthering education — represent two forms of problem-focused coping with the same goal but different approaches. Starting a business yields more immediate economic returns, while furthering education provides long-term benefits through improved qualifications and social mobility. According to Brown and Westaway (2011), the effectiveness of post-disaster coping strategies is influenced by how well the actions align with individuals' short- and long-term goals and by the availability of resources. Norris et al. (2008) also stress that a combination of immediate economic support and long-term capacity development is the most effective approach for disaster recovery.

Overall, problem-focused coping plays an important role in helping tsunami survivors rebuild their lives through concrete and strategic actions. Whether through palm oil businesses or continued education, both approaches reflect deliberate efforts to improve difficult life circumstances caused by the disaster. By providing structured support such as training, financial assistance, access to education, and technical guidance, authorities and aid organisations can strengthen the effectiveness of these coping strategies. Long-term approaches that combine economic recovery and human capital development have proven to be essential for sustainable livelihood restoration among disaster survivors.

### **5.3. Religious Coping Strategies (Maladaptive)**

Religious coping is one of the psychosocial adjustment strategies commonly used by disaster victims, including tsunami survivors, to cope with stress, trauma, and uncertainty following significant loss. According to Pargament (1997), religious coping refers to the use of religious beliefs, practices, rituals, and values to understand, manage, and give meaning to stressful events. Koenig (2012) similarly notes that religion functions as a source of psychological, social, and spiritual strength that helps individuals maintain hope and emotional stability during crises. Thus, religious coping is an important mechanism for tsunami survivors in their emotional and spiritual recovery.

Tsunami victims often face the loss of family members, homes, property, sources of income, and drastic changes in the social structure of their communities. In such situations, religious practices such as prayer, recitation of holy scriptures, attending religious gatherings, and drawing closer to God become major sources of inner peace. According to Park (2005), religion helps individuals construct new meaning for traumatic events, thereby reducing the psychological distress caused by the disaster. Ai et al. (2010) also found that prayer and spiritual practices enhance psychological resilience among disaster victims by creating a sense of protection and support from a higher power. Thus, religion serves as both a cognitive and emotional tool that strengthens the recovery process.

Beyond personal aspects, religious coping can also be seen in the form of community-based spiritual support. Religious institutions such as mosques, suraus, churches, or temples often serve as shelters, centres of moral support, and gathering spaces where people can support one another. According to Mahoney (2010), religious communities provide social networks that support the emotional well-being of victims, especially when dealing with loss and uncertainty. Thoresen and Harris (2002) found that community-based spiritual support increases a sense of belonging, hope, and motivation to continue living after disasters. These faith-based social relationships reduce isolation and give survivors the encouragement needed to recover.

In the context of long-term recovery, religious coping helps tsunami survivors maintain a sense of purpose and build new hope. Tedeschi and Calhoun (2004) note that religious practices can facilitate post-traumatic growth — positive development following trauma — through enhanced spirituality, stronger social relationships, and a deeper appreciation of life. Fernando and Hebert (2011) found that disaster victims in Sri Lanka who engaged in religious rituals had higher psychological resilience than those with lower involvement in spiritual activities. This indicates that religious coping is not only useful in the early stages of recovery but also serves as long-term protection against ongoing stress and trauma.

Overall, religious coping plays a vital role in helping tsunami survivors adjust to the physical, psychosocial, and emotional impacts of the disaster. Through spiritual practices, participation in religious communities, and the pursuit of new meaning in life, survivors are able to build the inner strength and mental resilience necessary for long-term recovery. Therefore, post-disaster assistance approaches that consider religious and spiritual dimensions have been shown to enhance the effectiveness of interventions and support the overall well-being of victims.

## 6. Conclusion

After 20 years since the tsunami, survivors have demonstrated strong resilience and adaptability through various coping strategies. Through problem-focused coping, they managed to transform their experiences of profound grief and loss into productive opportunities, such as returning to work, rebuilding businesses, or furthering their education, thereby restoring economic stability and creating a more structured life. Social support coping has also proven crucial, as involvement in local community activities enabled them to receive emotional support, motivation, and practical assistance from those around them, strengthening social bonds and fostering a sense of belonging that supports long-term mental wellbeing. Meanwhile, religious coping helped survivors maintain emotional calm and spiritual hope, giving new meaning to the traumatic experiences they endured. The combination of these three coping strategies has enabled tsunami survivors not only to recover from short-term trauma but also to rebuild lives that are more stable, meaningful, and resilient in the face of future challenges.

## Acknowledgements

This research is funded by the Research Excellence and Innovation Grant (REIG) by UCSI University.

## References

- Abdullah, M. S., Mohd Nor, M., Mohd Yusof, A. R., & Che Husain, F. (2017). Konsep komuniti dan perkembangannya: Suatu tinjauan kritikal terhadap penggunaannya. *Journal of Social Sciences and Humanities*, 12(3), 22–32. ISSN 1823-884X.
- Ai, A. L., Tice, T. N., Whitsett, D. D., Ishisaka, T., & Chim, M. (2010). Posttraumatic symptoms and growth of Kosovar war refugees: The influence of hope and religious coping. *Journal of Positive Psychology*, 5(5), 356–365. <https://doi.org/10.1080/17439760.2010.507468>
- Ben-Zur, H., & Michael, K. (2007). Burnout, social support and coping at work among social workers, psychologists and nurses: The role of challenge/control appraisals. *Social Work in Health Care*, 45(4), 63–82. [https://doi.org/10.1300/J010v45n04\\_04](https://doi.org/10.1300/J010v45n04_04)
- Brave, H., & Maria, Y. H. (2000). Wakiksuyapi: Carrying the historical trauma of the Lakota. *Tulane Studies in Social Welfare*, 21–22, 245–266.
- Brown, K., & Westaway, E. (2011). Agency, capacity, and resilience to environmental change: Lessons from human development, well-being, and disasters. *Annual Review of Environment and Resources*, 36, 321–342. <https://doi.org/10.1146/annurev-environ-052610-092905>
- Brown, S. P., Westbrook, R. A., & Challagalla, G. (2005). Good cope, bad cope: Adaptive and maladaptive coping strategies following a critical negative work event. *Journal of Applied Psychology*, 90(4), 792–798. <https://doi.org/10.1037/0021-9010.90.4.792>
- Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56(2), 267–283. <https://doi.org/10.1037/0022-3514.56.2.267>
- Chaplin, J. P. (2004). *Kamus lengkap psikologi*. Jakarta: Raja Grafindo Persada.
- Davison, G. C., & Neale, J. M. (1996). *Abnormal psychology* (6th ed.). New York: John Wiley & Sons.



- Fernando, G. A., & Hebert, B. (2011). Resilience in Sri Lankan displaced communities: Religious coping and cultural transformation. *Journal of Community Psychology*, 39(2), 144–163. <https://doi.org/10.1002/jcop.20423>
- Halim, R., Ramasamy, R., & Noh, K. M. (2020). Livelihood recovery and sustainable agricultural practices in post-disaster communities. *Asian Journal of Agriculture*, 4(1), 1–10. *(Jika perlu DOI, boleh saya carikan)*
- Harris, T., & Molock, S. D. (2000). Cultural orientation, family cohesion and family support in suicide ideation and depression among African American college students. *Suicide and Life-Threatening Behavior*, 30(4), 341–353. <https://doi.org/10.1111/j.1943-278X.2000.tb00991.x>
- Koenig, H. G. (2012). Religion, spirituality, and health: The research and clinical implications. *ISRN Psychiatry*, 2012, 1–33. <https://doi.org/10.5402/2012/278730>
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. Springer Publishing.
- Lyons, S. (2009). Building back better: The sustainable recovery of communities after disaster. *International Journal of Disaster Resilience*, 1(1), 1–16.
- Mahoney, A. (2010). Religion in families: A decade review. *Journal of Marriage and Family*, 72(4), 805–827. <https://doi.org/10.1111/j.1741-3737.2010.00732.x>
- Mustaffa, C. S., Ahmad Marzuki, N., Ariffin, M., Salleh, N. A., & Rahaman, N. H. (2014). Relationship between social support, impression management and wellbeing among flood victims in Malaysia. *Procedia - Social and Behavioral Sciences*, 155, 197–202. <https://doi.org/10.1016/j.sbspro.2014.10.276>
- Muttarak, R., & Lutz, W. (2014). Is education a key to reducing vulnerability to natural disasters? *Ecology and Society*, 19(1), 42. <https://doi.org/10.5751/ES-06476-190142>
- Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., & Pfefferbaum, R. L. (2008). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology*, 41(1–2), 127–150. <https://doi.org/10.1007/s10464-007-9156-6>
- Pargament, K. I. (1997). *The psychology of religion and coping: Theory, research, practice*. Guilford Press.
- Park, C. L. (2005). Religion as a meaning-making framework in coping with adversity. *Journal of Social Issues*, 61(4), 707–729. <https://doi.org/10.1111/j.1540-4560.2005.00428.x>
- Perrin, M., Pelling, M., & Uitto, J. (2015). *Education and skills training in disaster recovery*. United Nations University Press.
- Sander, A. M., Davis, L. C., Struchen, M. A., Atchison, T., Sherer, M., Malec, J. F., et al. (2007). Relationship of race/ethnicity to caregivers' coping, appraisals, and distress after traumatic brain injury. *NeuroRehabilitation*, 22(1), 9–17.
- Shaw, R., Uy, N., & Baumwoll, J. (2008). *Reducing disaster risks through education*. United Nations Publications.
- Squires, A., & Tamminga, K. (2016). Agricultural livelihoods and economic recovery in post-disaster rural communities. *Journal of Rural Studies*, 47, 172–181. <https://doi.org/10.1016/j.jrurstud.2016.08.004>
- Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic growth: Conceptual foundations and empirical evidence. *Psychological Inquiry*, 15(1), 1–18. [https://doi.org/10.1207/s15327965pli1501\\_01](https://doi.org/10.1207/s15327965pli1501_01)
- Thoresen, C. E., & Harris, A. H. (2002). Spirituality and health: What's the evidence and what's needed? *Annals of Behavioral Medicine*, 24(1), 3–13. [https://doi.org/10.1207/S15324796ABM2401\\_02](https://doi.org/10.1207/S15324796ABM2401_02)
- Walsh, K., Fortier, M. A., & DiLillo, D. (2010). Adult coping with childhood sexual abuse: A theoretical and empirical review. *Aggression and Violent Behavior*, 15(1), 1–13. <https://doi.org/10.1016/j.avb.2009.06.009>

Wong, M. T. (2002). *Hubungan di antara sokongan sosial dengan kemurungan di kalangan remaja* (Tesis sarjana yang tidak diterbitkan). Universiti Kebangsaan Malaysia.