

Analyzing the Influence of the Media on Disaster Response and Social Transformation

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Abstract

The current qualitative study examines the complicated role of mass media in shaping social responses and transformations during disasters in Pakistan. The thematic analysis approach is used to investigate the how different forms of mass media including traditional media as well as social media platforms. Influence the behavior, public perception, and policy responses at the time of disasters. The current study identifies major themes such as agenda setting, propagation of information, and social mobilization. This research explores the complex relationship between media depictions and social resilience. The potential benefits and pitfalls of the media during the time of disaster are being considered in the study. The findings of the study foster the importance of media literacy, ethics in reporting, and collaborative approaches among policymakers, community stakeholders, and media practitioners. These measures are required to leverage the media's constructive influence in enhancing effective disaster preparedness, quick responses, and recovery initiatives.

Keywords: *Mass Media, Social Response, Traditional Media, Social Media, Social Resilience*

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1. Introduction

In the current era, the role of media during disasters has attracted increasing attention from different researchers, policymakers, and practitioners globally. The media's capability to form public perceptions, and behavior, distribute perilous information, and activate the resources during such situations of crises has placed it as one of the influential and powerful actors in enabling social responses, societal change, and transformations. (Hossain et al., 2020). The intensity and frequency of the disasters in Pakistan pose a substantial challenge to Pakistan's socio-economic development and the flexibility to grasp the dynamics of media influence become specifically critical and perilous. Mass media has a linchpin role in forming how people, communities, and different institutions perceive, distinguish, explain, interpret, and respond to disastrous catastrophes in Pakistan.

The relationship between traditional media and socio-digital media has established a dynamic information ecosystem that can impact public perceptions, public discourse, behaviors, policy shaping, and the process of disaster governance (Ali et al., 2018). Nevertheless, the media can assist as a substance for social transformation during the time of disasters. Media also reflects risks

and challenges during this time. Biased reporting, disinformation, misinformation, propagation, and sensationalism can aggravate fright, panic, misperception, confusion, and social division that can destabilize or weaken the disaster management work and its efficiency. Biases in reporting, misinformation dissemination, and sensationalism can aggravate panic, confusion, and social divisions, undermining effective disaster management efforts (Ahmed et al., 2019).

Over the past few decades, there has been a significant increase in natural disasters worldwide (Calvin, 2012; Pantti, Vasterman, Yzermans & Dirkzwager, 2005; Pelling, 2003; Wahl-Jorgensen & Cottle, 2012; WB, 2013), and this rise in catastrophes is directly linked to the notable intensification of human suffering and hardship (Yodmani, 2001). Consequently, any factors that may help alleviate the adverse effects of natural hazards are highly valued. In this regard, mass communication plays a crucial role, as it can contribute to mitigating a disaster or reducing its potential damage (Nair, 2010; Quarantelli, 1996). Therefore, the significance of information and communication during calamitous situations is widely recognized (Lee, 2008). Tangible transformation pathways are underrepresented in literature, particularly in scientific discourse, despite the widespread acknowledgment of the necessity for transformation on a global scale in the domains of sustainability and adaptability, as endorsed by various organizations such as the Intergovernmental Panel on Climate Change (IPCC) and the 2030 Agenda. The IPCC acknowledges the complicated nature of transformation and provides a comprehensive definition as "a variation in the central traits of a system including changed values, objectives, or goals" and the influence of mass media (IPCC, 2022, p. 64), contrasting with the incremental changes outlined in its 2022 report (Begum & Lempert, 2022). These shifts affect "equity, fairness, climate justice, and large-scale socio-institutional change," as well as "power, governance, politics, competencies, cultural identity, and sense-making" (IPCC, 2022, pp. 65–66).

To address these pressing concerns, the research community (O'Brien, 2012; Park et al., 2012; Loorbach et al., 2017) has advocated for an examination of how knowledge from diverse fields of study can be leveraged to facilitate transformative social change and the role of media. This article posits that public policy initiatives can promote transformation by regulating behavior and offering incentives to achieve specific objectives through perceptions built up through the media. Major policy changes across statutes, decrees, laws, regulations, executive decisions, and programs are necessary to initiate the transformation of system attributes, such as rapid decarbonization (Weible et al., 2011). Thus, the transition to a more sustainable future hinges on our ability to understand the elements and processes that lead to significant policy changes. This project is part of a broader social science research program investigating political feasibility and how various levels of government can foster and facilitate change across different political contexts (Biermann et al., 2012; Patterson et al., 2017; Fazey et al., 2017).

It is commonly believed that disasters have a significant impact on institutions, policies, attitudes, and values and the role of media is pivotal in this regard. The "disaster-reform hypothesis" (Nohrstedt et al., 2021) emerged from a growing body of transformation literature. Disasters, such as wildfires and floods, are described as significant external drivers enabling substantial changes (Pelling, 2010). However, both theoretical rationale and empirical evidence cast doubt on disasters as the primary cause of policy changes. Research indicates minimal effects of disasters on disaster risk reduction, sustainable development, and climate adaptation (Yeganeh et al., 2020; Nohrstedt et al., 2021; Zhang & Maroulis, 2021; Boin & 't Hart, 2022). Furthermore, the study suggests that various barriers, including recurrent disasters, blame politics, and declining political prominence, diminish the likelihood of significant policy changes following disasters and it can thoroughly be done through the media (Boin et al., 2008). Numerous theories and analyses have explored the

relationship between transformation and disasters across various contexts. However, the breadth of these concepts poses challenges to synthesis, and little effort has been made to distill and make sense of the available information. Specifically, within the broader field of climate science, there is an abundance of transition and transformation literature that tends to downplay the significance of public policymaking. A systems approach that theorizes variation and transformation across intersecting societal, environmental, mechanical, and technological domains may partly contribute to this limitation. This is exemplified by the "Pareto principle," which serves as the main theory linking change to "social tipping points," where the reasoning of significant minorities prevails over that of the majority (Rockström, 2020). While a substantial body of empirical evidence seems to support this theory (Winkelmann et al., 2020; Loorbach et al., 2017), these explanations tend to oversimplify the significance of politics, policy, administration, and policymaking and the influence of the media as well.

The goal of this article is to encourage deeper discussions across diverse fields. It provides an overview of research on the conditions under which catastrophic events could lead to significant changes in public policy, conducted in the domains of public administration and policy and the media has a significant role in this change. The study aims to synthesize existing techniques rather than develop new ones. An area of concern is the systematic summary of available empirical data, particularly given recent reviews on the policy implications of different disasters (Brundiers & Eakin, 2018; McHugh et al., 2021; Giordano et al., 2021). Instead, the aim is to theoretically and abstractly examine the connection between disasters and transformation using knowledge from the domains of public administration and policy. To this end, the study explores expressive, descriptive, explanatory, and prescriptive perspectives on transformation. It also presents four scenarios illustrating how disasters could gradually influence policy initiatives aimed at fostering change and highlights important findings regarding the formulation of post-disaster policies.

During the time of disasters, the role of media is critical in the formation of public opinion, distributing perilous information, and social reactions. The principal source of information, news, and instruction regarding disasters whether man-made or natural is the mass media. Social media and digital podiums have also had a momentous influence on the way that information is distributed during crises and emergencies, which reflects both prospects and challenges for social change and disaster response. The influence of mass media exposure on societal change and disaster response is a progressively prevalent issue in modern research. It is imperative to grasp how the mass media formulate public perception and opinions, the processes of decision-making, and the social transformation to accomplish disasters and foster community resilience. Probing how the mass media feasts precise and correct information, captures mythologies and activates resources is another essential phase to refining preparedness and response. The current study has shed light on the composite connection between the mass media, social change, and disaster response. A 2023 study, for example, established how media podiums eased real-time coordination and communication between obstructed populaces during times of disasters, permitting swift responses and resilient societies. (Johnson et al. 2022)

This is the age of hyper-globalization and pervasive media existence has directed a surge in academic interest in the influence of the media in disaster response and social transformation. In times of disaster and crisis, whether these are transported by disasters, the media is critical for directing the masses, convincing public perceptions or opinions, and allotting resources (Rodriguez, Trainor, & Quarantelli, 2006). The composite relationships among public sermons or discourse, media depictions, and disaster management tactics highlight the importance of systematic research to copiously comprehend the influence on society. The objective of the paper

is to inspect the complicated dynamics of media effect on disaster response and social transformation, with emphasis on probable advantages and disadvantages, to promote societal change, flexibility, and resilience.

2. Methodology

Qualitative research methodology involves a systematic exploration and interpretation of phenomena through techniques such as interviews, observations, and analysis of textual data, aiming to uncover underlying meanings and understand complex social processes (Bryman, 2016). When analyzing the influence of the media on disaster response and societal transformation, qualitative methods can provide rich insights into the perceptions, experiences, and behaviors of individuals and communities affected by disasters, as well as the role of media narratives in shaping these responses.

The researcher conducted semi-structured interviews with key stakeholders including five professional journalists and five policymakers were selected for the interviews. The journalists ask the following questions:

1. How do you think the role of the media in shaping public perception and response during natural disasters or crises?
2. In your knowledge and experience, what exact examples can you provide of how media reporting has inclined disaster response and societal changes?
3. What factors contribute to the effectiveness or ineffectiveness of media reporting in promoting or endorsing social transformation following a disaster?

The following questions are asked of the policymakers of disaster management:

1. What policies or measures are currently in place to regulate the media's role in disaster response and its potential impact on societal transformation?
2. How do policymakers observe the media's impact on disaster response, and what kind of strategies are being considered to influence its potential for positive social transformation?
3. do you think, in what ways can policymakers cooperate and collaborate with media to guarantee precise, correct, timely, accountable, and responsible reporting during disasters, while also promoting social resilience and transformation?

3. Findings

The professional journalists who reported the disasters are being interviewed. The following were the responses of them:

1. How do you think the role of the media in shaping public perception and response during natural disasters or crises?

It is important to note that the media's role in shaping public perception and response during natural disasters or crises in Pakistan is paramount. Journalist Participant 1 emphasized that media reporting informs the public about the severity of the situation and influences their actions and decisions, despite challenges such as sensationalism and misinformation. Similarly, Journalist Participant 2 highlighted the immense power of media coverage, emphasizing the importance of accurate reporting to enable effective response and resilience-building while avoiding panic-inducing sensationalism. Journalist Participant 3 resonated with these thoughts, emphasizing that media reporting does not only inform about disasters but also mobilizes different communities and stimulates response efforts. Participant four has his point of view on the changing role of media during crises or disasters. The media portray the situation as they are informed to propagate. The fifth participant also showed his concerns over the governmental policies related to the gatekeeping of the news related to disasters. The filtered information is disseminated but the media role can never be avoided in all such scenarios. However, all participants underlined the importance for

professional journalists to prioritize or rank realistic reporting, avoid sensationalism, maintain ethical and moral standards, and cooperate with different authorities to safeguard and ensure optimistic contributions to public response and perception. This highlights the perilous role of the media in distributing reliable and steadfast information and simplifying productive responses to the crises in Pakistan.

2. In your knowledge and experience, what exact examples can you provide of how media reporting has inclined disaster response and societal changes?

The media's influence on disaster response and societal changes in Pakistan has been substantial across various catastrophic events, as evidenced by the accounts of journalists who have reported on these incidents. During the devastating floods of 2010, extensive media coverage heightened awareness of the disaster's scale, leading to increased aid efforts domestically and internationally (Journalist Participant 1). Correspondingly, after the earthquake in 2005, and the flood in 2022; media reporting enabled the swift mobilization of rescue efforts and exposed inadequacies in government response, prompting demands for policy reforms (Journalist Participant 2). Additionally, during the 2015 Karachi heatwave, media narratives and descriptions urged instant action from authorities and started discussions on social disparity and infrastructure development (Journalist Participant 3). These practices highlight the serious role of media in not only determining disaster response but also fostering social dialogue and promoting systemic changes. Participant Four also gave the example of Flood 2022 in Pakistan which was devastating and Pakistan has around \$30 billion economic loss. Participant five reflected on his point of view by keeping the example of Covid 19 and its effects in Pakistan.

3. What factors contribute to the effectiveness or ineffectiveness of media reporting in promoting or endorsing social transformation following a disaster?

The efficiency of media reporting in promoting social transformation following disasters in Pakistan is influenced by numerous factors, as painted by the viewpoints of the participating journalists. Journalist Participant 1 highlights the significance of speed and correctness in information distribution, joined with public trust in the media, to enable effectual resource mobilization and aid delivery. In difference, Journalist Participant 2 classifies challenges such as misrepresentation, lack of diversity in media depiction, and restricted access to communication infrastructure, that can hinder effective response efforts and leave weak populations unacquainted and uninformed. Nevertheless, Journalist Participant 3 underlines the optimistic role of media in highlighting stories of flexibility, and resilience, enabling community engagement through collaborating platforms like social media, and holding authorities answerable and accountable for their response actions. Participants four and five have clarity about the role of media in social change after the disasters. Disasters are common which can be natural and manmade and they have different dimensions. Disasters can be the cause of social change that can be positive as it can be said crisis has the potential to be converted into a blessing. These various perspectives demonstrate the complex nature of media's effect on social transformation post-disaster and underline the position of addressing challenges while leveraging media's potential to determine optimistic change.

The policymakers of disaster management in Pakistan have given the following responses:

1. What policies or measures are currently in place to regulate the media's role in disaster response and its potential impact on societal transformation?

The perspectives of policymakers highlight substantial gaps and challenges in the existing framework governing the media's role in disaster response and social transformation in Pakistan. Policymaker Participants 1 and 2 highlight the need for targeted policies that describe media

responsibilities in disseminating and distributing precise and accurate information and promoting resilience. Policymakers Participants 3 and 4 highlight the need for stronger omission mechanisms and capacity building to guarantee responsible media reporting during disasters. Policymaker Participant 5 supports inclusive legislation addressing problems like misinformation and ethical reporting, while also suggesting advanced approaches like public-private partnerships to bind the media's potential for positive social change post-disaster. These viewpoints jointly highlight the perseverance for reforms to improve the efficiency and accountability of media participation in disaster management and social transformation, requiring comprehensive legislative measures and capacity-building initiatives.

2. How do policymakers observe the media's impact on disaster response, and what kind of strategies are being considered to influence its potential for positive social transformation?

The perspective of policymakers underlines the noteworthy role of the media in shaping public perceptions and responses during disasters in Pakistan. Policymakers identify the need for enhanced association between government agencies and media outlets to safeguard the correct information distribution and endorse public awareness and preparedness (Policymaker Participant 1). They also recognize the media's impact on disaster response and support initiatives such as media literacy campaigns and assimilating media training within disaster management frameworks to connect its potential for positive and optimistic transformation (Policymaker Participant 2,3). However, policymakers are careful about the potential drawbacks of media reporting, highlighting the significance of mitigating fear and misinformation through cooperative efforts, combined training exercises, and support for responsible and accountable journalism (Policymaker Participant, 4,5). These viewpoints highlight the compound dynamics between policymakers and the media in steering disaster communication strategies and emphasize the importance of proactive and practical measures to guarantee effective coordination and responsible reporting during crises.

3. Do you think, in what ways can policymakers cooperate and collaborate with media to guarantee precise, correct, timely, accountable, and responsible reporting during disasters, while also promoting social resilience and transformation?

The collaboration and association between policymakers and media are vital for enhancing disaster response and promoting social transformation in Pakistan. Policymakers can enable this collaboration by creating strong procedures, guidelines, and protocols for reporting during disasters, endorsing transparency, precision, accuracy, and accountability in media reporting (Policymaker Participant 1,2). Also, policymakers can inspire partnerships between government agencies, NGOs, and media outlets to advance the quality and reach of disaster-related news reporting (Policymaker Participant 3). Moreover, providing access to precise and correct data and expert understandings, appealing to journalists to comprehend their challenges, and supporting combined initiatives can aid in influencing the media's impact to alleviate the effect of disasters and promote positive change in society (Policymaker Participant 4,5). By working together, policymakers and media both can play a decisive role in the construction of resilience and enabling well-versed decision-making during crises.

Findings	Themes
<p>1. Role of Media in Shaping Public Perception and Response</p> <p>The media's role in shaping public perception and response during natural disasters or crises in Pakistan is crucial. Participants emphasized the influence of media reporting on informing the public about the severity of the situation and influencing their actions and decisions. Despite challenges such as sensationalism and misinformation, participants stressed the need for journalists to prioritize factual reporting, avoid sensationalism, uphold ethical standards, and collaborate with authorities to ensure positive contributions to public perception and response.</p>	<p>Importance of Media Reporting, Influence on Public Perception, Challenges (Sensationalism, Misinformation), Ethical Reporting, Collaboration with Authorities</p>
<p>2. Examples of Media Coverage Influencing Disaster Response and Societal Changes</p> <p>Media coverage has significantly influenced disaster response and societal changes in Pakistan across various catastrophic events. Examples include the extensive media coverage during the devastating floods of 2010, the earthquake in 2005, and the 2015 Karachi heatwave. Media reporting heightened awareness, facilitated rapid mobilization of rescue efforts, exposed shortcomings in government response, prompted demands for policy reforms, and initiated discussions on social inequality and infrastructure development.</p>	<p>Impact of Media Coverage, Increased Awareness, Rapid Mobilization, Exposing Shortcomings, Policy Reforms, Social Discussions</p>
<p>3. Factors Contributing to the Effectiveness of Media Coverage in Promoting Societal Transformation</p> <p>The effectiveness of media coverage in promoting societal transformation following disasters in Pakistan is influenced by various factors. These include speed and accuracy in information dissemination, public trust in the media, challenges such as misinformation and limited access to communication infrastructure, and the positive role of media in highlighting stories of resilience, facilitating community engagement, and holding authorities accountable.</p>	<p>Speed and Accuracy of Information, Public Trust, Challenges (Misinformation, Limited Access), Highlighting Resilience, Community Engagement, Accountability</p>

4. Analysis and Discussion

The current study clarified the role of the media in forming public perception, insight, and response during disasters in Pakistan. The participant journalists unanimously pressure the importance of media reporting in informing the public about the severity of the condition and manipulating their activities and decisions. Notwithstanding, recognizing challenges such as sensationalism, exaggeration, and misinformation, the journalists highlight the perilous need for accurate reporting, moral standards, and association with authorities to safeguard positive contributions to public insight, perception, and response. It is focused on how critical the media is in affecting public perception, public opinion, and resource mobilization in times of disaster. It is also significant to analyze Pakistan’s media efforts to distribute the correct and precise information and also encourage effective and efficient disaster management.

The participants’ journalists shared their experiences and they have exposed that media reporting in Pakistan persistently influence social change and the swift disaster response. The media has reported several catastrophic and disastrous events like the flood in 2010, the Kashmir earthquake in 2005, the Karachi heat wave in 2015, and the flood in 2022, and these all were critical in mobilizing public support, revealing weaknesses in the government response and ignite discussions about the social issues. These disasters demonstrate the media’s complicated and influential role in the immediate and long-term impact on Pakistan. Media also play a pivotal role in the modification of social discourse, focus and encourage structural reforms, and influence the response after the disaster.

The different perspectives were given by the different professional journalists who were the participants. They shed light on the complexity of different variables that influence the media reporting’s ability to encourage social change successfully or unsuccessfully in the wake of disasters. It was revealed by the interviewing with the highly professional journalists who covered the news during the disasters. It is highly acknowledged that legitimate media reporting is required to be accurate, swift, unbiased, and trustworthy. The efficiency and efficacy can be hindered by false information, lack of diversity in media representation, and limited access to communication

infrastructure. On the opposite side, adaptability, flexibility, resilience, community involvement, and holding the authorities responsible and accountable seem to be essential factors in social change after the disasters. All these points of view highlight that policymakers, media outlets, and other related stakeholders must enhance the ability of media reporting to foster social change with resilience after the disasters. The journalists also concentrate on how crucial it is to address the problems and also leverage the media's ability to impact constructive and productive social change in post-disaster settings.

The policymakers have different points of view and insights about the media's participation in social change and disaster relief initiatives. The policymaker (participant 1) concentrated on the need for the targeted policies to demarcate the media's role in distributing and disseminating the correct information and encourage resilience. Participant 2 focused on the need for more detailed and comprehensive oversight procedures and capacity building. The policymaker (participant 3) was in favor of developing progressive policies just as public-private partnerships and inclusive legislation which addresses issues like ethical and moral reporting disinformation as well. Both of these perspectives highlight how significant it is to implement the reforms that can be more effective, responsible, and accountable for media's involvement in disaster relief and social change after the disaster. It is also obligatory to implement capacity-building initiatives and laws.

The major goal of this study focused on the idea that policymakers identify the media's crucial role in influencing public perception, public opinion, and the reaction to disasters as well in Pakistan. It has also been emphasized how government organizations and media outlets can work together more effectively and efficiently to protect and promote the correct information and raise public awareness as well as readiness. Media literacy campaigns and media literacy training in disaster management framework are the ways to measure the positive effect of the media. Politicians are aware of the possible negative influence of media reporting and are also focused on the need for collaboration in the fight against terror and false information while also progressing ethical, moral, and transparent journalism.

It is unquestionably essential to demonstrate how the policymakers and media outlets collaborate and cooperate to enhance the disaster response and foster social transformation in Pakistan. The establishment of precise and accurate policies, procedures, and proper guidelines for reporting in times of crisis or disasters. To encourage accountability, responsibility, transparency, and accuracy in media reporting. The policymakers can encourage and facilitate this kind of collaboration and cooperation. It is suggested that governmental, non-governmental, and media outlets work together which develop accurate information and professional opinions. During times of disasters and crisis, policymakers and media outlets could be enormously significant in fostering resilience and tempting people to make well-informed decisions.

5. Conclusion

The current study highlights the crucial role that Pakistan's media plays in the formation of public perception, public opinion, understanding, reaction, and social change after the disasters. Professional journalists highlighted how important media coverage is for educating the public, stimulating local communities, and urging emergency acts. After the disaster, policymakers identified the significance of using media influence to promote positive social change, but they also acknowledged the hitches presented by sensationalism and false information through media reporting. Professional journalists produce precise examples that highlight how important media reporting is for disaster response and social change in Pakistan. Media reporting of disasters such as the 2010 floods, the 2015 Karachi heatwave, and the flood in 2022 has increased public awareness, mobilized resources, uncovered government weaknesses, and flashed discussions

about social problems. These illustrations point out the nuanced nature of media influence and its capacity to offshoot constructive and positive social change in the wake of disasters. In addition, policymakers emphasize the need for regulatory actions and media collaboration to safeguard timely, accurate, responsible, and accountable reporting during disasters and to foster social transformation and resilience after the disasters. Vibrant and clear guidelines should be established, collaborations should be encouraged, precise and correct data should be accessible, and responsible and accountable reporting should be rewarded. Building social resilience, nurturing positive change, and providing an efficient and effective disaster response are all made possible by these supportive efforts in Pakistan.

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