

Deluge, Pain, Agony, and Survival: Decoding Disaster's Adversities

Edgar R. Eslit

St. Michael's College, Philippines.

Abstract

This article aimed to explore the experiences of deluge victims in Iligan City following Typhoon Sending using Interpretative Phenomenological Analysis (IPA). Semi-structured interviews were conducted with 10 participants, and the data were analyzed using IPA. The study found that the flood had a significant psychological and emotional impact on the participants, with several key themes and patterns emerging from the IPA analysis. These included the impact on emotional well-being, coping strategies, and patterns of adaptation and adjustment among Iligan City's Sending Survivors. The coping strategies employed by the participants highlighted the importance of social support and community engagement in disaster recovery. The patterns of adaptation and adjustment observed among the participants suggest the potential for personal growth and development following a traumatic event. The study has implications for practitioners and policymakers involved in disaster response and recovery, and highlights the need for continued research and support for individuals and communities affected by natural disasters.

Keywords: deluge victims; iligan city; interpretative phenomenological analysis; making sense of the flood; typhoon sending

Introduction

In December 17, 2011, Typhoon Sending caused widespread flooding and landslides in the southern Philippines, resulting in over 1,200 deaths and affecting over 2 million people (National Disaster Risk Reduction and Management Council, 2012). Iligan City, located in the province of Lanao del Norte, was one of the areas hardest hit by the disaster (Batabyal, 2014). The flooding caused by Typhoon Sending resulted in significant damage to property, infrastructure, and livelihoods, as well as widespread psychological and emotional trauma for the individuals affected (Mercado, 2014).

Many of the survivors were closely associated with the researcher, hence, igniting the sympathetic and emphatic urgency to conduct this kind of study. That being said, the purpose of this study is to explore the subjective experiences of deluge victims in Iligan City following Typhoon Sending. Using the Interpretative Phenomenological Analysis (IPA) approach, the study seeks to gain a deeper understanding of the psychological and emotional impact of the flood, the coping strategies employed by individuals, and the ways in which they have adapted to their changed

circumstances. The research questions guiding this study include:

1. What are the subjective experiences of deluge victims in Iligan City following Typhoon Sending?
2. How do deluge victims make sense of their experiences of the flood?
3. What coping strategies have deluge victims employed in response to the flood?
4. How have deluge victims adapted and adjusted to their changed circumstances following the flood?

By exploring the experiences of deluge victims in Iligan City, this study aims to contribute to a deeper understanding of the impact of natural disasters on individuals and the ways in which they cope and recover from such events. The findings of this study may also inform the development of more effective interventions and support services for deluge victims in the future.

Theoretical Framework

The study is guided by a theoretical framework that draws on the concept of post-traumatic growth (PTG) as a potential outcome of natural disasters. PTG refers to the positive psychological changes that can occur in individuals following a traumatic event (Tedeschi &

Calhoun, 2004). PTG can result from the cognitive and emotional processing of a traumatic event, leading to personal growth and development (Tedeschi & Calhoun, 2004). This framework is particularly relevant for understanding the experiences of deluge victims in Iligan City following Typhoon Sendong, as research has shown that exposure to natural disasters can lead to both negative and positive outcomes (Norris et al., 2002).

Moreover, the theoretical framework draws on the concept of coping strategies and social support as important factors in disaster recovery (Huang et al., 2018). Coping strategies refer to the behavioral and cognitive efforts used to manage the stressors of a traumatic event (Folkman & Lazarus, 1988). Social support, on the other hand, refers to the resources and assistance provided by others during and after a disaster (Huang et al., 2018). The role of coping strategies and social support in promoting PTG and recovery following a disaster is well-established (Huang et al., 2018; Zoellner & Maercker, 2006). Therefore, this framework provides a basis for understanding the experiences of deluge victims in Iligan City, as well as the potential for growth and recovery in the aftermath of a natural disaster.

In the context of the present study, exploring the coping strategies and social support networks of deluge victims can provide insight into the factors that facilitate PTG following a natural disaster. By identifying the specific coping strategies and sources of social support that are most beneficial in promoting PTG, the study can provide practical guidance for disaster response and recovery efforts, as well as inform the development of interventions to support the mental health and well-being of disaster-affected populations.

Literature review

Natural disasters are a common occurrence around the world, with devastating consequences for individuals, communities, and entire nations. In recent years, there has been increasing interest in the subjective experiences of individuals who have been affected by natural disasters, with researchers using qualitative approaches such as Interpretative Phenomenological Analysis (IPA) to gain a deeper understanding of the psychological and emotional impact of such events (Cooke et al., 2018). IPA is particularly suited to exploring the subjective experiences of individuals and has been used extensively in research on trauma and adversity (Smith et al., 2018). Floods are one of the

most common natural disasters worldwide, affecting millions of people every year (World Health Organization, 2020). The impact of floods on individuals can be significant, with studies suggesting that floods can result in widespread psychological and emotional distress, as well as physical health problems (Bai et al., 2017). The psychological impact of floods can include symptoms of depression, anxiety, post-traumatic stress disorder (PTSD), and other mental health issues (Huang et al., 2018).

Research on the experiences of deluge victims in the aftermath of floods has shown that individuals can experience a range of emotions, including shock, disbelief, fear, and anger (Shorey et al., 2019). Coping strategies employed by deluge victims include seeking support from friends and family, engaging in religious or spiritual practices, and engaging in positive activities such as exercise or hobbies (Mashamba-Thompson et al., 2019). However, studies have also highlighted the challenges that individuals face in coping with the aftermath of floods, including financial and practical difficulties, social isolation, and ongoing psychological distress (Liao et al., 2018). The Philippines is a country that is frequently hit by typhoons, leading to loss of life, property, and livelihood. One of the deadliest typhoons in the country's recent history was Typhoon Sendong, which hit Iligan City on December 17, 2011. The typhoon caused massive flooding that resulted in over 1,200 deaths and affected more than 700,000 individuals. In the aftermath of the disaster, many individuals were left struggling to cope with the physical, emotional, and psychological impacts of the flood. The current study aims to provide an interpretative phenomenological analysis of the experiences of deluge victims in Iligan City following Typhoon Sendong.

Studies have shown that natural disasters can have significant physical, emotional, and psychological impacts on individuals and communities. These impacts can include loss of life, physical injury, displacement, disruption of social networks, and psychological trauma (Rohini et al., 2014). Researchers have used various methods to investigate the experiences of disaster survivors, including quantitative surveys, qualitative interviews, and mixed-methods approaches. Interpretative phenomenological analysis (IPA), Overall, previous research has highlighted the significant impact of natural disasters on individuals, particularly in terms of their psychological and emotional well-being. The use of qualitative approaches such as IPA can provide valuable insights into the

experiences of deluge victims and the ways in which they cope and adjust to their changed circumstances.

Methodology

Research Design and Rationale for Using IPA: This study uses an Interpretative Phenomenological Analysis (IPA) research design, which is a qualitative approach that aims to explore the subjective experiences of individuals (Smith et al., 2018). IPA is particularly suited to exploring the lived experiences of individuals who have been through a traumatic event, such as a natural disaster (Cooke et al., 2018). This study aims to gain a deeper understanding of the experiences of deluge victims in Iligan City following the Sending Typhoon in 2011.

Sampling Procedures and Participant Selection: The participants for this study were selected using purposive sampling, a method of selecting participants based on specific criteria (Palinkas et al., 2015). The inclusion criteria for this study were individuals who had experienced the Sending Typhoon in 2011, were living in Iligan City at the time of the disaster, and were over the age of 18. A total of 10 participants were selected for the study. They used to live in Barangay Barina-ut, Iligan City and were relocated to the relocation site in Barangay Paitan, Dalipuga, Iligan City after the typhoon.

Data Collection Procedures: Data for this study were collected through in-depth, semi-structured interviews with the participants which took place one year after the tragedy. The interviews were conducted face-to-face using a pre-determined interview guide that focused on the participants' experiences during and after the Sending Typhoon. The interviews were audio-recorded and transcribed verbatim for analysis. Other sources of data, such as news articles and official reports, were also reviewed to provide additional context to the participants' experiences.

Data Analysis Procedures: The data collected from the interviews and other sources were analyzed using an IPA approach. The analysis involved multiple stages of coding and thematic analysis (Smith et al., 2018). The first stage involved reading and re-reading the transcripts to identify initial codes that captured the participants' experiences. The second stage involved grouping the initial codes into broader themes. The final stage involved interpreting the themes to generate a rich, in-depth understanding of the participants' experiences (Cooke et al., 2018). The analysis was

conducted by the primary researcher and verified by a second researcher to ensure inter-rater reliability.

Validity and reliability

Validity and reliability are critical aspects of research that contribute to the overall quality and credibility of a study. In the case of this study, several steps were taken to ensure the validity and reliability of the study's findings. In terms of validity, several measures were taken to ensure the accuracy and trustworthiness of the findings. Face validity was established by reviewing the transcripts and confirming that they accurately reflected the experiences and perceptions of the participants, as recommended by Smith and colleagues (2009). Construct validity was ensured by using multiple coders and conducting member checking to confirm the accuracy of the interpretations. To establish internal validity, detailed records of the analysis process were maintained, and quotes from the participants were included to support the findings.

In terms of reliability, measures were taken to ensure consistency and reproducibility of the results. To establish inter-coder reliability, two independent coders were used, and Cohen's kappa coefficient was calculated to assess the degree of agreement between them, as recommended by Hallgren (2012). Intra-coder reliability was established by periodically reviewing the coding and analysis methods to ensure consistency. The reliability of the findings was also established by using member checking to confirm the accuracy of the interpretations with the participants, as recommended by Smith et al. (2009). These measures helped to increase the credibility and dependability of the findings, enhancing the validity and reliability of the study.

Results

Overview of the Experiences of Deluge Victims in Iligan City Following Typhoon Sending. The analysis of the participants' interviews and other sources of data provided an in-depth understanding of the experiences of deluge victims in Iligan City following the Sending Typhoon in 2011. The participants described the typhoon as a traumatic event that caused extensive damage to their homes and belongings, disrupted their daily lives, and resulted in the loss of loved ones and community members. Key Themes and Patterns Identified Through IPA Analysis: The IPA analysis identified several key themes and patterns in the participants' experiences. One of the main themes was

the psychological and emotional impact of the flood, with many participants describing feelings of fear, anxiety, and sadness in the aftermath of the disaster. Another theme was the coping strategies employed by

the participants, including seeking social support, engaging in religious activities, and focusing on positive aspects of their situation.

Table: summary of the information gathered:

Participants	Narrative
#1	Jeepney driver: (Experiencing extensive damage to their homes and belongings). ...Grabe ka pait, walay makatopong sa kong gibati bisan pag usa n aka tuig ang nilabay. Tanan namong kabtangan horot, maski haligi sa among balay, anod tanan sa baha.
#2	Factory worker: (disrupted their daily lives). Tibook nako pamilya daw gi papha sa kalit lang. Kinsa bay maghadom kay nangatulog na biya me, ug sa dihang kalit lang mi nanglotaw. Abi nakog patay nako adto.
#3	Housewife: (loss of loved ones and community members). Huhuhu, di ko kalimot bisan pag unsaon. Akong anak, wa nay kinabuhi nga akong gikogos human sa baha. Dagahna sa akong silingan, ambo tug asa na kaha intawon...wala na.
#4	Student: (psychological and emotional impact). Ah, grabe, Sir oy, mura ko'g mabuang. Imbis nagplano pa me sa among mga friends nga manaygon kay pasko baya, pero, ambot. Hantod karon dili pa ko kadawat sa nahitabo. Disturb kayo akong utok, Sir. Dili ko kasabot sa akong gibati.
#5	Teacher: (feelings of sadness). Walay kabutanagan akong kagool. Dili na tingali ko mauli-an aning akong gibati ron. Ngano man to oy?
#6	Vendor: (theme was the coping strategies employed by the participants, including seeking social support,) Sos, sa akong kapobrehon, grabe gyod ang kasakit nga gihatag ni Sendong. Pero kalooy sa Ginoo, murag ako nalang gyong dawaton. Maglakaw ko nga nga murag wa nagdapat akong tiil sa yota, sos, Ginoo. Pero, nasayon ko, naa ang Diyos.
#7	Store owner: (engaging in religious activities, and focusing on positive aspects of their situation). Nagpasalamt ko nga bisan sa nahitabo, naay mga hianabang nga among nadawat. Wala man ko nawad-i ug paglaom. Padayon akong pag simba. Naame mga activities sa simbahan nga nakatabang namo.
#8	Beautician: revealed patterns of adaptation and adjustment among the participants. Abi nakog kataposan na to sa akong kinauhi, oy. Pero, naluwas ko. Human sa us aka tuig, kinahanglan ko nga mo adapt sa kamatooran, kay unsaon man, wa man tay mahimo kong hukman na gyod ta sa kahitas-an. Mag adjust nalang gyod ta.
#9	Fisherman: Showing patterns of adaptation and adjustment observed among the participants. Sa tanang kalisod nga akong naagian, murag wala nay molabaw pa adtong Sendong. Pero, may pag-asa. Kay gihatagan pa ta sa Gino-o og kinabuhi, so, padayon ta.
#10	Government employee: (Showing feelings of fear, anxiety). Way kabutangan ang akong kahadlok ug kabalaka, Sir. Labi nag mag ulan-ulan, sos, mura gyod ug magbulag akong lawas ug kalag oy. Grabe akong truma, grabe gyod. Tan-awa ning akong samad sa kilid ug sa ulo, sir o? Agi ni sa mga troso. Kay kong wa ko kagunit, na, wa gyod. Wan a tingali ko ron.

Note: Narratives of the informants were written in vernacular (Sebuano) to preserve the authenticity and nuances of the informants' profound and in-depth experiences.



Figure: Pictures taken form *The Atlantic*.

The analysis also revealed patterns of adaptation and adjustment among the participants, with some describing a renewed sense of purpose and appreciation for life following the disaster. Additionally, many participants expressed a desire to help others and contribute to their community's recovery.

Discussion of the Psychological and Emotional Impact of the Flood, Coping Strategies Employed, and Ways of Adaptation and Adjustment: The findings of this study highlight the significant psychological and emotional impact of natural disasters on individuals, particularly those who have experienced significant losses and disruptions to their daily lives. The coping strategies employed by the participants suggest that social support and engagement in meaningful activities can help individuals to cope with the emotional and psychological effects of disaster.

The patterns of adaptation and adjustment observed among the participants suggest that individuals can find ways to rebuild their lives following a traumatic event, and may even experience personal growth and development as a result. However, it is important to note that the experiences of deluge victims are complex and multifaceted, and require ongoing support and resources to facilitate recovery and healing.

Overall, this study provides valuable insights into the experiences of deluge victims in Iligan City following the Sending Typhoon, and highlights the need for continued research and support for individuals and communities affected by natural disasters.

Implications and recommendations

Implications for Practitioners and Policymakers: The findings of this study have several implications for practitioners and policymakers working with deluge victims and communities affected by natural disasters. Firstly, the psychological and emotional impact of the flood highlights the need for mental health support and interventions that address the emotional needs of disaster survivors (Bai et al., 2019). Practitioners and policymakers should consider the implementation of trauma-focused interventions and psychotherapeutic support for individuals and communities affected by natural disasters. Secondly, the coping strategies employed by the participants suggest the importance of social support and community engagement in disaster recovery (Hogan & Linden, 2011). Practitioners and policymakers should prioritize the development of social support networks and community-based interventions that promote resilience and positive coping strategies.

Thirdly, the patterns of adaptation and adjustment observed among the participants highlight the potential for personal growth and development following a traumatic event. Practitioners and policymakers should consider the implementation of interventions that facilitate post-traumatic growth and promote positive psychological outcomes (Tedeschi & Calhoun, 2004). **Recommendations for Future Research:** The findings of this study suggest several areas for future research on the experiences of deluge victims and communities affected by natural disasters. Firstly, future research should explore the long-term effects of natural disasters on individuals and communities, including the potential for post-traumatic growth and the development of resilience.

Secondly, future research should investigate the effectiveness of different interventions and support services for disaster survivors, including trauma-focused interventions and community-based interventions that promote resilience and positive coping strategies. Finally, future research should examine the role of social support and community engagement in disaster recovery, including the development of social support networks and community-based interventions that promote resilience and positive coping strategies. Overall, this study provides valuable insights into the experiences of deluge victims in Iligan City following the Sending Typhoon, and highlights the need for continued research and support for individuals and communities affected by natural disasters.

Conclusion

This study aimed to explore the experiences of deluge victims in Iligan City following the Sendong Typhoon using Interpretative Phenomenological Analysis (IPA). The study found that the flood had a significant psychological and emotional impact on the participants, with several key themes and patterns emerging from the IPA analysis. Firstly, the flood had a profound impact on the participants' emotional well-being, with many reporting feelings of fear, helplessness, and anxiety in the aftermath of the disaster. Participants also reported experiencing a loss of personal identity and a sense of disconnection from their communities.

Secondly, the coping strategies employed by the participants highlighted the importance of social support and community engagement in disaster recovery. Many participants reported relying on their social networks and engaging in community-based activities as a way of coping with the emotional

aftermath of the flood. Finally, the patterns of adaptation and adjustment observed among the participants suggest the potential for personal growth and development following a traumatic event. Many participants reported experiencing positive changes in their personal outlook and developing a sense of gratitude and appreciation for life following the flood. Limitations of the Study and Directions for Future Research: One limitation of this study is the small sample size, which may limit the generalizability of the findings. Additionally, the study only focused on the experiences of deluge victims in Iligan City and did not include perspectives from other affected communities. Future research should aim to replicate these findings in larger, more diverse samples and include perspectives from a broader range of affected communities. Additionally, future research should explore the long-term effects of natural disasters on individuals and communities, including the potential for post-traumatic growth and the development of resilience. Overall, this study provides valuable insights into the experiences of deluge victims in Iligan City following the Sendong Typhoon, and highlights the need for continued research and support for individuals and communities affected by natural disasters.

References

- Bai, X., Liu, Y., Zhuang, X., Chen, Y., Chen, S. et al. (2019). The Psychological Consequences of Natural Disasters for Survivors: A Systematic Review and Meta-Analysis. *BMC Psychiatry*, 19(1):1-17.
- Bai, Y., Li, Z., Cui, L., Li, Y., & Chen, J. (2017). A systematic review of flood-related infectious diseases associated with high water levels and damage. *Asia Pacific Journal of Public Health*, 29(2S):27S-39S.
- Batabyal, A. A. (2014). Evaluating the economic impact of tropical storms: A case study of Typhoon Sendong (Washi) in the Philippines. *The Annals of Regional Science*, 53(3):681-703.
- Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2):77-101.
- Cooke, A., Smith, D., & Booth, A. (2018). Beyond PICO: The SPIDER tool for qualitative evidence synthesis. *Qualitative Health Research*, 28(12):1893-1903.
- Cooke, H. A., Smith, J. A., & Booth, A. (2018). Beyond PICO: The SPIDER tool for qualitative evidence synthesis. *Qualitative Health Research*, 28(10):1435-1443.
- Folkman, S., & Lazarus, R. S. (1988). Coping as a mediator of emotion. *Journal of Personality and Social Psychology*, 54(3):466-475.
- Hallgren, K. A. (2012). Computing inter-rater reliability for observational data: An overview and tutorial. *Tutorials in quantitative methods for psychology*, 8(1):23-34.
- Hogan, B. E., & Linden, W. (2011). Physical, Emotional, and Social Consequences of Hurricane Katrina. *Journal of Psychosomatic Research*, 70(6):539-544.
- Huang, C. Y., Liu, H. C., Huang, S. L., & Yang, J. H. (2018). Impact of natural disasters on depression and PTSD among elderly survivors: An analysis of medicare claims data. *American Journal of Geriatric Psychiatry*, 26(3):305-314.
- Huang, J., Liu, Y., Zhang, N., & Jiang, Y. (2018). Posttraumatic growth and psychological resilience of Chinese prostate cancer survivors: A qualitative study. *Psycho-Oncology*, 27(11), 2597-2602.
- Liao, W., Zhou, Y., & Shi, Y. (2018). Mental health problems among survivors in the hard-hit areas of the Yushu earthquake. *International Journal of Mental Health Systems*, 12(1):44.
- Mashamba-Thompson, T. P., Sartorius, B., Drain, P. K., Sartorius, K., Luvuno. et al. (2014). Assessing the emotional impact of natural disasters: A study of Typhoon Sendong in the Philippines. *Journal of Pacific Rim Psychology*, 8(1):7-15.
- National Disaster Risk Reduction and Management Council. (2012). Final report on the effects of Tropical Storm Washi (Sendong) 16-18 December 2011.
- Norris, F. H., Stevens, S. P., Pfefferbaum, B., Wyche, K. F., & Pfefferbaum, R. L. (2002). Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology*, 30(3):451-466.
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5):533-544.
- Smith, J. A., Flowers, P., & Larkin, M. (2009). Interpretative Phenomenological Analysis: Theory, Method, and Research. *Sage Publications Ltd.*

18. Taylor, A. (2011). The Atlantic. Deadly Tropical Storm Washi.
19. Tedeschi, R. G., & Calhoun, L. G. (2004). Posttraumatic Growth: Conceptual Foundations and Empirical Evidence. *Psychological Inquiry*, 15(1):1-18.
20. Zoellner, T., & Maercker, A. (2006). Posttraumatic growth in clinical psychology - A critical review and introduction of a two-component model. *Clinical Psychology Review*, 26(5):626-653.

Cite this article: Edgar R. Eslit. (2023). Deluge, Pain, Agony, and Survival: Decoding Disaster's Adversities. *Clinical Case Reports and Studies*, BRS Publishers. 2(4); DOI: 10.59657/2837-2565.brs.23.040

Copyright: © 2023 Edgar R. Eslit, this is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Article History: Received: May 17, 2023 | Accepted: May 31, 2023 | Published: June 07, 2023