Renai
ISSN 1411-7924
Vol. 12, No. 1, January, 2026, pp. 1-8 1

Percik
The Institute for Social Research, Democracy and Social Justice

Digital Traces of Collective Trauma in the 2025 Aceh Climate Disaster

Aurisa Putri Hawin Yusima [a,1,*]

[a] Statistics and Data Science, School of Data Science, Mathematics and Informatics, IPB University, Jl. Meranti Kampus, Babakan, Kec. Dramaga, Kabupaten Bogor, Jawa Barat 16680, Indonesia
[1] yusimaa.res@gmail.com*

* corresponding author

ARTICLE INFO

Article history
Received: December 10, 2025
Revised 1: January 6, 2026
Revised 2: January 17, 2026
Accepted: January 19, 2026
Published: January 31, 2026

Keywords:
Aceh,
Collective Trauma,
Disaster,
RoBERTa,
Sentiment Analysis

ABSTRACT

Climate-induced disasters generate not only physical destruction but also significant emotional consequences, particularly in communities with a history of traumatic events. This study examines how collective trauma becomes visible in public responses to the 2025 Aceh flash floods and landslides. The objective is to identify emotional patterns expressed on social media and to understand how past disasters shape contemporary reactions. A total of 3,436 tweets posted between 28 November and 9 December 2025 were analyzed using an Indonesian RoBERTa-based sentiment classifier alongside a trauma-informed emotion lexicon. The results show a predominance of negative sentiment, driven largely by expressions related to loss, fear, and anger, while solidarity appeared as the most common positive emotional category. Informational tweets also formed a substantial portion of the discourse, reflecting the urgency and severity of the crisis. The emotional patterns observed suggest the reactivation of collective trauma linked to Aceh's experience of the 2004 Indian Ocean tsunami, shaping how communities interpret and respond to new climate-related hazards. These findings demonstrate the utility of social media analysis for understanding community-level emotional dynamics and contribute to broader discussions on human security in disaster-prone regions.

1. Introduction

Flash floods and landslides that struck Aceh on 26 November 2025 resulted in extensive loss of life and property for residents in the affected areas. The confirmed death toll has surpassed 600 individuals, with nearly 500 others still missing and thousands more sustaining injuries (Drury, 2025). According to experts, the disaster was triggered by the interaction between Cyclone Ditwah and Cyclone Senyar, which was further exacerbated by widespread deforestation that has critically weakened the region's ecological stability (Gilliver, 2025; Nugroho, 2025). These overlapping environmental pressures highlight how climate change is intensifying the scale and impact of disasters in the region. As climate-related hazards become more frequent and severe, the emotional and psychological consequences for affected communities are also expected to grow (Abrutyn, 2024).

Natural disasters are not only destructive events but also bring sudden and overwhelming stress to entire communities (Norris & McFarlane, 2006). Beyond the visible physical damage, flooding disrupts social life and creates long-term psychological challenges for survivors (Asim et al., 2019).

ISSN 1411-7924
Vol. 12, No. 1, January, 2026, pp. 1-8

Many people experience health risks such as injuries and disease exposure, but the emotional impact often lasts much longer. Research shows that flood survivors frequently face post-traumatic stress disorder (PTSD), anxiety, and depression symptoms that may continue for months or even years after the event (Bastami et al., 2024; Nasri et al., 2020; Sönmez & Hocaoğlu, 2023).

In Aceh, the psychological effects of the 2025 disaster cannot be understood purely at the individual level. The region still carries deep emotional wounds from the 2004 Indian Ocean tsunami, a tragedy that continues to shape collective memory and community identity (Amna et al., 2025). Collective trauma is not something that disappears but becomes part of a community's shared consciousness (Erikson, 1976). When new crises occur, memories and emotions from earlier disasters can re-emerge. Communities with past experiences of catastrophe often react more intensely to new threats, showing heightened fear, uncertainty, and a renewed sense of vulnerability (Hirschberger, 2018). These perspectives suggest that past disasters strongly influence how people interpret and emotionally respond to later climate-related events.

Despite greater recognition of the psychological impacts of disasters, there is still limited research on how collective trauma becomes visible in everyday public expressions, especially within digital spaces. Much of the existing literature relies on clinical assessments or small-scale interviews, which offer valuable insights but capture only a fraction of the broader community experience. Prior disaster communication research has historically depended on limited, top-down information channels and small-sample studies that do not adequately reflect population-level emotional dynamics (Houston et al., 2015). Trauma research often depends on narrowly defined indicators and lacks specificity in understanding the diverse domains through which people experience and express distress (Bountress et al., 2021).

At the same time, research on disaster communication shows that platforms like X (formerly Twitter) capture immediate emotional responses from affected communities. X often functions as a real-time outlet where people share fear, anxiety, losses, and calls for help, making it a valuable source of public emotional expression during crises. Recent studies using sentiment analysis further demonstrate that online emotional tone tends to shift sharply negative at the height of disaster events before gradually recovering, mirroring community distress in real time. Although sentiment analysis holds significant potential for identifying emotional disruption and community needs during emergencies, its application in disaster studies remains limited and underdeveloped. This gap highlights the need to employ X sentiment analysis to better understand how communities emotionally process climate-related disasters. By applying an Indonesian language model such as RoBERTa to public reactions surrounding the 2025 Aceh flood and landslide disaster, this research aims to capture emerging emotional patterns and identify how collective trauma becomes expressed and reactivated in digital public spaces. Consequently, this study offers three primary contributions to the literature on disaster communication and collective trauma. First, it empirically validates the concept of "reactivated memory" in digital environments, demonstrating how the public emotional response to the 2025 Aceh climate disaster is framed through the historical lens of the 2004 tsunami. Second, methodologically, it advances disaster sentiment analysis by integrating the Indonesian RoBERTa transformer model with a domain-specific trauma lexicon, moving beyond standard binary classification to capture complex emotional registers such as solidarity and grief. Third, it provides a critical human security perspective by revealing that online disaster discourse is driven less by panic and more by communal bereavement and informational coping, establishing a new baseline for understanding psychosocial resilience in disaster-prone regions (Coffin, 2025).

2. Research Methodology

2.1. Data

X was selected as the primary data source because it offers real-time, user-generated reflections that capture how individuals and communities express their emotions during crises (Henríquez & Alessandri, 2024). Tweets were collected using a keyword-based crawling method covering discussions related to the disaster between 28 November 2025 and 9 December 2025, resulting in 5.870 raw tweets. The collected data underwent a multi-stage preprocessing procedure to prepare

ISSN 1411-7924
Vol. 12, No. 1, January, 2026, pp. 1-8

the text for transformer-based analysis. This included removing duplicate entries, lowercasing text, stripping URLs, mentions, emojis, punctuation, and non-alphabetic characters, followed by stopword removal and normalization of colloquial Indonesian expressions commonly used on social media. Tokenization was conducted using byte-pair encoding (BPE) compatible with RoBERTa architecture. After cleaning, the dataset was reduced to 3.436 tweets, which constituted the final corpus for analysis.

2.2. RoBERTa Methodology

Sentiment classification in this study was conducted using *w11wo/indonesian-roberta-base-indolem-sentiment-clf*, a RoBERTa-based transformer model fine-tuned for Indonesian sentiment analysis. RoBERTa is an optimized variant of the original BERT architecture that removes the next-sentence prediction objective, applies dynamic masking, and is pretrained with larger batches and longer training durations (Liu et al., 2019). These modifications allow the model to capture richer contextual representations, making it highly suitable for short and often emotionally charged social media texts.

Indonesian RoBERTa models are pretrained on large Indonesian corpora, including colloquial and web-based language, which enhances performance on informal expressions common in X discourse (Koto et al., 2020; Wilie et al., 2024). Before inference, all tweets were converted into subword units through the BPE tokenization algorithm used by RoBERTa. BPE allows the model to interpret slang, incomplete words, and spelling variations by decomposing them into subword components (Rust et al., 2021; Sennrich et al., 2016).

2.3. Sentiment Analysis

The model architecture consists of 12 transformer encoder layers, each containing 12 self-attention heads and feed-forward sublayers with a hidden size of 768 dimensions. During inference, each cleaned tweet was processed in batches of 32. For every tweet, the model returns a sentiment label and a confidence score. The internal *id2label* configuration maps the output classes into negative and positive sentiment. Although the model is binary, the probabilistic output provides fine-grained information about the strength of emotional expression across the dataset. All predictions were reintegrated into the dataset and subsequently summarized for visualization and interpretation.

3. Results and Discussion

Complementary to the RoBERTa outputs, the research also applies a trauma-lexicon tagging layer to identify lexical markers of fear, loss, anger, and solidarity as shown in the Table 1. “Other” represents tweets that did not match any lexicon category. Counts indicate the number of tweets assigned to each sentiment-emotion combination.

Table 1. Summary of sentiment analysis

Emotion Category	Negative (LABEL_0)	Positive (LABEL_1)
Anger	17	2
Fear	27	4
Loss	836	441
Other	890	626
Solidarity	154	252

The sentiment analysis revealed a clear dominance of negative emotional reactions in the public discourse surrounding the 2025 Aceh disaster. Feelings of fear, grief, and helplessness expressed in the online discourse reflect emotional patterns central to collective distress. The helplessness experienced in the face of the witnessed event and the inability to cope with the existing situation can affect large groups (Tunçel, 2023), suggesting that public reactions on social media may reveal deeper communal struggles beyond immediate shock. From the 3.436 cleaned tweets analyzed, the RoBERTa classifier identified 1.924 negative tweets and 1.325 positive tweets, indicating that

ISSN 1411-7924
Vol. 12, No. 1, January, 2026, pp. 1-8

public responses on X were largely characterized by expressions of distress, concern, and dissatisfaction. When these sentiment labels were examined alongside trauma-related emotion categories, a more nuanced emotional landscape emerged. Negative tweets were overwhelmingly associated with loss (n = 836) and with tweets categorized as "other" (n = 890), the latter consisting primarily of informational statements such as updates on missing persons, calls for evacuation, or situational reporting that did not contain explicit emotional indicators.

Fear-related expressions also appeared more frequently in negative tweets (n = 27) than in positive ones (n = 4), indicating a heightened sense of insecurity during the immediate aftermath of the event. The presence of anger, although numerically smaller (17 negative tweets; 2 positive tweets), remains symbolically significant, as these expressions targeted perceived institutional failures, environmental negligence, and lack of preparedness. Such reactions reflect secondary stressors, meaning social and political grievances that intensify emotional distress following a catastrophic event (Williams et al., 2021). In contrast, positive tweets were most strongly associated with solidarity (n = 252) and loss (n = 441), indicating the simultaneous emergence of community support, compassion, and efforts to mobilize aid despite the prevailing negative emotional climate. These patterns demonstrate that the Aceh disaster triggered not only immediate emotional reactions but also deeper resonances consistent with collective trauma. The heavy concentration of loss-related and fear-related tweets suggests such reactivation may have occurred, especially given Aceh's long-standing historical memory of the 2004 tsunami, which continues to shape communal vulnerability and emotional sensitivity to large-scale disasters.

Beyond the overall dominance of negative sentiment, the emotion-tagging layer clarifies what kind of distress circulated most prominently in the X discourse. Across the sentiment–emotion crosstab, loss-related expressions form the most substantial emotional category (1.277 tweets), far exceeding fear (31) and anger (19). This imbalance suggests that the public conversation was anchored less in panic-driven narratives and more in the ongoing social reality of bereavement: missing persons, confirmed deaths, destroyed homes, and disrupted livelihoods. In disaster settings, "loss" functions not only as a private experience but also as a collective language through which communities publicly acknowledge the scale of harm. The prevalence of loss-related expressions therefore supports the idea that social media becomes a shared space for communal grieving, where individual sorrow is repeatedly articulated and validated through circulation, retweeting, and collective attention. In the context of Aceh where memories of the 2004 tsunami remain culturally salient, this shared grief may carry additional symbolic weight, as current losses are not experienced in isolation but are understood against a longer history of catastrophe.

At the same time, a striking feature of the dataset is the large number of tweets categorized as "other" (1.516). Importantly, "other" does not indicate emotional absence; it indicates that the tweets did not contain explicit lexicon markers for fear, loss, anger, or solidarity. Many such posts likely functioned as situational reporting and crisis information sharing such as updates on evacuation routes, casualty figures, missing persons lists, requests for rescue assistance, donation information, or warnings about further hazards. This pattern suggests that X served as a hybrid public sphere in which emotional expression coexisted with urgent informational needs. From a human security perspective, the prominence of informational tweets is analytically meaningful: when disasters unfold, affected communities often rely on informal digital channels to fill gaps in official communication, coordinate help, and reduce uncertainty. In this sense, "other" tweets can be read as part of a collective coping mechanism, where circulating information becomes a practical response to vulnerability. Even without explicit emotional words, these posts contribute to the emotional climate of crisis by repeatedly foregrounding severity, risk, and loss.

Another notable finding is the role of solidarity as the most prominent category within positive sentiment. Among positive tweets, solidarity accounts for 252 entries, substantially higher than solidarity within negative sentiment which only 154 entries. This suggests that "positive" discourse during disaster is not necessarily optimistic in a celebratory sense, but rather reflects prosocial emotions such as compassion, collective responsibility, and mobilization for aid. Tweets expressing solidarity may include prayers, encouragement, calls for donations, offers of shelter, gratitude toward rescuers, or messages affirming unity among Indonesians. This pattern is consistent with

ISSN 1411-7924
Vol. 12, No. 1, January, 2026, pp. 1-8

the idea that communities facing large-scale disruption may reaffirm social bonds as a stabilizing force. In this dataset, solidarity appears to operate as a counterweight to distress: even as loss dominates the emotional landscape, expressions of care and collective action remain highly visible. This coexistence of grief and support provides a more layered view of public emotion than sentiment polarity alone, highlighting that disaster communication often contains overlapping emotional registers rather than a single uniform mood.

Fear and anger appear less frequently in absolute counts, yet they remain analytically important. Fear-related tweets are more common in negative sentiment than positive sentiment, indicating that when fear is expressed, it is typically embedded within broader distress and insecurity. Fear in disaster discourse often reflects not only immediate physical danger but also uncertainty about ongoing risk, trust in institutions, and anticipated future harm. Meanwhile, anger is comparatively rare but symbolically significant because it often points outward to blame, accountability, and governance failures. In crisis contexts, anger can function as a public articulation of secondary stressors, the social and political pressures that compound suffering after the initial shock, such as perceived negligence, environmental degradation, delayed response, misinformation, or unequal access to assistance (Williams et al., 2021). Even small amounts of anger can indicate emerging fault lines in public trust, which matter for human security and long-term recovery.

Methodologically, the crosstab also helps clarify what the RoBERTa classifier likely captured as “negative” or “positive” in this context. Because the sentiment model used in this study is binary, the “positive” category may include tweets that are supportive or hopeful rather than emotionally “happy.” This is important for interpretation: a disaster dataset is unlikely to produce positivity in conventional affective terms. Instead, positivity may reflect moral and social responses such as solidarity, encouragement, religious expressions, and calls to help which are central to community resilience. Conversely, many informational tweets categorized as “other” may be labeled negative or positive depending on wording, even when their primary function is reporting rather than expressing emotion. This reinforces the value of combining model-based sentiment with emotion tagging: sentiment provides a broad polarity signal, while emotion categories help distinguish grief, fear, anger, and solidarity as socially meaningful forms of expression.

Taken together, these results strengthen the argument that the 2025 Aceh disaster generated not merely individual distress but a broader collective emotional field shaped by loss, informational urgency, and prosocial solidarity. Within a collective trauma framework, the dominance of loss-related discourse and the persistence of fear and vulnerability can be interpreted as signs of communal meaning-making under threat, potentially reactivating historical memories of past catastrophe. The digital public space thus becomes a site where trauma is not only felt but also narrated, shared, and socially processed which made sentiment and emotion analysis a useful lens for examining the human security dimensions of climate-related disasters. These observations suggest that the digital traces of the Aceh disaster extend beyond immediate metrics, revealing deeper patterns in how communities collectively process trauma. The evident reactivation of historical memory where current floods are interpreted through the lens of the 2004 tsunami shifts the analytical focus from individual pathology to shared social processing, positioning digital spaces as vital sites for communal meaning-making. This complexity complicates traditional binary sentiment models, as the prevalence of "solidarity" indicates that positive digital expressions during crises are often rooted in moral resilience rather than hedonic happiness.

Such emotional dynamics necessitate a corresponding shift in disaster response strategies. Since expressions of loss vastly outnumbered panic or anger, interventions must prioritize bereavement support and grief counseling over standard de-escalation tactics. Furthermore, the critical role of informational sharing as a coping mechanism implies that rapid, accurate communication is not merely logistical but a fundamental component of psychological stabilization, while even minor signals of anger serve as essential diagnostics for emerging governance fatigue and secondary stressors.

Capturing this nuanced landscape where solidarity coexists with distress validates the need for hybrid analytical approaches over simple polarity checks. Reliance on generic models risks overlooking these cultural specificities, underscoring the importance of employing linguistically

ISSN 1411-7924
Vol. 12, No. 1, January, 2026, pp. 1-8

fine-tuned transformers like the Indonesian RoBERTa combined with trauma-specific lexicons to accurately decode local sentiment. Ultimately, this confirms the utility of real-time digital analysis as a rapid diagnostic tool for monitoring the shifting emotional temperature of vulnerable populations, offering insights that retrospective clinical methods often miss.

4. Conclusion

This research confirms that public reactions to the 2025 Aceh disaster extend beyond immediate shock, serving as a digital mirror for reactivated collective trauma rooted in the region's history of the 2004 tsunami. The overwhelming prevalence of loss-related discourse over panic, coupled with the resilience found in solidarity-driven posts, challenges traditional binary sentiment models and suggests that disaster management must pivot from purely logistical responses to those that integrate communal grief support and information transparency as psychological stabilizers.

For future research, there is a critical need to move beyond binary sentiment classification toward developing fine-grained, multi-class emotion detection models specifically for Indonesian disaster contexts. Future studies should aim to automatically distinguish complex registers such as differentiating "grief" from "anxiety" or "solidarity" from "happiness" without relying on manual lexicon tagging. Furthermore, researchers should consider longitudinal analyses that track digital traces over longer periods to observe how "solidarity" evolves into "recovery" or "frustration," thereby providing a more complete timeline of community resilience in the face of recurring climate crises.

5. References

Abrutyn, S. (2024). The Roots of Social Trauma: Collective, Cultural Pain and Its Consequences. *Society and Mental Health*, *14*(3), 240–256. https://doi.org/10.1177/21568693231213088

Amna, Z., Santy, D. H., Nurhasanah, D., Aristo, N., & Datachi, S. T. (2025). *Original Research Article Artikel Penelitian Orisinal Two Decades After Traumatic Events : Prevalence of Mental Health in Aceh Tsunami Survivors [Dua Dekade Setelah Peristiwa Traumatis : Prevalensi Kesehatan Mental Penyintas Tsunami Aceh]*. *40*(2), 1–18.

Asim, M., Mekkodathil, A., Sathian, B., Elayedath, R., N, R. K., Simkhada, P., & Van Teijlingen, E. (2019). Post-Traumatic Stress Disorder among the Flood Affected Population in Indian Subcontinent. *Nepal Journal of Epidemiology*, *9*(1), 755–758. https://doi.org/10.3126/nje.v9i1.24003

Bastami, F., Mohammadi, R., Piri, Z. A., Valipour, E., Ahmadi, P., Almasian, M., & Nouraei Motlagh, S. (2024). Prevalence of post-traumatic stress disorder and its relationship with coping strategies among flood victims: Evidence from Iran. *Journal of Affective Disorders Reports*, *15*(November 2023), 100704. https://doi.org/10.1016/j.jadr.2023.100704

Bountress, K. E., Cusack, S. E., Conley, A. H., Aggen, S. H., Vassileva, J., Dick, D. M., Amstadter, A. B., Lilley, E., Gelzinis, R., Morris, A., Bountress, K., Adkins, A. E., Thomas, N., Neale, Z., Pedersen, K., Bannard, T., Cho, S. B., Adkins, A. E., Barr, P., … Webb, B. T. (2021). Unpacking the impact of the COVID-19 pandemic: identifying structural domains. *European Journal of Psychotraumatology*, *12*(1). https://doi.org/10.1080/20008198.2021.1932296

Coffin, T. (2025). Ethical Considerations for the Use of Social Media in the Human Subjects Research Setting. *J Med Internet Res*, *27*, 78183. https://doi.org/10.2196/78183

Drury, F. (2025). *Indonesia floods death toll passes 600*. https://www.bbc.com/news/articles/c4g4enlp6kzo

Erikson, K. (1976). *Everything in Its Path: Destruction of Community in the Buffalo Creek Flood*.

ISSN 1411-7924
Vol. 12, No. 1, January, 2026, pp. 1-8

Simon & Schuster.

Gilliver, L. (2025). *How decades of deforestation turned Asia's floods into one of the deadliest weather events of 2025 | Euronews*. https://www.euronews.com/green/2025/12/05/how-decades-of-deforestation-turned-asias-floods-into-one-of-the-deadliest-weather-events-

Henríquez, P. A., & Alessandri, F. (2024). Analyzing digital societal interactions and sentiment classification in Twitter (X) during critical events in Chile. *Heliyon*, *10*(12), e32572. https://doi.org/10.1016/j.heliyon.2024.e32572

Hirschberger, G. (2018). Collective trauma and the social construction of meaning. *Frontiers in Psychology*, *9*(AUG), 1–14. https://doi.org/10.3389/fpsyg.2018.01441

Houston, J. B., Hawthorne, J., Perreault, M. F., Park, E. H., Goldstein Hode, M., Halliwell, M. R., Turner Mcgowen, S. E., Davis, R., Vaid, S., Mcelderry, J. A., & Griffith, S. A. (2015). Social media and disasters: A functional framework for social media use in disaster planning, response, and research. *Disasters*, *39*(1), 1–22. https://doi.org/10.1111/disa.12092

Koto, F., Rahimi, A., Lau, J. H., & Baldwin, T. (2020). IndoLEM and IndoBERT: A Benchmark Dataset and Pre-trained Language Model for Indonesian NLP. *COLING 2020 - 28th International Conference on Computational Linguistics, Proceedings of the Conference*, 757–770. https://doi.org/10.18653/v1/2020.coling-main.66

Liu, Y., Ott, M., Goyal, N., Du, J., Joshi, M., Chen, D., Levy, O., Lewis, M., Zettlemoyer, L., & Stoyanov, V. (2019). *RoBERTa: A Robustly Optimized BERT Pretraining Approach*. *1*. http://arxiv.org/abs/1907.11692

Nasri, R. I., Seniwati, T., Ilkafah, & Erfina, E. (2020). Screening of post-traumatic stress disorder (PTSD) among flood victims in Indonesia. *Enfermeria Clinica*, *30*, 345–349. https://doi.org/10.1016/j.enfcli.2019.07.115

Norris, F., & McFarlane, A. (2006). Methods for Disaster Mental Health Research. In *Psychiatric Services*. https://doi.org/10.1176/appi.ps.59.7.815

Nugroho, A. (2025). *UGM Expert: Severe Sumatra Flash Floods Driven by Upper Watershed Forest Degradation - Universitas Gadjah Mada*. https://ugm.ac.id/en/news/ugm-expert-severe-sumatra-flash-floods-driven-by-upper-watershed-forest-degradation/

Rust, P., Pfeiffer, J., Vulic, I., Ruder, S., & Gurevych, I. (2021). How good is your tokenizer? On the monolingual performance of multilingual language models. *ACL-IJCNLP 2021 - 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing, Proceedings of the Conference*, *1*, 3118–3135. https://doi.org/10.18653/v1/2021.acl-long.243

Sennrich, R., Haddow, B., & Birch, A. (2016). Neural machine translation of rare words with subword units. *54th Annual Meeting of the Association for Computational Linguistics, ACL 2016 - Long Papers*, *3*, 1715–1725. https://doi.org/10.18653/v1/p16-1162

Sönmez, D., & Hocaoğlu, Ç. (2023). Post-Traumatic Stress Disorder After Natural Disasters: A Review. *Duzce Medical Journal*, *25*(2), 103–114. https://doi.org/10.18678/dtfd.1277673

Tunçel, Ö. K. (2023). Earthquake, Collective Trauma, and Consequences. *Noropsikiyatri Arsivi*, *60*(2), 97–98. https://doi.org/10.29399/npa.28494

Wilie, B., Vincentio, K., Winata, G. I., Cahyawijaya, S., Li, X., Lim, Z. Y., Soleman, S., Mahendra, R., Fung, P., Bahar, S., & Purwarianti, A. (2024). *IndoNLU: Benchmark and Resources for Evaluating Indonesian Natural Language Understanding*. 843–857. https://doi.org/10.18653/v1/2020.aacl-main.85

ISSN 1411-7924
Vol. 12, No. 1, January, 2026, pp. 1-8

Williams, R., Ntontis, E., Alfadhli, K., Drury, J., & Amlôt, R. (2021). A social model of secondary stressors in relation to disasters, major incidents and conflict: Implications for practice. *International Journal of Disaster Risk Reduction*, *63*, 102436. https://doi.org/10.1016/J.IJDRR.2021.102436