

183. Reporting Science and Technology in Print and Electronic Media

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Abstract. The advancement in communication technology has made a huge growth in media industry and also has given a freedom to set new professional trends. The convergence is apparent in many different ways. Media is growing and flourishing but with this growth many questions are emerging on the credibility of its content and the journalistic norms which print and electronic media are inheriting.

A free market gives birth to the opportunities for growth and also freedom and confidence to explore new things. Media is not only a great source of information but it also gives us a platform to raise our voice. It is a fourth pillar of the democracy which has the power to ask questions. Media can set new trends by making people as well informed citizens at the same time media has the power to influence public understanding on subjects like science and technology.

To get the answers of all these questions the researcher has done a study of print and electronic media for her PhD, for which the topic was “Reporting Science and Technology Communication in print and Electronic Media” study, was a content analysis of two mainstream newspapers and Four TV channels.

It was found in the study that people are very much interested in reading and watching science and technology news/ programs but they are not satisfied with the quantity of coverage being given by TV channels and newspapers to science and technology. Foreign channels like Discovery and National Geographic Channels which shows higher percentage of science and technology programs shows more foreign countries based programs. National News channels hardly cover science and technology in news shows. The survey of the school kids, college students and professionals shows that they want a channel devoted to science and technology news and programs. They want to see what is happening at world level in the field of science and technology but they are not getting that kind of information from media. Even the content of the programs does not match with viewers/ readers choice. While the coverage of science and technology in print media improved over the years, they are not only giving more space and importance.

Keywords: Science and technology, Readers and viewers, Content, News shale, Prime time, News papers, News channels, Purpose, Treatment of the program

Introduction

The advancement in communication technology has made a huge growth in media industry and also has given a freedom to set new professional trends. The convergence is apparent in many different ways. A free market gives birth to the opportunities for growth and also freedom and confidence to explore new things. Media can set new trends by making people as well informed citizens, at the same time media has the power to influence public understanding on subjects like science and technology. To get the answers of all these questions the researcher has done a study of print and electronic media for her PhD, the topic of her study was “Reporting Science and Technology Communication in Print and Electronic Media” was a content analysis of two mainstream newspapers and four TV channels.

Method of Research: Qualitative and Quantitative

General objectives of the study

1. To identify the information needs of the audiences.
2. To evaluate the percentage of science and technology based news in print media.
3. To analyze qualitatively the extent of coverage and relative importance to various issues in print and electronic media.
4. To evaluate the percentage of science and technology based news in selected TV channels.
5. To evaluate messages of science news in print.

6. To evaluate messages of science news in television.
7. To assess the relevance of science and technology reporting to their utilization.

Specific objectives of the study

- To analyse percentage of news space devoted to science and technology news?
- To understand how much space is covered by foreign news and how much covered by Indian news related to science and technology?
- To understand what is the content and structural element of the news of science and technology?
- To evaluate and comparatively analyze science and technology based news on TV Channels and reasons of selecting news and programs of some specific categories of science and technology.

Time Band

Two months for newspapers and four months for four TV channels (One month for each channel)

Languages: English - Hindi

Sample Size: Two mainstream Indian Newspapers comprising Hindi and English languages and four channels of electronic media i.e. Doordarshan, National Geographic, Discovery and Aaj Tak

Data Collection

1. Questionnaire for interviews with school children, college students and professionals
2. Questionnaire for interview with science communicators and journalists
3. Log Sheet for Data collection of the News items and programs of newspapers and TV channels

Findings

Part I: What reader/ viewers think on science and technology, their knowledge on subject and coverage in newspapers and TV channels?

Results shows that readers/viewers are pretty conscious about what is being telecast on different channels and published in newspapers on science and technology, they were showed high interest in reading and watching science and technology related news and programs. Readers and viewers were not satisfied with coverage being given by newspapers and TV channels to science and technology. They wanted a separate page in newspaper and a separate channel for science and technology. At the same time they showed keen interest in programs which can provide them knowledge and entertainment. Study shows that readers/ viewers think that science and technology not only update the knowledge but also improves their quality of life and mindset. For most of respondents science and technology related information means:

1. Information on happenings in the field of science and technology at world level
2. Information on science and technology news that directly affects our day-to-day life.
3. Information on new inventions and discoveries
4. Information on new researches
5. Information on space science

On the basis of readers/viewer's choice of most relevant categories of science and technology, researcher opted only these five categories for the further analysis of newspapers and TV channels and monitored only those news and programs.

Part II: What science communicators, journalists and scientists think on Science and Technology Coverage?

- Experts view shows that people have interest in science and technology news and programs; however media is not generating awareness among people by giving more coverage.
- It reveals that information about changing patterns, new findings and discoveries, news worthiness, relevance, news which develop scientific temper among people, awareness generation should be the criteria for selecting science and technology news.
- It shows that wide coverage of science and technology can help in changing people understanding about

- the subject.
- Research findings shows that scientific controversies are good but they should not be cheap and shallow.
- Experts views shows that science and technology coverage helps in fostering better understanding and practices in the society.

Part III: Analysis of Newspapers

The Times of India

- Category–The category which was covered in the news items of the Times of India newspaper in higher percentage was “what is happening in the field of science and technology around the world.
- Columns–The space given to science and technology news in the Times of India Newspaper was not sufficient. The news stories published in two columns were higher in percentage.
- Geographic Focus–The study revealed that the percentage of science and technology news was higher in percentage on the international page.
- Type of news stories–It was found that most of the science and technology news was published as the other news stories.
- Tables–The number of stories, which were published without tables, was higher in percentage.
- Statistical Formula–The number of stories, which were published without statistical formula, was higher in percentage.
- Mathematical Formula–The number of stories, which were published without mathematical formula, was higher in percentage.
- Visuals–The number of stories, which were published without proper visuals, was higher in percentage.
- Story Source–In this study researcher discovered major change in the findings, it was found that the number of news stories with Indian Source was higher than one with the foreign source.
- Tone of News–It was found that the stories with positive tone were higher in percentage.
- Purpose of news–The researcher found that in the Times o India Newspaper the maximum coverage was given to news stories which were scientifically explaining the unusual events, phenomenon, claims and reports.

The Hindu

- Category–It was found in this part of analysis of newspapers that the category which was covered in the news items of The Hindu newspaper in higher percentage was “Information on new Researches”.
- Columns–The news stories which were published in four columns were higher in percentage.
- Geographic Focus–The study revealed that the percentage of science and technology news was higher in percentage in the special edition of Hindu Newspaper which published every Thursday by the name of science and technology page.
- Type of news stories–It was found that most of the science and technology news was published as the other news stories.
- Tables–The number of stories, which were published without tables, was higher in percentage.
- Statistical Formula–The number of stories, which were published without statistical formula, was higher in percentage.
- Mathematical Formula–The number of stories, which were published without mathematical formula, was higher in percentage.
- Visuals–The number of stories, which were published with proper visuals, was higher in percentage.
- Story Source–In this study researcher discovered major change, it was found that the number of news stories with Indian Source was higher than one with the foreign source.
- Tone of News–It was found that the stories of positive tone were higher in percentage.
- Purpose of news–The researcher found that in the Hindu Newspaper the maximum coverage was given to news stories which were scientifically interpreting complex phenomenon, research and development results and scientific work in laymen’s language.

Analysis of TV Channels

Doordarshan

- Researcher recorded one month prime time news from 8 PM to 8.30 PM.
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- In one month study, the total number of news stories telecasted were 138, while the news stories on science and technology was only 14, which means only 10.14% coverage

Aaj Tak

- The researcher recorded one month prime time news from 8PM to 8.30 PM
- Total 161 news reports were telecasted and 91 news programs of high hour duration were telecasted but no news report or program was telecasted on science and technology.

Discovery Channel

- The researcher analyzed one month programs of Discovery Channel; total 920 programs were telecasted from the channel.
- Out of which 49 programs with repeat telecast were based on science and technology.
- If we can remove the numbers of repeat telecasts only 19 programs were telecasted on science and technology.
- Out of 19 programs on science and technology only one program was based on Indian science and technology.
- Out of five categories selected for the analysis of science and technology only one category “What is happening in the field of science and technology around the world” was covered in most of the programs telecasted from Discovery Channel.
- Researcher found that out of some units decided for the measurement of the purpose of the program, the unit which was mostly covered in the programs was “Bring out the potential of scientific/technical inventions in research and development works in an area.
- It was also found that most of the programs were in documentary format.
- The study revealed that research, good scripts, excellent camera work and good narration were some of the incentives of the interest of the programs.
- The analysis of objectives and concept of the program showed quality of content, treatment and presentation of all the programs telecasted from Discovery channels was good.
- Duration of each program was one hour.

National Geographic Channel

- The researcher analyzed one month programs of NGC, total 900 programs were telecasted from the channel.
- Out of which 69 programs with repeat telecast were based on science and technology.
- If we can remove the numbers of repeat telecasts only 12 programs were telecasted on science and technology.
- Out of 12 programs on science and technology only one program was based on Indian science and technology.
- Out of five categories selected for the analysis of science and technology only one category “What is happening in the field of science and technology around the world” was covered in the programs telecasted from NGC.
- Researcher found that out of some units decided for the measurement of the purpose of the program, the unit which was mostly covered in the programs was “Bring out the potential of scientific/technical inventions in research and development works in an area.
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- The analysis of objectives and concept of the program showed quality of content, treatment and presentation of all the programs telecasted from Discovery channels was good.
- Duration of each program was one hour.

Conclusion

- Readers and viewers were pretty conscious about what is being telecast on different channels on science and technology and also what is being published in the newspapers. Results of this study revealed that respondents were very much interested in reading and watching science and technology news/programmes. They wanted
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a separate page in newspapers and a separate channel for science and technology programmes. However, they also showed keen interest in programmes which can provide them knowledge as well as entertainment through such programs. Responses showed that science and technology news not only update the knowledge of readers/viewers but also improves quality of life and mindset.

- At the same time, it also comes out from the study that readers/viewers are not satisfied with the quantity of coverage being given by TV channels and newspapers to science and technology news. The study examines the programmes of two of the most popular channels Discovery and National Geographic Channel which give a wide coverage to science and technology programmes. They telecast science and technology related programmes on a regular basis but the programmes are generally based on researches done in foreign countries. It was found that though the quality of production and content in all their programmes was very excellent, these two channels still do not satisfy audiences' needs as far as quantity is concerned, especially in the context of the number of programmes based on Indian science and technology.
- More focus on country specific topics by understating the information needs of people will not only help in making channel more popular but it will definitely help in generating a scientific temper among masses.
- Channels which telecast news for 24 hours. It is an ample opportunity to cover science and technology news. But as discussed the coverage of science and technology news is very less, regional and need specific issues hardly get any place in the television programmes. It was found in the study that news channels do not give much coverage to science and technology news/programmes. It was also found that there is no regular slot for the science and technology news/programmes during the primetime on Doordarshan and Aaj Tak Channel. The irregularity in science and technology news/programmes definitely affects the interest of readers and viewers. These findings also match with the hypothesis of the study.
- The content of any science and technology news/programmes plays very important role in deciding its quality. However, sometimes the content of a programme does not match with the choice of viewers/readers, which is one of the reasons behind lack of interest in science and technology news/programmes. Sometimes television channels overlook viewers' level of knowledge, choice, interests and expectations. Hence, science and technology related news/ programs should be published/aired in a simple language to increase their popularity.
- Continuity and repetition of programs, time, space, topic, quality, presentation, readers/viewers' need and usefulness of the topic also play a very important role in holding the public attention.
- For readers and viewers, proximity matters a lot. If the televised/published content is not related to their area, they lose interest in the programme/news.
- Similarly, viewers/readers have a keen interest in the news/programmes, which provide them some answers or solutions of their day-to-day problems, needs and queries.
- The study reveals that these are some of the points which have been overlooked by the newspapers and TV channels in their science and technology news/programmes. These findings also match with the points which researcher had mentioned in the hypothesis of this study.

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