International Journal of Scientific Research and Reviews

Media Communication and Climate change: A study on online English Newspaper Framing of 'ockhi' Cyclone

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ABSTRACT

Media plays a significant role in the public perception and understanding of climate change issues. So climate change is attracting increasing media attention all over the world, in parallel; Indian media is attracting increasing attention within the climate debate. Media Communication about Climate Change has been emerged as a major academic research domain especially since last decade. This study tries to explore media framing of climate change issues pertaining to 'Ockhi' cyclone. The aim of this study was to explore news stories on 'Ockhi' from four online leading English dailies appeared between 29 November 2017 to 31 December 2017, in the Times of India, The Hindu, Hindustan Times and Indian Express. The study has chosen the above period for examine because during the period 'Ockhi' had formed and dissipated after making its widespread human, material, and environmental losses and repercussions. The study has set core objectives including; identifying the frames adopted by these online newspapers in their news stories relating to 'Ockhi', what frames were most/least prominent in the coverage of 'ockhi' and also investigate the news source pattern and how did attention to 'Ockhi' coverage vary among newspapers. For this, study has adopted using the prevalence of the five generic frames developed by Semetko and Valkenburg. A content analysis was conducted and the results were examined and compared for various framing aspects of climate change issues, like attribution of responsibilities, human interest, conflict, morality and economic consequence.

KEYWORDS: Media Communication, Climate Change, Media Framing, Ockhi Cyclone, Online Newspapers

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INTRODUCTION

Human induced climate change is a major environmental issue of 21st century. So climate change communication has growing to become most pressing and debatable topic all over the world. In this scenario, media communication on climate change issues plays a pivotal role in shaping and formulating public opinion and understanding of climate change. Many research activities are taking place in the multidisciplinary research domain of Media Communication about Climate Change (MCCC). Climate change is a multi layered topic, involving science, politics, economics, culture, geo politics and many other disciplines. So media representations, portrayals, framing and coverage of climate change issues are drawn an important role in the social construction of climate change among common people. Indian media completely views climate change as an 'underway' scientific reality. Indian journalists also agreed that climate change as a growing threat and its happening today is unequivocal.

MEDIA FRAMING

Media coverage and framing of climate change has been an area of research in the subset of environment communication, especially in the developed and developing countries since last decade. The framing research is derived from the study of Goffman, 1974[1] wherein he examined how individuals understand their environment and interpersonal interactions. He described frames as schemata of interpretation that allow individuals to locate, perceive, identify and label issues, events and topics. Also, he states that words are triggers that help people to negotiate meaning through the lens of existing cultural beliefs and worldviews. Framing communicates how and why an issue should be seen as a problem, how it should be handled, and who is responsible for it. Likewise, media framing is a process through which an issue or phenomenon is portrayed by the news.

'Ockhi' Cyclone

Cyclone Ockhi left a trail of destruction in the southern districts of Tamil Nadu, apart from devastating coastal areas in Kerala and Lakshadweep. Hundreds of fishermen, who had gone out to the sea for fishing well ahead of Ockhi's formation, could not access information on the cyclone. Ockhi formed as a depression over southwest Bay of Bengal on 29 November 2017, it intensified into a cyclone off the Kanyakumari coast in Tamil Nadu on 30 November 2017 and travelled up to the Gujarat coast before dissipating on 06 December 2017 after weakening into a low pressure area. Ockhi is the first severe cyclonic storm in almost 40 years in the Indian Ocean region to have travelled more than 2,000 kilometers (according to metrological department of India).

REVIEW OF LITERATURE

1. The study titled *The framing of climate change in New Zealand newspapers from June 2009 to June 2010, 2015* carried out by K Chetty*, V Devadas** & JS Fleming* (Centre for Science Communication, University of Otago*, Dunedin, New Zealand; Department of Film, Media and Communication**). The study analyzed articles on climate change published in three leading New Zealand newspapers including; The New Zealand Herald, The Dominion Post and The Press over a 12-month period between 1 June 2009 and 31 May 2010 . The study sample of 540 articles was collected through the electronic news database Factiva, using the search terms 'climate change' or 'global warming'. Frames were analyzed deductively according to an experimental frame typology designed by Nisbet & Scheufele, 2009[2]. The results suggested that New Zealand newspapers have presented climate change in accordance with the scientific consensus position since 2009, focusing on discussion of political, social and economic responses and challenges.

2. The research scholars Chinenye Nwabueze and Stella Egbra of Department of Mass Communication, Anambra State University, Igbariam, Nigeria did a study titled *Newspaper framing of climate change in Nigeria and Ghana, 2016.* This study was a content analysis of two newspapers from Nigeria and Ghana to determine the coverage and framing of climate change issues for a period of 7 months. Content Analysis was used in carrying out the study. This study is limited to Nigerian and Ghanaian newspapers. The environment of this study is two newspapers each from Nigeria and Ghana. The *Vanguard* and *Punch* newspapers of Nigeria as well as the *Daily Graphic* and *The Ghanaian Times* were specifically selected for the study. The main objective of this study was to find out how climate change stories are framed in Nigerian and Ghanaian national dailies. Frames were analyzed deductively according to an experimental frame typology designed by Nisbet & Scheufele, 2009. Dominant frame was environment and action frame which focused on the predicted effect of climate change on the landscape and relief in Nigeria and Ghana and on several other regions. Study also found that the media in Nigeria and Ghana source their reports mainly from international fora. It is recommended that the Nigerian and Ghanaian press should use more of the information and awareness frame in writing their reports.

3. The research paper titled *News media framing on Doha climate change conference, 2013* was to explore articles on Doha Climate Change Conference from three online news media appeared between November 1st 2012 to December 9th 2012, in The Hindu, The Times of India, and New Delhi Television (NDTV).The study carried out by *G. C.* Prem Nivas* *and Dr. I. Arul* Aram (Research scholar*, Department of Media Sciences, Anna University, Chennai and Associate Professor** and Head Department of Media Sciences, Anna University, Chennai). A content

analysis was conducted and the results were examined and compared for various framing aspects of climate change issues, like attribution of responsibilities, human interest, conflict, morality and economic consequence (according to the media theoretical frame work of Semetko and Valkenburg, 2000[3]. The study found that Doha Climate Change had a least coverage compared to the previous years. The Hindu and The NDTV had majority of the articles captured from the attribution of responsibility frame. The Hindu and The Times of India had equal frequency of articles in the human interest and conflict frame. Mortality frame did not occur in any of the articles.

4. The research paper titled *Framing of climate change issues in Indian television news channels, 2016* of G. C. Prem Nivas, C. Arul and A. Aram (CEG Campus, Anna University, Chennai, India). This research paper analyzed six years of coverage of climate change issues in two Indian national television news channels, Cable News Network-Indian Broadcasting Network(*CNN-IBN*) and New Delhi Television Limited (*NDTV24X7*). Study adopted Robert M Entman's (1993) theoretical media frame work[4]. The results of the study revealed that policy makers and NGOs were strongly associated with the 'judgment' frame; while the news bureaus and scientists were strongly associated with the 'problem' frame. TV channels could adopt the model of *NDTV24X7* in collaborating with an institution working on climate change to offer quality coverage.

5. The study titled *Framing Global Warming: An International Comparison of the Influence of Climate Contrarians on News Media Coverage, 2014* of Andrew R. Jones California State University, Fresno.This study is to examine the extent of their influence in creating a news frame of global climate change, using a combination of content analysis, frame analysis and ordinal regression. The study has adopted Shanto Iyengar's operationalization of media frames, 1987[5]. Data from English-language print media from news sources from nine countries were analyzed. The study finds that inclusion of climate contrarians in news stories about global warming has a significant impact on the framing of the issue, and that scientist promoting the consensus view on climate change need to employ linguistic devices such as metaphors to counter the climate contrarian frame.

6. The scholars Renée Moernaut , Jelle Mast and Luc Pauwels were completed a research work titled *on Climate change journalist and news frames in mainstream and alternative media, 2017*. The study has examined visual frame-building and as part of it has conducted interviews with 26 climate journalists, photo editors, chiefs and opinion-makers, working for three mainstream and two progressive alternative outlets in northern Belgium[6]. The research work has followed the findings combined with the outcome of a deductive framing analysis of 114 climate articles. The results show a strong overlap among journalist frames and news frames. Anthropocentric sub frames prevail in the mainstream news articles and among the reporters.

OBJECTIVES

1. How did online leading English Newspapers in India frame the climate change issue of 'Ockhi'.

2. What frames were most/least prominent in the coverage of 'ockhi'.

3. To investigate and interpret the motives behind the framing variations in all the studied newspaper stories.

4. To study the role and prospects of Newspapers as prime source of information for various climate change issues.

THEORETICAL FRAME WORK

Study has taken the content analysis of news stories of four leading English newspapers during the period 29 November 2017 to 31 December 2017 and adopted the content analysis measure for frames according to H.A. Semetko and P.M.Valkenburg (cited in their research article titled *Framing European politics: A content analysis of press and television news*, *Journal of Communication* 2000). According to this theoretical frame work, media frames have been classified into following five categories including;

1. Attribution of Responsibility Frame

- Does the story suggest that some level of government has the ability to alleviate the problem?
- Does the story suggest that some level of the government is responsible for the issue/problem?
- Does the story suggest solution(s) to the issue/problem?
- Does the story suggest that an individual (or group of people in society) is responsible for the issue/problem?
- Does the story suggest the problem requires urgent action?

2. Human Interest Frame

- Does the story provide a human example or "human face" on the issue?
- Does the story employ adjectives or personal vignettes that generate feelings of outrage, empathy-caring, sympathy or compassion?
- Does the story emphasise how individuals and groups are affected by the issue/problem?
- Does the story go into the private or personal lives of the actors?
- Does the story contain visual information that might generate feelings of outrage, empathy-caring, sympathy or compassion?

3. Conflict Frame

- Does the story reflect disagreement between parties-individuals-groups-countries?
- Does one party-individual-group-country reproach another?
- Does the story refer to two sides or to more than two sides of the issue/problem?
- Does the story refer to winners and losers?

4. Morality Frame

- Does the story contain any moral message?
- Does the story make reference to morality, God and other religious tenets?
- Does the story offer specific social prescriptions about how to behave?

5. (Economic) Consequence Frame

- Is there a mention of financial losses or gains now or in the future?
- Is there a mention of the costs/degree of expense involved?
- Is there a reference to economic consequences of pursuing or not pursuing a course of action?
- Does the story contain visual information that might generate feelings of outrage, empathy-caring, sympathy or compassion?

METHODOLOGY

Study selected four online leading English newspapers like *The Hindu, The Times of India, Indian Express and Hindustan Times.* Study focused on news stories related to 'Ockhi' cyclone. For the systematic analysis of the news frames in the gathered news stories, study has taken content analysis of news stories of leading English dailies during the period 29 November 2017 to 31 December 2017. Study has adopted the standard set of content analytic indicators to measure the prevalence of the five generic frames developed by Semetko and Valkenburg (2000).

DISCUSSION & RESULT

Percentage of the news stories in each four online newspapers on 'ockhi' coverage Table: 1

Sl. No	Online Newspapers	Total Number of News Stories	Percentage
1.	Times of India	28	23.9
2.	The Hindu	48	41
3.	Indian Express	27	23
4.	Hindustan Times	14	11.9
	Total	**117**	**100**

The aim of the current study was to investigate how climate change issue 'Ockhi' had been framed in coverage in leading online English newspapers in India. Out of the total four leading online English newspapers, the online edition of 'The Hindu' newspaper made the larger overage of the climate change issue 'Ockhi' cyclone (see Table: 1). The Hindu has reported the total of 48 stories (23.9%) during the period of study. 'Times of India' and 'Indian Express' newspapers were made the second and third largest coverage in reporting news stories associating with 'Ockhi' issue, and both the newspapers were reported 28 news stories (23.9%) and 27 news stories (23%) respectively. The total of 117 news stories was reported among the leading four online English newspapers in India.

Framing of the news stories in each four online newspapers on 'ockhi' coverage Table: 2

Frames	Times of India (28)	The Hindu (48)	Indian Express (25)	Hindustan Times (14)
Attribution of Responsibility Frame	9	27	11	5
Human Interest Frame	1	4	2	0
Conflict Frame	4	5	2	1
Morality Frame	0	1	0	0
Consequences Frame	14	11	10	8

First of all, each online English newspaper was given a kind of slight varying framing interpretation according to their news reports of respective content (See Table: 2). Undoubtedly, the major prominences were received to the two frames including; attribution of responsibility frame and consequences frame. Morality frame has received hardly any significance in the coverage of 'Ockhi' issue. Newspapers were made a little interest to portray 'Ockhi' climate change issue in according to Human Interest Frame and Conflict Frame.

Out of the total 48 news stories published in 'The Hindu' newspaper, the bulk of news stories (27 stories) were given prominence to attribution of responsibility frame (See Table: 2). 11 stories were given prominence to consequences frame and 5 stories were put under conflict frame. It is quite interesting that the 'The Hindu' newspaper made human interest frame prominence with 4 news reports, where as it had published just a single story by giving prominence to morality framing.

Likewise of 'The Hindu' newspaper, Times of India was also given prominence to two faming aspects including; attribution of responsibility frame and consequences frame (See Table: 2). Out of the total 28 news stories, Times of India was reported 14 'Ockhi' news stories by giving prominence to consequences frame and 9 stories were under attribution of responsibility frame. None of the news stories were given prominence to morality frame; whereas just a single news story was put under the frame prominence of human interest.

Out of the total 25 news stories in Indian Express, major chunk of news stories were given prominence to represent 'Ockhi' issue in attribution of responsibility frame (11 stories) and consequences frame (10 stories). Both human interest and conflict frames were equally given prominence to two news stories respectively (See Table:II). None of the news stories were given prominence in respect of morality frame.

The newspaper 'Hindustan Times' is given slightly less 'Ockhi' coverage compared to the rest three leading English dailies. Like all other studied newspapers, Hindustan Times also given significance to attribution responsibility frame and consequences frames. Out of 14 news stories in Hindustan Times, 5 news stories were given prominence to attribution responsibility frame and 8 news stories were given prominence to consequences frame. None of the stories given prominence to human interest and morality frames.

FINDINGS

1. The top four English Dailies (Online Editions) in India were given increased attention in the coverage of 'Ockhi'.

2. All the newspapers were given larger prominence to attribution of responsibility frame and consequences frame in 'Ockhi' coverage.

3. Frame sharing proportions suggested that climate change issue like 'Ockhi' needs urgent action.

4. 'The Hindu' newspaper was given larger number of news reports (48 news stories) in coverage of 'Ockhi' compared to other newspapers under study.

5. The study proved the fact that media framing has got pivotal role both in the understanding and public perception of 'Ockhi' and its climate change communication.

6. According to framing data, newspapers were largely emphasized government is responsible/government has the ability to alleviate (attribution of responsibility frame) the 'Ockhi' issue.

7. Framing data tells newspaper is one of the prime sources of news in climate change communication.

8. Newspapers were showed second most prominence to the 'consequences frame', which representing the economic consequences/ financial losses/ degree of expense of 'Ockhi' issue.

9. Newspapers were showed a very less significance to how individuals and groups are affected by the 'Ockhi' issue/problem (human interest frame).

10. Newspapers were failed to give prominence to 'morality frame' in the respective coverage of 'Ockhi' issue.

11. Newspapers are increased to given attention to climate change issues, but they are not giving that much emphasize to its remedial/problem solving aspects of climate change

12. Most of the 'Ockhi' news stories lack scientific contents/perspectives in their report writing.

13. It is evident that climate change news reporting lacks professional journalistic practice.

14. Newspapers did not give adequate concern in the disaster management perspective of 'Ockhi'.

15. Study re-emphasizes the prospects of data journalism in climate change communication.

16. Data showed that majority of news stories were placed 'Ockhi' climate change issues as both debatable social and development issues as well.

17. Very less stories contained visual information that might generate feelings of outrage, empathy-caring, sympathy or compassion.

18. Most of the news stories dealt with 'Ockhi' climate change issue reflected anthropogenic (human induced) reasons behind the phenomenon.

19. Study proved that media has got vital role in the public perception and understanding of 'Ockhi' cyclone.

20. Study paved way to explore more in the aspect of media agenda in climate change communication

SUGGESTION & CONCLUSION

The study was to investigate how climate change had been framed in coverage of 'Ockhi' cyclone in leading English newspapers. Study used content analysis of coverage between the periods of 29 November 2017 to 31 December 2017; found that 'Ockhi' issue was framed largely on attribution of responsibility frame and consequences frame. Climate change was also framed in a manner that reflected a strong alignment with the scientific consensus position: that it is real and very likely to be anthropogenic in cause.

The findings of this research may provoke to do further research work in the coverage of climate change in television news, news websites, blogs and social media. It helps to understand the more prospects and challenges of media communication on climate change in the changing dimensions of occurring frames in climate change news stories. Also public impact on the climate change issue through the news stories needs to be specifically studied and explored to understand what effect the news framing can create or produce. More experimental studies can also be done to find the framing impacts of television news channels at specific times to understand how the perception varies time to time.

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