

Study on the Effect of International Disaster News Reporting on Public Environmental Protection Behavior

Zijie Wei^{1,a,*}

¹*School of Journalism and Communication, Hebei Normal University, Yuxiang Street, Shijiazhuang City, Hebei Province, China*

a. supercrayonn@outlook.com

**corresponding author*

Abstract: This study zeroes in on the impact of international disaster coverage on public environmental behaviors, employing the S-O-R (Stimulus-Organism-Response) theoretical framework to chronologically analyze how global in-depth disaster reporting at various time periods triggers shifts in public environmental awareness and actions. Utilizing a mixed-methods approach that combines qualitative analysis with quantitative data, it compiles cases of major environmental disasters worldwide over nearly two decades, including wildfires, marine pollution, and extreme weather events, meticulously examining how media information acts as external stimuli, processed through cognitive mechanisms, leading to emotional responses and subsequent behavioral intentions. The findings reveal that high-frequency, high-quality disaster event coverage significantly heightens public recognition of the urgency for environmental protection, particularly during the initial stages post-event. Immediate and comprehensive disclosure can rapidly capture broad attention, activating feelings of empathy and responsibility, thereby catalyzing pro-environmental behaviors such as energy conservation, waste sorting, and participation in public welfare activities. However, without sustained follow-up reports and positive reinforcement, the public's focus tends to wane over time, diminishing environmental motivation and hardening behavior patterns. The research also observes the pivotal role played by social media platforms in amplifying the influence of disaster reporting, facilitating collective memory formation and consensus building through viral dissemination; yet, this comes with challenges like information overload and exaggerated emotional appeal, potentially leading to audience fatigue and reduced intervention efficacy.

Keywords: Disaster news, Internationalization, Environmental protection.

1. Introduction

In globalization, cross-border environmental disasters have increasingly become the focus of international attention, and these events often enter the public eye through extensive coverage in the international media. While threatening human safety and health, they have profoundly impacted the global ecosystem. In this context, the role of the media is not only the disseminator of information but also the builder of social issues. Especially in environmental protection, news reports can arouse people's compassion and social responsibility by showing the seriousness and urgency of disasters, thus inspiring individuals or groups to take practical actions to improve the environmental situation.

Especially recently, with the development of new media technology, significant changes have occurred in the way and speed of the transmission of disaster information. International disaster news reports have gradually become an important bridge connecting audiences around the world with the scene of the event. But at the same time, although disaster news reports play an essential role in raising public environmental awareness, their actual effect on promoting specific environmental protection behaviors still need further exploration. Existing research shows that while media coverage can generate high public attention in the short term, such attention does not always translate into lasting environmental behavior changes. In addition, different types of disaster coverage, such as emotionally oriented reporting versus fact-oriented reporting, have different mechanisms of influence on audience psychology and behavior. Therefore, an in-depth understanding of how international disaster news coverage can effectively promote environmental behavior is significant for guiding media practices and optimizing public policies. Based on the axis of time, this study further explores the current research gap on the relationship between international disaster news reports and public environmental protection behaviors and explores effective reporting strategies by systematically analyzing the content characteristics of disaster news reports and their impact on audience attitudes and behaviors. On the one hand, it is expected to help the media practitioners design the reporting framework more scientifically and enhance the social effect of the report. On the other hand, it also provides a reference for government departments to take the power of media communication into account as much as possible when formulating environmental protection policies and promote citizens' participation in environmental protection.

Based on the insights, several recommendations are put forth: Firstly, media professionals should uphold principles of objectivity and fairness, avoiding sensationalism while prioritizing continuous coverage of post-disaster recovery efforts to maintain long-lasting public engagement. Secondly, governmental bodies and non-government organizations must collaborate more closely, leveraging social media channels for science communication and policy advocacy to construct a comprehensive network for environmental information dissemination. Lastly, promoting sustainable lifestyles among the general public is advocated, encouraging everyday actions toward cumulative impacts for greener planet stewardship. By intricately considering the interplay between media dissemination, public psychology, and behavioral reactions, this paper contributes theoretical grounding and empirical evidence to refine the societal implications of disaster reporting and advance the development of effective incentives for sustained public environmental conduct.

Through an exhaustive examination of the dynamic relationship among media portrayal, individual cognition, and behavioral outcomes, this study offers valuable perspectives and actionable strategies for enhancing disaster reporting's social utility and fostering resilient environmental practices among the populace.

2. Literature Review

A review of existing studies shows that early studies mainly focused on the impact of disaster reporting on public psychology (such as "Environmental psychological Changes after Earthquakes"). In contrast, recent studies have begun to focus on how reporting promotes specific environmental protection behaviors. According to the content of the existing literature, economic level and environmental knowledge are essential components, while the discussion from an international perspective is lacking. The following will be divided into examples and detailed demonstrations from this perspective by period.

Since 1990, with the accelerated development of globalization, transnational reports on environmental disasters have gradually increased. During the period from 1990 to 2005, for example, during the Gulf War in 1991, the Iraqi army deliberately damaged Kuwait's oil Wells while retreating, resulting in a large amount of crude oil flowing into the Persian Gulf, causing severe environmental

pollution. The incident was widely reported by the international media, demonstrating the damage of the oil spill to Marine life and triggering public reflection on the environmental consequences of the war around the world. Media coverage during this period, mainly through television and newspapers, detailed the ecological disaster caused by the oil spill, including scenes of dead seabirds and Marine life, and the difficulties of the clean-up. The visual images and detailed descriptions enhanced the public's awareness of environmental pollution and stimulated their thinking on preventing similar incidents from happening again. Although the reports at that time lacked specific guidance for action, they laid the public opinion foundation for the subsequent environmental protection movement. In the early period, when traditional media dominated, the communication power of news reports initially appeared. Compared with previous reports on disaster events, this reporting mechanism in the 1990s paid attention to the importance of timeliness in reporting opportunities. It made some provisions conducive to increasing the reporting timeliness. Sending fast news and reporting before foreign news outlets, etc. is a summary of the historical lessons that the emphasis on the timing of the report of "post-creation" has repeatedly led to the passive transformation of news from export to domestic sales and emphasizes the social effects that the report should pay attention to as a whole[1].

In the 2006-2012 period, reports of the molybdenum copper project in Shifang County, Sichuan Province, triggered strong protests from residents, eventually leading to the project's suspension. The same year, reports of a project in Qidong, Jiangsu province, to discharge sewage into the sea also drew public attention. The project was planned to discharge industrial wastewater into the sea, but after media reports, public opposition forced the government to reconsider the feasibility of the project. This shows the public's heightened sensitivity to environmental issues and willingness to take collective action to block projects that could cause severe environmental damage. Netizens, as the most active and influential subjects in online media, including so-called "citizen journalists" and "square commentators," are increasingly playing an important role, and the phenomenon of "grassroots" sets the agenda even before the events are known. At this time, the relevant media should pay close attention to the diverse agenda-setting subjects based on public opinion and positively interact with the agenda-setting content and the development of the process to produce positive results[2]. To a certain extent, this shows that positive, objective, and accurate media reports can stimulate public awareness of environmental protection, promote environmental behaviors and actions, and even promote changes in the agenda for social environmental protection.

Since 2013, bushfires in Australia have not only claimed human lives but also caused the death of hundreds of millions of animals and released a large amount of carbon dioxide. The devastating consequences of the disaster have gained worldwide attention, prompting many people to pay attention to climate change and its impact on natural ecosystems and inspiring more people to get involved in reducing their carbon footprint. Public opinion surveys since 1988 have shown that the public in the United States, Europe and Japan are increasingly aware of global warming and broadly support mitigation and adaptation policies worldwide. To date, however, few in-depth studies have been conducted on public perception of the risks of climate change. Public opinion can fundamentally compel or constrain political, economic, and social action to address a particular risk. For example, the public's perception of the dangers of climate change dramatically influences their attitudes towards environmental policies (such as international treaties, laws and regulations, taxes, subsidies, etc.) [3]. Have you heard of the environmental issue of global warming? Further research shows that the lack of a basic understanding of climate change has wide-ranging consequences, such as the lack of political pressure on local and national governments to act and the chronic weakness of individuals and groups in making decisions about urban and coastal development, the implementation of agricultural and food policies, and water management. Based on the original survey data with the same sample size from developed countries to poor countries, respondents in developed countries such as the United Kingdom and Japan had 96% awareness and understanding of international

disaster news. Respondents in relatively poor countries such as Pakistan and Indonesia had only 15% to 25% awareness of the same issue. And the overall data analysis shows a decreasing trend from developed to backward countries. Therefore, it is significant to enhance global public awareness through international disaster reports and shorten the cognitive gap in environmental protection awareness between developing countries, developed countries, and other countries as much as possible to promote global environmental development.

In addition, from the perspective of the content of disaster news reports, the ethical authenticity and objectivity of disaster news reports still need to be further discussed. In addition, the research on the analysis of the reporting mode of traditional Chinese media shows that no matter how different the service goals or the reporting themes are, Chinese media always put the principle of factual news reporting in the first place and gradually dilute the expression style [4] of political commentary and criticism, which gradually becomes the standardized development trend of disaster news reporting. Because the public with "emotion" as the link is unstable, the public may hold sympathy for the suffering events but may deny the communication role of the news media and get used to preconceived that the media is exciting for its interests[5]. This will hurt the environmental protection force generated by the news reports. At the same time, in the era of traditional media, different media symbols show the fundamental characteristics of alienation. Digital technology erases the heterogeneity among symbol systems and promotes the coupling trend among symbol systems. Omnipotent symbol systems act on multisensory channels to generate diverse perceptual experiences. The final formation of this differentiated experience has influenced the international influence of disaster reports and the research on the effect of environmental protection behavior[6]. At the same time, regarding the social values embodied in reports such as Southern Weekly, the media profession should not be regarded as a tool to convey information, while the core socialist values that media workers themselves need to adhere to should be ignored. When reporting disaster events, journalists should not only start with the attention or sensational effect but should uphold the concept of humanistic care and make a balance and choice between the temperature and depth of the report.[7] Under the new form of communication, news media should adhere to self-discipline and heteronormality, do an excellent job in gathering and editing, and cross-verify the source of information rather than blindly strive for speed at which they are chasing traffic.[8]

3. Discussion

The existing research results trigger further thinking of public environmental awareness by exploring the images of disaster news reports on social news environment and the social reality. Such thinking and concepts promote the formation of social environmental awareness and then influence the formulation and implementation of social environmental protection agenda, policies and measures. This paper begins with international disaster reports by exploring the images of people in different regions, event facts, and cultural backgrounds in international news reports to understand the differential formation of public environmental protection behaviors. It gives most of the discussion results that can promote the role. In the process of establishing a relationship between the two entities, the listener can quickly and thoroughly understand the disaster news.[9] In the current environment of "everything is media", the media can grasp the environmental information of the enterprise timelier and fully. As the medium or carrier of information dissemination, the media can also let all kinds of information flow freely and play an essential role in the bridge between the government, enterprises, and the public. At this stage, with increasing globalization, international news reports have become a bridge connecting countries closely. This paper, starting from the internationalization of disaster news reports, further demonstrates the impact of international disaster news reports on environmental awareness and behavior [10].

4. Conclusion

Through a study of international disaster news coverage between 2006 and 2012 and in subsequent years, we find that it enhances people's understanding of climate change, natural disasters, and their consequences and motivates individuals to take action. For example, events such as the bushfires in Australia and the Fukushima nuclear disaster in Japan spread through the media, attracting widespread global attention and prompting the public to reflect on the impact of their behavior on the environment and actively seek changes. At the same time, the research also revealed the limitations of the reporting, such as the short-term effect and the influence of cultural differences on the response. Unlike most previous studies that focused on regional perspectives, this article takes a global perspective to explore the impact of disaster reporting on environmental behavior from a global perspective, covering a more comprehensive range of regions and examples while objectively analyzing the causes, background, and multiple influencing factors that lead to environmental behavior. At the same time, the article also analyzes the various causal chains that disaster reporting of multiple categories, forms, and levels of emotional expression can have on the public's responses, with a longer period to provide a more comprehensive analysis.

However, the article also has several limitations. Firstly, the sample is limited, such as the influence of culture background and age differences may affect the universality of the study, and future research should consider further expanding the sample range to enhance the generalizability of the results. Secondly, the accuracy of causal relationships needs to be further improved, as the transformation of public environmental behavior is influenced by multiple factors, including personal values and social-cultural background, policy environment, etc., the interaction of these factors affects the study of causal relationships, and the variable moderation still needs to be more accurate. Therefore, future research should further explore how to effectively convey environmental messages through the media over the long term and develop more targeted strategies to promote sustainable environmental behavior change.

References

- [1] Liu Yiping. *On the mechanism of Disaster Reporting in China in 1990s* [J]. *Journalism University*, 2001, (01): 45-47. It has a series of promoting effects on public behavior.
- [2] Wei Sun, Xiaolin Zhang and Xiangshu Wu. *Role of media in public emergency and network public opinion guide* [J]. *Journal of southeast academic*, 2014, (6) : 264-268. The DOI: 10.13658/j.carol carroll nki SAR. 2014.06.036.
- [3] Leisrowitz A, Xiong Yi-xue. *Models, trends and Limitations of research on public perception of international climate change* [J]. *Dongyue review*, 2013 (10) : 24-38. DOI: 10.15981/j.carol carroll nki dongyueluncong. 2013.10.019.
- [4] Wang Haiyan, Colin Sparks, Huang Yu, et al. *Chinese traditional media coverage pattern analysis* [J]. *Journal of the international press*, 2017, 33 (6) 6:105-123. The DOI: 10.13495/j.carol carroll nki CJJC. 2017.06.006.
- [5] Shi Zhe. *Diary of the Dead: Construction and Ethical Analysis of a Media Event* [J]. *Modern Communication-Journal of Beijing Broadcasting University*, 2001, (02): 7-15.
- [6] Liu Zixin. *News of the real ethical crisis and* [J]. *Journal of youth press*, 2022, (6) : 34-36. DOI: 10.15997/j.carol carroll nki QNJZ. 2022.06.003.
- [7] Chen Xin. *Loss and Return: Reflections on Human Centered Value in Disaster Reporting* [J]. *Media Forum*, 2022, 5(10): 12-14.
- [8] Ren Xiaolin. *A Discussion on disaster reporting in the New Environment from the perspective of journalistic professionalism* [J]. *News Research Guide*, 2022, 13(09): 138-140.
- [9] Dai Yujie. *Discourse Analysis of Disaster News Reports from the Transitivity Perspective -- A Case study of apartment collapse in Florida* [J]. *Taste · Classic*, 2021, (24): 90-92+100.]
- [10] Chen Yunping, Liu Yan. *The influence mechanism of media attention on green technology innovation of heavy polluting enterprises: based on the mediating effect of government environmental regulation and public participation.* *Management review*, 2023, 35 (6) : 111-122. The DOI: 10.14120/j.carol carroll nki cn11-5057/f 2023.06.020.