

Framing of Flood News in The Borneo Post, a Regional Malaysian Newspaper

Ning Li and Su-Hie Ting¹, Universiti Malaysia Sarawak

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Abstract

In recent years, climate change and unpredictable weather are causing more frequent severe floods in various areas, but little is understood about how regional newspapers shape public reactions to and preparations for natural disasters. This study investigated the framing of flood news by The Borneo Post, an English-language newspaper circulated in Sarawak, Malaysia. The specific aspects examined were: (a) frequency of thematic and episodic framing of flood events and (b) frame dimensions used in articles. Altogether 76 articles (25,676 words) on floods published by The Borneo Post from 1 January to 31 December 2023 were analysed. All articles were in the episodic frame. The main frame dimension was attribution of responsibility (79%), where authorities act as disseminators and narrators of disaster facts. However, the absence of thematic framing of floods lowers attribution of responsibility to authorities to plan long-term solutions to flooding. The economic consequences frame ranked second (14.5%), emphasising losses suffered. Little attention was given to human interest (3.9%) or conflict (1.3%). There was no morality frame, and 1.3% of articles were fact-filled and did not have an obvious frame dimension. The findings suggest that fact-focused flood reporting lacking the humanity element may not move readers to action.

Keywords: *Newspaper, framing, flood, episodic, thematic, climate change*

Introduction

Climate change plays a role in the increased frequency of floods. "Climate change may cause river floods to become larger or more frequent than they used to be in some places, yet become smaller and less frequent in other places" (United States Environmental Protection Agency, 2023, para. 6). As a result of increasingly frequent floods, the negative impacts on people, property, and the environment are multiplied. For example, floods cause erosion, and the massive movement of rocks and soil may lead to landslides. Either the flood itself or the resulting landslides cause deaths, injuries, and homelessness every year; floods also damage buildings, roads, and other infrastructure (State of Alaska, 2024).

In the past few years, floods may be the most devastating natural disaster experienced in Malaysia. On 28 January 2022, floods devastated much of Malaysia, causing an estimated Malaysian Ringgit (RM) 6.1 billion (US\$ 1.46 billion) in overall losses ("Malaysia floods," 2022). Throughout Malaysia, including Sabah and Sarawak, there are 189 river basins (89 of these river basins are in peninsula Malaysia, 78 in Sabah, and 22 in Sarawak), with the main channels flowing directly into the South China Sea, and 85 of them are prone to recurrent flooding. The estimated area vulnerable to flood disasters is approximately 29,800 km², or 9% of the total area in Malaysia; almost 4.82 million people, or 22% of the Malaysian population, may be affected (Abdullahi, 2014). Flood risk management in Malaysia has been a top-down government responsibility, and Malaysians are heavily reliant on a top-down government-controlled ethnocentric approach to flood management (Chong & Kamarudin, 2018). Awareness among local communities is very important for flood mitigation initiatives to have the desired impact in reducing the risk of flooding in such areas. In this context, it is the media that creates public awareness of initiatives and prompts those living in flood-prone areas to reduce water damage and thus the devastating impact of flooding.

Reporting of flooding constitutes environmental journalism (Santana et al., 2019). Studies on environmental journalism show different emphases in flood news in different countries. News reports

¹ Corresponding author's email address: shting@unimas.my, suhieting@gmail.com

of the Florence flood in Italy were reported in negative tones in five newspapers (two international, three Italian), and highlighted the catastrophe experienced by flood victims (Roney et al., 2022). In Ireland, Devitt and O'Neill's (2017) analysis of three newspapers showed a focus on the emotional impact of the flood on people, and citizens' participation in risk management. On the other hand, flood coverage in India did not emphasise human interest stories. Giri and Vats (2018) found that four newspapers published in India (The Times of India, Hindustan Times, The Hindu, The Telegraph) highlighted the response of authorities to the Uttarakhand flood, and did not draw attention to community preparedness.

In Malaysia, there are few academic publications about flood reporting in newspapers, and two previous studies both focused on mainstream national newspapers. Ihediwa and Ishak (2015) compared how two English dailies framed floods: The New Straits Times focused on government responses to the flood, while The Star highlighted individual losses suffered. Ahmad and Lateh's (2016) framing study of two mainstream newspapers (Utusan Malaysia, The Star) was not directly about floods, but how flooding resulting from a landslide in Taman Puncak Setiawangsa, Kuala Lumpur, in December 2012. Both newspapers relied on government sources, and Utusan Malaysia tended to highlight government measures, while The Star was inclined towards portraying elements of humanity by including victims as sources (Ahmad & Lateh, 2016). Ahmad et al. (2015) adopted a different line of investigation by examining the role of social media in flood disasters, and their findings showed that self-efficacy, social support, and social recognition influenced the knowledge sharing intentions of social media users.

Thus far, framing studies on the newspaper coverage of floods in national newspapers in Malaysia have shown a focus on government responses and government sources of information in New Straits Times and Utusan Malaysia, but The Star was different as it focused on victims' experiences and human interest. However, little is known about the coverage of floods in regional newspapers, as there has been no research on them. It is crucial to determine the characteristics of flood news in newspapers "closer to home," especially in terms of the salient dimensions of flood incident reporting. This is because earlier studies have found different perspectives between national and regional newspapers for topics such as selection of the site for the international science-business belt (Lee, 2011), and communication of science (Baruah, 2019). The present study used framing priorities, in terms of episodic and thematic reporting, as well as frame dimensions for flood news, to provide insights into how regional newspapers shape the public's reactions and preparations for natural disasters.

In this study the framing of flood news by The Borneo Post was investigated, an English mainstream newspaper in Sarawak Malaysia. The objectives of the study were:

1. To identify the frequency of thematic and episodic framing of flood events.
2. To examine the frame dimensions used for framing flood events.

Literature Review

Flooding is one of the most common types of natural disaster, and the results often are fatal. The Central China flood of 1931, for example, was one of the worst flooding events in recorded history. The Yangtze and Huai Rivers broke their banks, killing as many as several million people. The aftermath was devastating as deadly waterborne diseases like dysentery and cholera spread quickly, and those who survived faced the threat of starvation (National Geographic, 2024).

People and governments suffer economic losses due to floods. Flood damages public assets and infrastructure, individual homes and vehicles, business, manufacturing and agricultural sectors. Flooding is among the most prevalent of natural hazards, with particularly disastrous impacts in low-income countries, bearing in mind that low- and middle-income countries are home to 89% of the world's flood-exposed people (Rentschler et al., 2022).

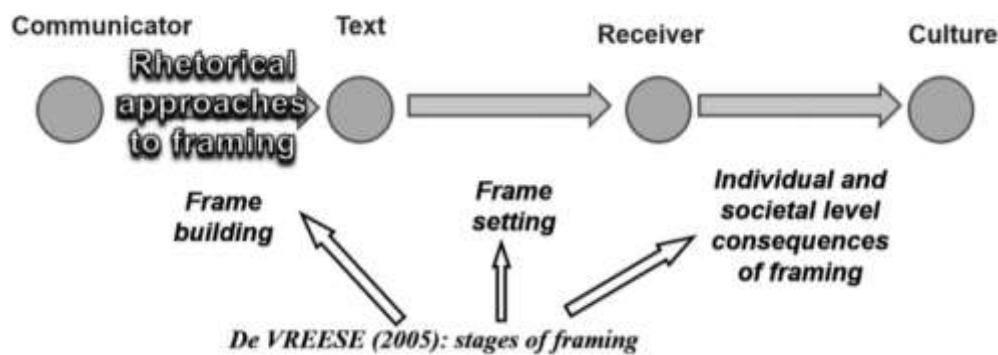
Inadequate public awareness among communities is one of the main challenges that local authorities have to face in implementing flood disaster management (Yazid et al., 2022). Although flood disasters are natural disasters that often occur in Malaysia, some individuals are still not aware of the hazards posed by flooding and neglect essential safety precautions (Rosmadi et al., 2023).

People in affected areas lack awareness of Standard Operating Procedures (SOP) during a flood disaster (Yazid et al., 2022). For example, Rosmadi, et al. (2023) pointed out that some individuals refused to evacuate despite receiving orders, while others treated the flood as a festive occasion. Children play in the flood water, and some drown; this is caused by parents and local communities who underestimate the danger of flooding in their home areas (Perera et al., 2020). This dismissive attitude towards flood disasters poses significant dangers, threatening lives and property. Every time a disaster occurs, the Malaysian government declares a state of emergency in the affected states and sends out teams of rescuers and aid workers to assist in the relief effort (Shafiai & Khalid, 2016). However, public awareness is needed for the community to be prepared for the next flood, and little is known about the messages sent by newspapers to the public (as explained in the Introduction section).

Theoretical Framework of Study

The theoretical framework of the study is Entman's (1993) framing theory, which delineates four locations of communication where frames are manifest: The communicator, the text, the receiver, and the culture (Figure 1). Framing is defined as the process of selecting certain elements of a perceived reality and emphasising them in a communicative text to promote a specific problem definition, causal interpretation, moral evaluation, and/or recommended course of action (Entman, 1993).

Figure 1 *Framing Theory Incorporating Entman (1993) and de Vreese (2005)*



Source. Carlan & Ciocea, (2016)

When communicators construct texts, this is referred to as frame building by de Vreese (2005). Frame building occurs within newsrooms, where journalists consider editorial policies, news values, and social movements. Journalists utilise both issue-specific and generic frames to shape news narratives, which Iyengar (1990) categorised as episodic and thematic frames, respectively.

The subsequent phase, frame setting, involves the interplay of readers' pre-existing knowledge and predispositions with the frames presented in the news (de Vreese, 2005). The final stage, framing effects, pertains to the impacts of these frames at both the individual and societal levels. This study focuses on the examination of frames within news articles.

Episodic and Thematic Frames

Iyengar (1990) introduced a framework for analysing frames, distinguishing between episodic and thematic frames. Episodic framing concentrates on individual events and personal narratives, often eliciting more intense emotional reactions from readers compared to thematic framing (Gross, 2008). Episodic framing has been documented in reports on child abuse in Bangladesh (Jahan & Razib, 2023) and floods in India (Giri & Vats, 2018). However, a limitation of episodic framing is that readers may not be able to link events to broader historical or contextual backgrounds. Episodic framing in crisis reporting also tends to reduce the attribution of political responsibility (Boukes, 2022). In contrast, thematic framing situates events within a broader context or trend (Iyengar, 1994), providing readers with a macro-level perspective.

Frame Dimensions

In their framing analysis, Smetko and Valkenburg (2000) employed a deductive methodology to evaluate the prevalence of frames within news content. Their analytical framework encompassed five distinct dimensions of news frames:

- Conflict, which highlights disputes and disagreements to engage the audience,
- Human interest, which focuses on the human or emotional aspects of events,
- Economic consequences, which shows the financial impact of events,
- Morality, which situates events within religious and ethical contexts, and
- Responsibility, assigning accountability to governments, individuals, or groups for specific issues.

Smetko and Valkenburg's (2000) framework was used by Ihediwa and Ishak (2015) in their analysis of crisis news in Malaysian and Nigerian newspapers between 2007 and 2009. A total of 2,834 news stories on political, environmental, health and economic crises were collected from four newspapers, comprised of 912 articles from Malaysian newspapers (New Straits Times and The Star), and 1,922 articles from Nigerian newspapers (The Sun and The Nation). All the four newspapers reported the crisis news mostly using the conflict frame (New Straits Time 38.1%; The Star 47.8%; The Sun 34%; The Nation, 28.6%). It is interesting that the responsibility frame ranked second for New Straits Time (28.6%) and The Sun (34%), but the human interest frame ranked second for The Star (26.1%) and The Nation (22.8%). The other frames accounted for 20% or less of the frames in the crisis articles in each of the newspapers. The inclination of The Star towards reporting personal stories was found in Ahmad and Lateh's (2016) framing analysis of landslide news in Malaysia.

Method of Study

The descriptive study involved framing analysis of articles on floods published in The Borneo Post. The Borneo Post is selected because it is the largest and widely circulated English-language daily newspaper in East Malaysia, and also the alternately circulated newspaper in Brunei (The Borneo Post, n.d). The Borneo Post currently has a daily print subscription of about 80,000 in Sarawak and Sabah, and it has about 300,000 followers across its social media platforms (Boon, 2023).

The Borneo Post was the first English newspaper in East Malaysia to use photo-composition for type-setting, and printing was done in offset as against the old-fashioned letterpress (Boon, 2023). The Borneo Post became part of a group of newspapers, along with See Hua Daily News and Sin Hua Evening News, as well as weekly tabloids the See Hua Weekly and Your Weekender (Boon, 2023). Although The Borneo Post has its headquarters in Kuching, the company originated in Sibul. The expansion to Kuching on 28 October 1979, and to Miri and Sabah in 1986, made The Borneo Post the most widely distributed English newspaper in Borneo (Boon, 2023).

To collect news articles on flood in The Borneo Post, the search term "flood" was used in the online portal of this media (<https://www.theborneopost.com/>). The search identified 76 news articles on flood from 1 January to 31 December 2023. The selection criteria were: (a) straight news articles, and no editorials and letters to the editor, and (b) news articles with text, and not photos with captions only. Articles in languages other than English were excluded. The total word count was 25,676 words. The year-long data collection period was chosen to cover the whole cycle of floods in a year.

The unit of analysis was the news article for identification of episodic and thematic framing, and frame dimensions. No thematically framed article on flood was found. Episodic framing was the norm (refer to Appendix 1 for an example). For the analysis of thematic and episodic framing, a dominant frame was identified for each news article. An article is considered episodic if it accentuates individual events and personal narratives (Iyengar, 1994), although it may contain a minimal amount of background information such as history, analysis of facts, and expert opinions. An article was considered thematic if it promoted a macro perspective by situating issues within a broader societal context (Iyengar, 1994).

The frame dimensions were analysed based on Smetko and Valkenburg's (2000) definitions given in the Theoretical Framework of the Study section. To ensure reliability in both analyses, the first

researcher coded the news articles, and the codes were checked by the second researcher. Differences in coding were discussed, and resolved by referring to the definitions. A point of difference was the human interest frame, as the first researcher was not able to distinguish between articles that merely mentioned flood victims and those that highlighted their personal experiences and stories.

Results

A total of 76 news articles on floods reported in The Borneo Post were analysed for thematic and episodic framing, and frame dimensions. All of the flood news in The Borneo Post were in the episodic frame (100%). The absence of thematic framing of flood framing meant that readers were unable to connect the latest flood incident to past floods. People have short-term memories, and when newspaper articles do not provide background information on previous floods, readers cannot develop a macro perspective on flooding. The absence of thematic framing of flooding also lowers attribution of responsibility to authorities to find long-term solutions to flooding, as opposed to short-term solutions such as evacuation to higher ground and provision of shelter.

Episodic articles revealed details of the work of flood rescuers, consequences of floods, government calls and actions. The government presence in the handling of flood disasters was particularly strong. For example, The Borneo Post article dated 28 December 2023 read “Anwar arrives in Kelantan to assess flood situation.” This article was written from the first-person perspective of Prime Minister Anwar Ibrahim. It briefly described his visits to assess the flood situation, but the news article was careful to avoid promises of response, because he had not visited the site of the flooding at the time of the news report. The care in reporting was reflected by the following: “Anwar is scheduled to visit the Lubok Jong Bridge and two temporary relief centres at Sekolah Kebangsaan Sri Kiambang in Kampung Repek and Sekolah Menengah Kebangsaan (A) Lati in Kampung Banggol Manok, Pasir Mas” and “In his posting on Facebook yesterday, Anwar said he would visit Kelantan today to personally check on the flood situation currently affecting the state.” Anwar also shared the information following his meeting with the Prime Minister of Thailand, Srettha Thavasin, in Phuket yesterday. He said, “We also discussed the current flood situation, and Insya-Allah, I will go to Kelantan tomorrow to personally assess the increasingly worrying situation there. May Allah lift this disaster soon.” (“Anwar arrives in Kelantan,” 2023).

Anwar Ibrahim is the prime minister, and yet he made time to visit a flood disaster area in Kelantan. The ministerial presence shows the importance the government places on solving the flood problem for the people; the news report had Anwar Ibrahim’s travelling schedule. There was also a religious element when Anwar Ibrahim was quoted as saying “May Allah lift this disaster soon.” As Islam is the official religion of Malaysia, it was natural for the prime minister to make statements on weather and flood as events beyond human control, and under the control of God.

Dominant Frame Dimensions

Table 1 shows the frequency and percentage of frame dimensions in The Borneo Post. The main frame dimension is the responsibility frame (79%), followed by economic consequences frame (14.5%), human interest frame (3.9%), conflict frame (1.3%), not classifiable (1.3%), and no morality frame.

Table 1 *Frequency and Percentage of Frame Dimensions in The Borneo Post (N = 76 articles)*

Frame Dimensions	Frequency	Percentage (%)
Attributions of Responsibility	60	79.0
Economic Consequences	11	14.5
Human Interest	3	3.9
Conflict Frame	1	1.3
Not Classifiable	1	1.3
Morality	0	0
Total	76	100

One article could not be classified into any of the five frame dimensions because it was a factual update on the flood situation in Johor, Sabah, and Pahang, the number of evacuees in temporary relief centers, and the water levels ("Floods," 2023).

Attributions of Responsibility

In most responsibility frameworks, authorities typically play key roles in flood relief, evacuation, and resettlement efforts. In The Borneo Post articles on floods, authorities sometimes acted as disseminators and narrators of disaster facts. Within these responsibility frameworks, authorities were occasionally framed negatively. For example, a 25 January article headlined "30 houses in Kg Bako hit by flash floods" included facts about the flash flood in Kampung Bako to answer the Wh questions (what, where, who, when), and an announcement by the Fire and Rescue Department that evacuation orders had not been issued.

Around 30 houses, including a kindergarten, in Kampung Bako were inundated by flash floods as of 9.30 pm today. The Fire and Rescue Department (Bomba) in a statement said so far, no order was issued to villagers to vacate their homes and move to a flood relief centre.

"The sea tide has started to recede – however, a large volume of water is still flowing from the nearby mountainside due to heavy rain in the area" it said.

At the scene today were rescuers from the Tabuan Jaya fire station and Bomba volunteers from Bako Indah.

In a separate incident, flash floods also hit villagers in Kampung Telaga Air and affected three houses.

The three houses are home to 18 adults and seven children, said Bomba.

"No orders were given to those affected to relocate to a flood relief centre," it said.

In Lundu, a video also circulated via WhatsApp showing water levels rising to almost knee-level. Meanwhile, Bomba is monitoring other areas which are seeing a trend of rising water levels such as Kampung Sungai Laru, Jalan Setia Raja, Kampung Buntal and areas in Santubong. ("30 houses in Kg Bako hit," 2023)

It was not clear from the news article whether the Fire and Rescue Department is responsible for issuing evacuation orders. It may look as if the image of the government agency was negative. However, the next part of the news article informed readers that the sea tide was receding, and that the fire department had sent rescuers and volunteers to the site. The news article went on to report another flash flood in Kampung Telaga Air, with similar circumstances. The article ended on a positive note by informing readers that the Fire and Rescue Department was monitoring the rise in water levels in other villages, thereby showing government readiness and response to natural disasters.

Another example of the responsibility dimension was the 3 February 2023 article headlined "Dr Sim: S'wak govt to learn flood management from Netherlands." As The Borneo Post is a regional newspaper circulated in Sarawak, this explained the highlight given to a local minister. Dr Sim is a deputy chief minister of Sarawak, and he was quoted as saying that the Sarawak government plans to learn flood management techniques from the Netherlands, and would allocate funds for the redevelopment and infrastructure improvement of Sibul, which is located in the low-lying area of the Rejang River Basin. This article highlighted government responsibility and initiative in learning about flood mitigation measures from other countries.

Economic Consequences

Economic consequences highlighted in The Borneo Post included the funds provided by the government to support post-flood reconstruction efforts, including financial support for flood prevention systems and plans, as well as economic assistance to the people affected by a disaster. For example, the headline of an article was "Six flood mitigation projects re-tender process won't take long, says Ahmad Zahid" ("Six flood mitigation projects," 2023). In this article, Deputy Prime Minister Ahmad Zahid Hamidi assured the public that there would be a quick re-tendering for six flood mitigation projects. Tender is the financial process by which the government selects project awardees, and the tendering process takes time because meetings need to be held at different levels to reach a

decision. This was why the Deputy Prime Minister pacified the public by assuring them that the process would not take long.

Human Interest

Some articles narrated personal stories and used emotive language. An example was the 25 January 2023 article headlined “Floods badly hit northern Sabah.” The last part of the article included an SOS message sent by a Facebook user Manuel Manual (bolded). This personalised the dire conditions they were in (“We need help. Our area is in danger”), in contrast to reports of rain, inaccessibility of roads, and closure of schools, which were reported as if there were no people involved. A more extensive account is given below (“Floods badly hit northern Sabah,” 2023).

A secondary school in Pitas allowed its students and teachers affected by the floods following heavy rain on Tuesday, to be absent on Wednesday.

Principal of SMK Pitas II, Johori Botohong made the announcement on the school’s Facebook page on January 24 night after a number of roads connecting Pitas, Kota Marudu, Kudat and the city centre are inaccessible to vehicles.

“There has been no proposal to close the school since our school area has not been flooded. Safety first.” He said.

“Please prioritise safety in whatever we do when facing this flood. Safety first,” he said.

A Facebook user, Manuel Manual who claims is from Kampung Dandun in Bengkoka constituency said his area is currently in danger as the Sungai Bengkoka water has overflowed without any flood siren warning.

“We need help. Our area is in danger. Our phone connection is also bad,” he said in his post around 8am.

The news article also used information from other flood victims who shared their disaster experiences and responses, highlighting the human side of the disaster and the challenges faced by communities due to floods. The human interest stories can connect with readers on a personal and emotional level, and provide a different perspective from the government-centric narratives. However, this journalistic strategy was not used much in The Borneo Post flood articles (less than 4% of the 76 articles analysed).

Conflict Frame

There was only one article in The Borneo Post with a conflict frame—that is, the 4 January 2023 article headlined “Bengkoka flood victims disappointed over aid” (2023). This article quoted flood victims saying that some households had not received the RM 2,500 cash aid. The article also highlighted discrepancies between the aid received by flood victims in the peninsula (amounting to RM 10,000 per household) versus those in Sabah. In the interior regions like Bengkoka, aid delivery was slower and less comprehensive. The victims felt neglected compared to flood victims in the peninsula, where faster and more substantial aid was provided. The victims were frustrated and hoped for more attention from the government as it had been almost a year. The conflict between the affected community and the authorities was still on-going at the time of this news report. Part of the news report is given below:

Flood victims here have expressed disappointment over the unfair treatment by the government in channeling financial aid. Their spokesperson Omar Jalun said in a statement the worst flood in Bengkoka in February 2022 had affected thousands of victims. However, only about 50 households have received one-off RM 2,500 cash aid, while the rest are still waiting.

“One hundred and seventy-one household heads in Sinukab temporary flood relief centres were told that they would be getting financial aid. However, only about 50 have received the aid. It is frustrating because the government does not seem to make any effort to help those badly affected by the flood,” he said.

One of the victims, Seina Suaib said flood victims in the peninsular often received fast assistance and [were] given proper attention. In Sabah, she said, especially those in the interior are normally left behind.

“Although one-off cash aid of RM 2,500 was given to some of the victims, it was not given to all.

In the peninsular, we saw on TV flood victims were given RM 10,000 for house repairs, but for us here, we did not get anything," she said.

Seina said she is hoping they will be still getting attention from the government although the flood already happened almost a year ago.

"Our houses were badly affected and our furniture, electrical goods and daily essentials were damaged during the flood. We are still waiting for the government to ease our burden," she added. ("Bengkoka flood victims," 2023)

Discussion and Conclusion

In the examination of news frames on floods employed by The Borneo Post, a regional newspaper published in English, two main findings are worthy of discussion.

First, all news frames in flood news were episodic frames. This is rather extreme, when compared to Giri and Vats' (2018) study on four Indian newspapers, where 70% of newspaper articles on the Uttarakhand flood were episodic frames. In crisis news, episodic frames bring breaking news on the unfolding events and creates a sense of urgency. In the case of floods, which occur several times a year in certain places in Malaysia, the response of readers depends on whether their area is flood-prone. If their area has been safe from flood, they probably read the episodic articles with a detachment—places affected, flood rescuers at work, statements by government officials, visits and assessments by government officials, along with other rescue and flood mitigation action. The prevalence of episodic reporting in all articles on flooding may lead readers to believe that the only methods to alleviate flooding are immediate relief and short-term measures, thereby diminishing their comprehensive understanding of the overall situation and overlooking long-term solutions, environmental issues, and possible policy changes on flood response.

Second, attribution of the responsibility frame is the most salient (79%) in flood news articles published in The Borneo Post, compared to economic consequences, human interest, and conflict frames. This salience is not surprising, as An and Gower (2009) found that 95.1% of newspaper articles carrying news on business crises had at least one item of responsibility frame attribution. The newspapers analysed were the New York Times, the Washington Post, and USA Today. In their study, the responsibility frame tended to be used to attribute blame to parties involved or to question the capabilities of the parties involved. Whether it was a regional newspaper like The Borneo Post or newspapers published in the United States, and whether it was flood crises or business crises, the responsibility frame was dominant because there were parties involved.

However, there were other findings where the conflict frame predominated like in Ihediwa and Ishak's (2015) analysis of flood news in two Malaysian newspapers and two Nigerian newspapers. The responsibility frame was second in New Straits Time (Malaysia) and The Sun (Nigeria), but fourth in The Star (Malaysia) and The Nation (Nigeria). Since a majority of the crisis articles in Ihediwa and Ishak's (2015) study were on political, health and economic crises, it was natural for the news articles to highlight these conflicts. In their corpus, environmental crisis articles only accounted for 17.98% of their corpus, but they did not separate the reporting of the frame dimensions according to type of crises, so it was not known whether the responsibility frame dominated in the news articles on environmental crises.

An and Gower's (2009) results showed that it is important to analyse the responsibility frame in terms of the level of responsibility. Their findings showed that accidental crisis news articles (52.9%) focused on the organisational level of responsibility, whereas preventable crisis news articles were more likely to use the individual level of responsibility (47.1%). The Borneo Post flood articles tended to focus on the organisational level of responsibility, and this is because floods are not preventable crises. In The Borneo Post articles, authorities were portrayed as playing positive roles in flood relief, evacuation, and resettlement efforts, and also sometimes acted as disseminators and narrators of disaster facts. Individual responsibility was not given much attention, which may lead readers to feel that they are not accountable and blame the government for flood problems. This may explain why some members of the public have a relaxed attitude towards flooding, and let their children play in the rising flood waters, while others refuse to evacuate and leave their homes (Rosmadi et al., 2023).

Deaths due to flooding are actually preventable and avoidable if the public were more informed about Standard Operating Procedures during a flood disaster (Rosmadi et al., 2023; Yazid et al., 2022) and had a more cautious attitude towards the danger of floods (Perera et al., 2020). From our analysis of flood news in The Borneo Post, it is apparent that the regional newspaper has not taken it upon itself to educate the public about their individual responsibility for flood preparedness. For example, some ways for the public in flood-prone areas to be prepared are buying insurance, and ensuring that any wiring is above the predicted flood level to lower the danger of getting electric shocks.

In terms of environmental journalism, the flood coverage in The Borneo Post would benefit from some thematic articles to educate the public about the history and the science of floods, so that they would better understand the consequences of climate change and other environmental consequences resulting from deforestation and construction. Increasing the content on economic consequences and human interest frames would also help people to realise the financial losses incurred when families must buy or repair vehicles and houses, and the trauma of not knowing when their houses may be inundated with water again. As an example, newspapers in Ireland tended to focus on the emotional impact of the flood on people, and how citizens were active in flood risk management (Devitt & O'Neill, 2017). In Malaysia, The Star, a national newspaper, led the way in highlighting economic consequences and personal stories in crisis reporting (Ihediwa & Ishak, 2015) to make the public more aware of their responsibility to be prepared. The Borneo Post is like the New Straits Time (Ihediwa & Ishak, 2015) and Utusan Malaysia (Ahmad & Lateh, 2016), which focus on government responses to floods and landslides, respectively. As a regional newspaper, The Borneo Post has an advantage over national newspapers, as it can afford to zoom in on flood preparedness in flood-prone areas since the geographical scope of coverage is smaller.

The implications drawn from the findings are that journalists may consider writing more thematic articles, and adding a human interest element to the episodic articles to attract readers' attention. As for readers, the study suggests that it is worth giving feedback to newspapers on articles that interest them or angles of reporting they would like to see so that journalists may modify their reporting practices and cater to reader preferences. Newspapers often have social media accounts, and some newspapers allow readers to comment on a particular article. This is one avenue for readers to give their input on news reporting.

Reader input gives an idea of preferred news slants, and these messages constitute a form of data that other media researchers may analyse to understand reader preferences. In flood framing, reader responses need to be studied to identify which newspapers or sources they refer to for flood news, and what triggers them to take preemptive measures to minimise flood risk. Such insights would be useful for environmental journalism and disaster reporting.

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Appendix 1: Episodic Article in The Borneo Post on Flood

The sole episodic article in The Borneo Post, during the survey period, was recorded by David (2024). The details are as follows:

Heavy afternoon downpour has caused flash floods in several parts of the city here today including the venue of the 78th birthday celebration of the Yang di-Pertua Negeri Sarawak Tun Pehin Sri Dr Wan Junaidi Tuanku Jaafar at Padang Merdeka, scheduled for tomorrow.

This led to tense moments as motorists navigated through the flooded sections of the road.

Among other areas reported to be hit by the flash flood is along Jalan Tun Abang Haji Openg near the Sarawak General Hospital junction.