

# COVERAGE OF SCIENCE CONTENT IN SELECTED HINDI AND ENGLISH NEWSPAPERS

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## ABSTRACT

*Science and journalism are integral parts of human life. Keeping this view in mind this study focuses on the coverage of science in selected Hindi and English newspapers. The content analysis method was used to analyse the coverage of the science in four Hindi and English newspapers from the Dehradun, Uttarakhand. This research has concluded that the coverage of science is not appropriate in selected newspapers.*

**Keyword :** - *Science, Journalism, Coverage, Newspapers*

## 1. BACKGROUND

Science is an integral part of human society, we cannot think of human life without science. Science came in existence when the humans started to ask the questions like What, Where, When, Why, Whom and How? Basically, Science allowed humans to survive and improve their lifestyle. Technology which is the end product of scientific studies providing humans a way by which they can make their life better and better. Almost everything in our surroundings is due to science and technology. In this background knowledge of science and technology is very important for the humans. Here comes the role of journalism and journalist.

As science and technology, journalism is also an inseparable part of human life because we all are dependent on mass media system for the information of new things which is called news. There are majorly four types of media systems currently in trends as print media (all the printed material, Newspapers, Magazines etc), electronic media (Television and Radio), Cinema and new media (social networking sites, apps etc). All the types of media are playing important role in informing, to educating, to entertaining and helping in making the opinions. There are many consideration related to journalism as it is the fourth estate, voice of voiceless and it is also the watchdog of our society. If we focus only on science the role of journalism must focus on informing rightly and educate the people with the various scientific fields.

In India newspapers are playing an important role in educating and informing public. As per the data of 2019 by Indian Readership survey the newspaper readership in India is 425 Million. Hindi dailies had 186 million readers, while regional readership stood at 211 million and English newspaper readership is 31 million. It means that the newspaper readership in India is continuously growing.

Thus keeping this view in mind two most important aspects of human life science and journalism the researcher has decided to study the coverage of science in selected Hindi and English newspapers.

## 2. LITERATURE REVIEW

Journalism related to different fields of science is called science journalism. According to Manoj Patariya (2007), "Science journalism is the key for opening the complex thing like scientific knowledge, by which a journalist is able to carry the complex concepts of science to the common man." So, Science journalism utilizes the art of reporting complex phenomena of science and presenting it in a way so that the general public can understand it easily.

Fischhoff, B. (2013) says that science communication should effectively fulfill the understanding gap so that people can take informed decisions. To perform this task press should identify the science, which is relevant to the daily decisions that public at large face, should determine what public already know, should design the communication accordingly to fulfill the critical gaps and constantly evaluate the adequacy of the science communication exercise, and based on this make necessary adjustments.

Kumar (2013) studied and compared the coverage of science in two Hindi and Two English newspapers namely The Hindu, The Times of India, Dainik Bhaskar and Rajasthan Patrika. The researcher selected 36 issues out 365 issues from June 2011 to June 2012 and concluded that English newspapers and Hindi newspapers were allotted 2.34% and 1.74% space respectively for the coverage of science. Researcher also stated that coverage of health is the top priority in the both language.

Verghese (2016) compared science & technology coverage in two leading English newspapers namely Times of India and Deccan chronicle. He Studies the content of the newspapers from January 2014 to March 2014 and concluded that Environment (29.74%) and Health (20.49%) are majorly covered areas in science and technology and also stated the Times of India in dedicating more space than the Deccan Chronicle for this coverage.

On the basis of the above literature review the following objective have been framed:

**2.1: Objectives of the Study:** On the basis of above literature review and background the objectives of the study were designed as follows:

- To find the status of the coverage of science content in some selected newspapers.
- To find the categorical Weightages of different format for science coverage.
- To find the page preferences for science content coverage.

## 3.0: RESEARCH METHODOLOGY

**3.1: Research Design & Method:** This is a purely exploratory quantitative study, which usages content analysis as a method for the study of coverage of science in selected Hindi and English Newspapers.

**3.2: Selection of the Newspaper for Content Analysis:** Collection of Sample was done through systematic random sampling technique as follows:

### Hindi Newspapers

- Dainik Jagran,
- Hindustan
- Amar Ujala &
- Rashtriya Sahara

### English Newspapers

- Hindustan Times,
- The Times of India,
- Indian Express
- The Hindu

**3.3: Selection of Time Period for Content Analysis:** For Analysis of content related to science coverage the data from all eight selected newspapers was taken for analysis. The researcher collected the data from April 2015 to September 2015 from the first week of all months.

**3.4: Unit of Analysis:** Newspaper have normally two published segments one is published newsworthy content another is advertisement. So for this study the researcher has taken both things into consideration and divided all newspapers in two segments first is Edit space, a space which is related to newsworthy content and second is advertisement space which is related to different advertisements. So the researcher has selected news, features, news analysis, editorials, photos/graphics, and letter to editor, interviews/discussions and quarries related to science published in selected Hindi and English newspapers as unit of analysis.

**3.5: Variables related to Unit of Analysis:** On the basis of unit of analysis Space (in CM<sup>2</sup>), Page Placement, Space on Different Pages (in CM<sup>2</sup>), Subject Area, Subject Area Space as variables were selected to do the quantitative analysis of the content in selected Hindi and English newspapers.

### 3.6: Measurement of the Newspaper

**Total Space:** The total space of the newspaper is measured with following formula:

$$\text{Total Space} = (\text{Area of One page} \times \text{Number of Pages}) \text{ CM}^2$$

**Edit Space:** The edit space was calculated by using formula given below

$$\text{Edit} = (\text{Total Space} - \text{Space used for Advertisements}) \text{ CM}^2$$

**Percentage of Science Coverage (CM<sup>2</sup>):** The published space was measured with the scale manually, and the following formula was used to draw the percentage space of published science in the selected Hindi and English newspapers:

$$\% \text{ Space given to the Science in each selected Hindi \& English Newspapers} = \frac{\text{Space Given to the Science item} \times 100}{\text{Total Edit Space}}$$

**Percentage distribution of science items:** Percentage distribution of science items was calculated with the following formula:

$$\% \text{ of Science items published selected Hindi \& English Newspapers} = \frac{\text{No of individual Science item} \times 100}{\text{Total Number of Science items}}$$

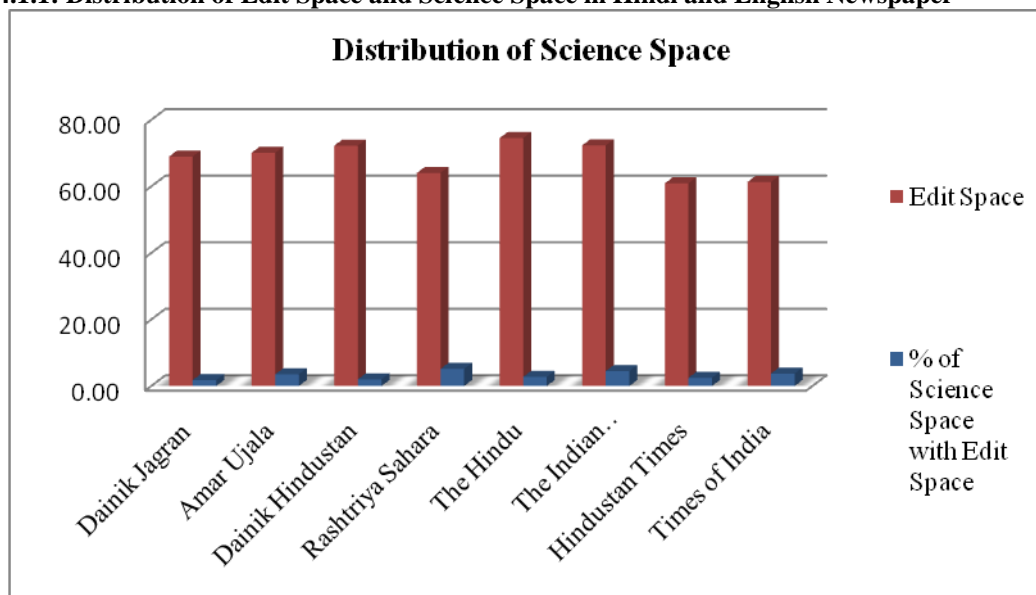
## 4. DATA ANALYSIS & PRESENTATION

**Table 4.1.1: Distribution of Space Allocation in selected Hindi and English Newspapers**

Newspaper	Total Space in Cm <sup>2</sup>	Edit Space in Cm <sup>2</sup> (% of Total Space)	Ad Space in Cm <sup>2</sup> (% of Total Space)	Space for Science in Cm <sup>2</sup>	% of Science Space with Edit Space
Dainik Jagran	1674432	1154520 (68.95%)	519912 (31.05%)	29400	1.76
Amar Ujala	1388016	972999 (70.10%)	415017 (29.90%)	48636	3.51
Dainik Hindustan	1388016	1002841 (72.25%)	385175 (27.75%)	27762	2.00
Rashtriya Sahara	1277856	818466 (64.05%)	459390 (35.95%)	65809	5.14
The Hindu	1678832	1250729 (74.50%)	428103 (25.50%)	44912	2.73
The Indian Express	1233792	892031 (72.30%)	341761 (27.70%)	55146	4.47
Hindustan Times	1850688	1127069 (60.90%)	723619 (39.10%)	45456	2.46

<b>Times of India</b>	1586304	972404 (61.30%)	613900 (38.70%)	59286	<b>3.74</b>
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Graph: 4.1.1: Distribution of Edit Space and Science Space in Hindi and English Newspaper



Above table and graph 4.1.1 clearly shows that during the study period from April 2015 to September 2015 in English Newspaper, 'The Hindu' is given the maximum edit space of 74.50% and in Hindi Newspaper, 'Dainik Hindustan' is given the maximum edit space of 72.25%. But 'The Indian Express' and 'Rashtriya Sahara' have given the maximum space for science content, 4.47% and 5.14% respectively. 'Times of India' with 3.74% and 'Amar Ujala' with 3.51% were on second position during the study period. In the below graph 4.1.1, it is clearly indicated that coverage of Science content in the selected English and Hindi newspapers is not adequate with respect to edit space given in the newspapers.

Table 4.1.2 (a): Distribution of Science content in selected English Newspapers

Types of Science Item/ Name of English Newspaper	The Hindu		The Indian Express		Hindustan Times		Times of India	
	No	%	No	%	No	%	No	%
News	36	45.57	35	41.67	40	51.95	38	46.34
Features	7	8.861	10	11.90	5	6.49	9	10.98
News Analysis	9	11.39	10	11.90	10	12.99	8	9.76
Editorial	6	7.595	10	11.90	5	6.49	4	4.88
Photos/ Graphics	10	12.66	10	11.90	11	14.29	12	14.63
Letter to Editor	2	2.532	1	1.19	2	2.60	0	0.00
Interviews/Discussions	5	6.329	6	7.14	4	5.19	5	6.10
Querries	4	5.063	2	2.38	0	0.00	6	7.32
<b>Total</b>	<b>79</b>	<b>100</b>	<b>86</b>	<b>100</b>	<b>81</b>	<b>100</b>	<b>80</b>	<b>100</b>

During the study period, as per the above table 4.1.2(a) among all four English newspapers, 'The Indian Express' secured the first position by publishing 86 Science content. 'Hindustan Times', 'The Times of India' and 'The Hindu' came on second, third and fourth position with the publication of 81, 80 and 79 science content

respectively. In terms of News items 'Hindustan Times' got the first place with publication of 40 (51.95 %) news items (Science) and 'Times of India' comes at second position with 38 (46.34 %) news items. 'The Indian Express' published 10 (11.90 %) editorial article followed by 'The Hindu', 6 (7.60%). In the category of science news analysis, interviews/ discussions, letters to editor, photo/ graphics, all the newspapers are having close fight. In terms of features and queries, 'The Indian Express' secured the first position with 10 feature articles and queries.

**Table 4.1.2 (b): Distribution of Science content in selected Hindi Newspapers**

Types of Science Item/ Name of Hindi Newspaper	Dainik Jagran		Amar Ujala		Dainik Hindustan		Rashtriya Sahara	
	No	%	No	%	No	%	No	%
News	38	54.29	42	46.67	36	46.15	42	38.53
Features	8	11.43	10	11.11	10	12.82	15	13.76
News Analysis	6	8.57	9	10.00	8	10.26	13	11.93
Editorial	5	7.14	6	6.67	6	7.69	10	9.17
Photos/ Graphics	6	8.57	10	11.11	9	11.54	15	13.76
Letter to Editor	2	2.86	4	4.44	3	3.85	2	1.83
Interviews/Discussions	2	2.86	4	4.44	2	2.56	6	5.50
Querries	3	4.29	5	5.56	4	5.13	6	5.50
<b>Total</b>	<b>71</b>	<b>100</b>	<b>89</b>	<b>100</b>	<b>78</b>	<b>100</b>	<b>107</b>	<b>100</b>

During the study period, as per the above table 4.1.2(b) among all four Hindi newspapers, 'Rashtriya Sahara' secured the first position by publishing 107 Science contents. 'Amar Ujala', 'Dainik Hindustan' and 'Dainik Jagran' came on second, third and fourth position with the publication of 89, 78 and 71 science contents respectively. In terms of News items, 'Rashtriya Sahara' and 'Amar Ujala' got the first place with publication of 42 science news items and Dainik Jagran comes at second position with 38 science news items but in terms of percentage, 'Dainik Jagran' (54.29%) secured the first place in publication of science news items. 'Rashtriya Sahara' published 10 (9.17%) editorial articles followed by 'Amar Ujala' and 'Dainik Hindustan' with a count of 06. In the category of science news analysis, 'Rashtriya Sahara' topped with 13 in number followed by 09 of 'Amar Ujala'. 'Rashtriya Sahara' again topped in terms of science features with 15 in number and 13.76 in percentage followed by 'Amar Ujala' (10), 'Dainik Hindustan' (10) and 'Dainik Jagran' (8) respectively. In other categories like Interview/ Discussions, Querries, Photo/ graphics, 'Rashtriya Sahara' secured the first place. In the category regarding letters to editor, 'Amar Ujala' got the number one position.

**Table 4.1.3: Distribution of format of Science content in selected Hindi and English Newspapers**

Format of Science content	No of Items in Hindi Newspapers	%	No of Items in English Newspapers	%
News	158	45.53	149	46.27
Features	43	12.39	31	9.63
News Analysis	36	10.37	37	11.49
Editorial	27	7.781	25	7.76
Photos/ Graphics	40	11.53	43	13.35
Letter to Editor	11	3.17	5	1.55
Interviews/Discussions	14	4.035	20	6.21
Querries	18	5.187	12	3.73
<b>Total</b>	<b>347</b>	<b>100</b>	<b>322</b>	<b>100</b>



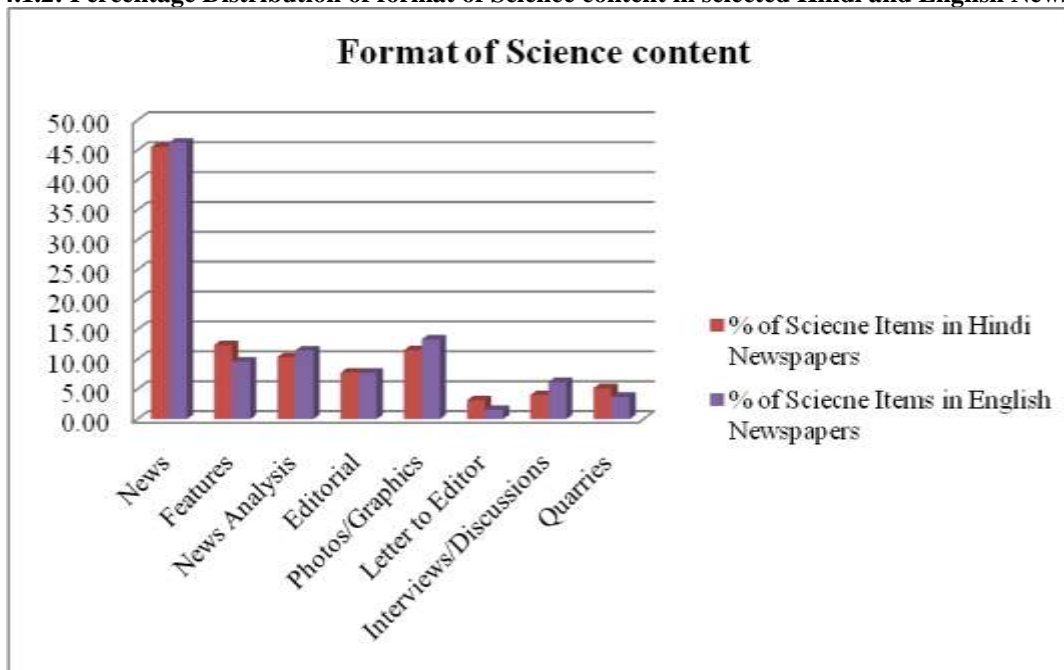
**Graph 4.1.2: Percentage Distribution of format of Science content in selected Hindi and English Newspapers**

Table 4.1.3 and Graph 4.1.2 shows that the total number of science content published in various format of news, features, news analysis, editorials, photos/ graphics, letters to editor, interviews/ discussions and queries are 333 and 314 respectively in Hindi and English Newspapers. It shows that Hindi Newspapers are publishing more science news than English newspapers. In terms of percentage of categories like news, news analysis, photos/ graphics, English newspapers are on first place but in other categories like features, editorials, letters to editor, interviews/ discussions and queries, Hindi newspapers are the winners.

**Table 4.1.4 (a): Distribution of Space given to different format of Science content in selected English Newspapers**

Format of Science content/ Name of English Newspaper/ Space CM <sup>2</sup>	The Hindu		The Indian Express		Hindustan Times		Times of India	
	Space	%	Space	%	Space	%	Space	%
News	18449.85	41.08	23177.86	42.03	21846.15	48.06	29079.78	49.05
Features	8196.44	18.25	9992.46	18.12	6163.83	13.56	8234.83	13.89
News Analysis	5748.74	12.80	7858.31	14.25	5872.92	12.92	6076.82	10.25
Editorial	4266.64	9.50	4703.95	8.53	3627.40	7.98	4879.38	8.23
Photos/ Graphics	4917.86	10.95	6203.92	11.25	5295.62	11.65	7250.68	12.23
Letter to Editor	251.51	0.56	452.20	0.82	295.46	0.65	498.00	0.84
Interviews/ Discussions	2178.23	4.85	1681.95	3.05	1404.59	3.09	2407.04	4.06
Querries	902.73	2.01	1075.35	1.95	950.03	2.09	859.47	1.45
<b>Total</b>	<b>44912</b>	<b>100</b>	<b>55146</b>	<b>100</b>	<b>45456</b>	<b>100</b>	<b>59286</b>	<b>100</b>

Table 4.1.4(a) clearly indicates the distribution of space given to science content in selected English newspapers in terms of News, features, News Analysis, Editorials, Photo/ Graphics, Letters to editor, Interviews/ Discussions and Querries published during the study period. In English newspapers, 'Times of India' has 49.05% of total science space followed by 'The Hindustan Times' (48.06%), 'The Indian Express' (42.03%) and 'The Hindu' (41.08%). In features category, 'The Hindu' (18.25%) topped the category followed by 'The Indian Express' (18.12%), 'The Times of India' (13.89%) and 'Hindustan Times' (13.56%). In News Analysis, 'The Indian Express' (14.25%) is on top followed by 'Hindustan Times' (12.92%), 'The Hindu' (12.80%) and 'Times of India' (10.25%). 'The Hindu' led in Editorial items (9.50%) followed by 'The Indian Express' (8.53%), 'The Times of India' (8.23%) and 'Hindustan Times' (7.98%). 'Times of India' published the highest photos/ graphics (12.23%) followed by 'Hindustan Times' (11.65%), 'The India Express' (11.25%) and 'The Hindu' (10.95%). In Letters to Editors, 'Times of India' (0.84%) is on top followed by 'The Indian Express' (0.82%), 'Hindustan Times' (0.65%) and 'The Hindu' (0.56%). 'The Hindu' (4.85%) has given top space to Interviews/ Discussions followed by 'Times of India' (4.06%), 'Hindustan Times' (3.09%). In regards to space allotted to querries, 'The Indian Express' (3.05%), 'Hindustan Times' (2.09%), 'The Hindu' (2.01%), 'The Indian Express' (1.95%) and 'Times of India' (1.45%).

**Table 4.1.4 (b): Distribution of space given to format of Science content in selected Hindi Newspapers**

Format of Science content/ Name of Hindi Newspaper/ Space Cm2	Dainik Jagran		Amar Ujala		Dainik Hindustan		Rashtriya Sahara	
	Space	%	Space	%	Space	%	Space	%
News	15364.44	52.26	24376.36	50.12	14730.52	53.06	32437.26	49.29
Features	4101.30	13.95	6609.63	13.59	3670.13	13.22	8061.60	12.25
News Analysis	1546.44	5.26	3817.92	7.85	1179.89	4.25	3580.00	5.44
Editorial	1778.70	6.05	3039.75	6.25	2012.76	7.25	6482.19	9.85
Photos/ Graphics	4077.78	13.87	5841.18	12.01	4180.95	15.06	8746.02	13.29
Letter to Editor	367.50	1.25	690.63	1.42	485.84	1.75	822.61	1.25
Interviews/ Discussions	1581.72	5.38	3205.11	6.59	857.84	3.09	4573.73	6.95
Querries	582.12	1.98	1055.42	2.17	644.07	2.32	1105.59	1.68
<b>Total</b>	<b>29400</b>	<b>100</b>	<b>48636</b>	<b>100</b>	<b>27762</b>	<b>100</b>	<b>65809</b>	<b>100</b>

Table number 4.1.4(b) clearly indicates the distribution of space given to science content in selected Hindi newspapers in terms of News, features, News Analysis, Editorials, Photo/ Graphics, Letters to Editor, Interviews/ Discussions and Querries published during the study period. In Hindi newspapers, 'Dainik Hindustan' has 53.06% of total science space followed by 'Dainik Jagran' (52.26%), 'Amar Ujala' (50.12%) and 'Rashtriya Sahara' (49.29%). In features category, 'Dainik Jagran' (13.95%) topped the item category followed by 'Amar Ujala' (13.59%), 'Dainik Hindustan' (13.22%) and 'Rashtriya Sahara' (12.25%). In News Analysis, 'Amar Ujala' (7.85%) is on top followed by 'Rashtriya Sahara' (5.44 %), 'Dainik Jagran' (5.26%) and 'Dainik Hindustan' (4.25%). 'Rashtriya Sahara' led in Editorial items (9.85%) followed by 'Dainik Hindustan' (7.25%), 'Amar Ujala' (6.25%) and 'Dainik Jagran' (6.05%). 'Dainik Hindustan' published the highest photos/ graphics (15.06%) followed by 'Dainik Jagran' (13.87%), 'Rashtriya Sahara' (13.29%) and 'Amar Ujala' (12.01%). In Letters to Editor, 'Dainik Hindustan' (1.75%) is on top followed by 'Amar Ujala' (1.42%) and 'Rashtriya Sahara' (1.25%). 'Rashtriya Sahara' (6.95%) has given top space to Interviews/ Discussions followed by 'Amar Ujala' (6.59%), 'Dainik Jagran' (5.38%) and 'Dainik Hindustan' (3.09%). In space given to querries, the figures were 'Dainik Hindustan' (2.32%), 'Amar Ujala' (2.17%), 'Dainik Jagran' (1.98%) and 'Rashtriya Sahara' (1.68%)

**Table 4.1.5: Distribution of Space given to format of Science content in selected Hindi and English Newspapers**

Format of Science content/ Space Cm <sup>2</sup>	Space in Hindi Newspapers Cm <sup>2</sup>	%	Space in English Newspapers Cm <sup>2</sup>	%
News	86908.58	50.64	92553.64	45.19
Features	22442.66	13.08	32587.56	15.91
News Analysis	10124.25	5.90	25556.79	12.48
Editorial	13313.40	7.76	17477.37	8.53
Photos/Graphics	22845.93	13.31	23668.08	11.56
Letter to Editor	2366.58	1.38	1497.17	0.73
Interviews/ Discussions	10218.40	5.95	7671.81	3.75
Quarries	3387.20	1.97	3787.58	1.85
Total	171607	100	204800	100

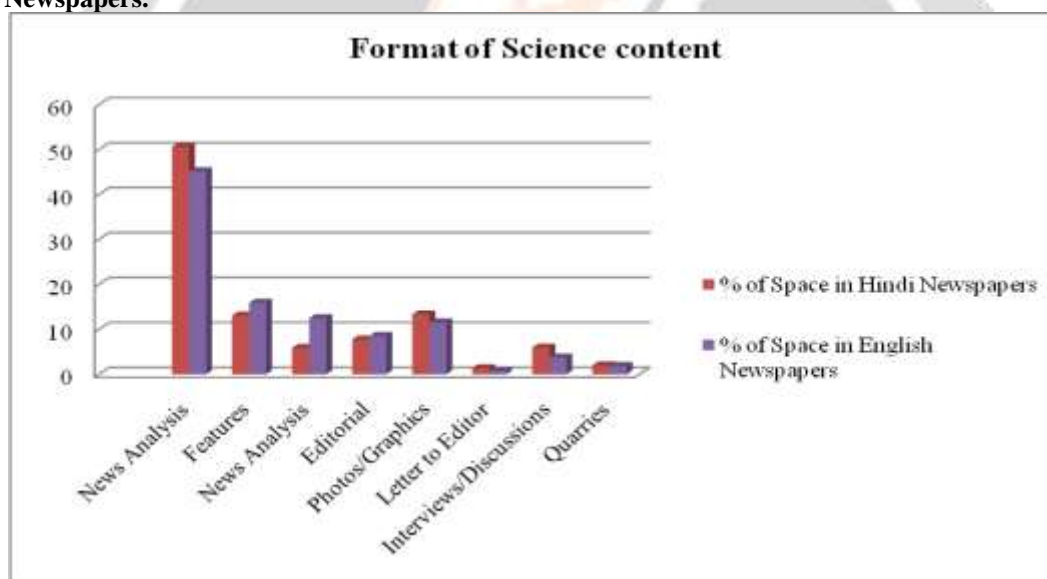
**Graph 4.1.3: Percentage distribution of Space given to Format of Science content in selected Hindi and English Newspapers.**

Table 4.1.5(a) and Graph 4.1.3 shows distribution of space given to format of Science Items in selected Hindi and English Newspapers. In Hindi Newspapers, science news had 50.64% space of the total space given to the science items. News is followed by Photo/ Graphics which have been given 13.51% space which falls in second position in all science content. It is followed by the features (13.08%), Editorials (7.76%), News analysis (5.90%), Interviews/ Discussions (5.95%), Quarries (1.97%) and Letters to Editor (1.38%). In English Newspapers, science news had 45.19% space of the total space given to the science items. News is followed by features which have been given 15.91% space. It is followed by News analysis (12.48%), Photo/ Graphics (11.56%), Editorials (8.53%), Interviews/ Discussions (3.75%), Quarries (1.85%) and Letters to Editor (0.73%). It suggested that maximum weightage has been given to News in all the science items.



**Table 4.1.5(a): Distribution of Pages Placement to Science content in selected English Newspapers**

Page Placement/ Name of English Newspaper	The Hindu		The Indian Express		Hindustan Times		Times of India	
	No	%	No	%	No	%	No	%
Front Page	4	5.80	5	6.76	6	9.09	5	7.14
Editorial Page	12	17.39	13	17.57	11	16.67	8	11.43
Science and Tech Page	7	10.14	9	12.16	6	9.09	4	5.71
Supplement	16	23.19	20	27.03	15	22.73	17	24.29
Other pages	30	43.48	27	36.49	28	42.42	36	51.43

Table no 4.1.5(a) indicates the page placement of the science content in selected English newspapers. It has been divided into five categories viz. front page, editorial page, science and tech page, supplement and other pages. 'Times of India', 'The Hindu', 'Hindustan Times' and 'The Indian Express' is published 51.43%, 43.48%, 42.42% and 36.49% respectively on the other pages of the newspaper. Supplements are on the second place with 'The Indian Express' (27.03%), 'Times of India' (24.29%), 'The Hindu' (23.19%) and 'Hindustan Times' (22.73%). Editorial page is on third number. The Indian Express is 17.57%, Hindustan Times (16.67%) and Times of India (11.43%) in terms of coverage. On science and tech page 'The Indian Express' is published 12.16% followed by 'The Hindu' (10.14%), 'Hindustan Times' (9.09%) and 'Times of India' (5.71%). Front page has the least coverage of science items in which 'Hindustan Times' (9.09%) has given highest coverage on front page followed by 'Times of India' (7.14%), 'The Indian Express' (6.76%) and 'The Hindu' (5.80%).

**Table 4.1.5(b): Distribution of Page Placement to Science content in selected Hindi Newspapers**

Page Placement/ Name of Hindi Newspaper	Dainik Jagran		Amar Ujala		Dainik Hindustan		Rashtriya Sahara	
	No	%	No	%	No	%	No	%
Front Page	4	5.71	6	6.67	4	5.13	5	4.59
Editorial Page	10	14.29	16	17.78	12	15.38	15	13.76
Science and Tech Page	9	12.86	18	20.00	17	21.79	17	15.60
Supplements	19	27.14	17	18.89	16	20.51	32	29.36
Other pages	28	40.00	33	36.67	29	37.18	40	36.70

Table no 4.1.5(b) indicates the page placement of the science content in selected Hindi Newspapers. It has been divided into five categories viz. front page, editorial page, science and tech page, supplement and other pages. 'Dainik Jagran', 'Dainik Hindustan', 'Amar Ujala' and 'Rashtriya Sahara' are published 40.00%, 37.18%, 36.70% and 36.67% respectively on the other pages of the newspaper. Supplements are on the second place with 'Rashtriya Sahara' (29.36%), 'Dainik Jagran' (27.14%), 'Dainik Hindustan' (20.51%) and 'Amar Ujala' (18.89%). Science and Tech is on third priority with 'Dainik Hindustan' (21.79%), 'Amar Ujala' (20.00%), 'Rashtriya Sahara' (15.60%) and 'Dainik Jagran' (12.86%) coverage. On Editorial Page 'Amar Ujala' has published 17.78% followed by 'Dainik Hindustan' (15.38%), 'Dainik Jagran' (14.29%) and 'Rashtriya Sahara' (13.76%). Front page has the least coverage of science items in which 'Amar Ujala' (6.67%) has given highest coverage on front page followed by 'Dainik Jagran' (5.17%), 'Dainik Jagran' (5.13%) and 'Rashtriya Sahara' (4.59%).

**Table 4.1.6: Distribution of Page Placement of Science content in selected Hindi and English Newspapers**

Pages Placement of Science content	No. of Science News in Hindi Newspapers	%	No. of Science News in English Newspapers	%
Front Page	9	2.59	27	8.38
Editorial Page	53	15.27	50	15.5
Science and Tech Page	61	17.58	32	9.93
Supplements	84	24.21	75	23.29
Other pages	140	40.35	138	42.86
<b>Total</b>	<b>347</b>	<b>100%</b>	<b>322</b>	<b>100%</b>

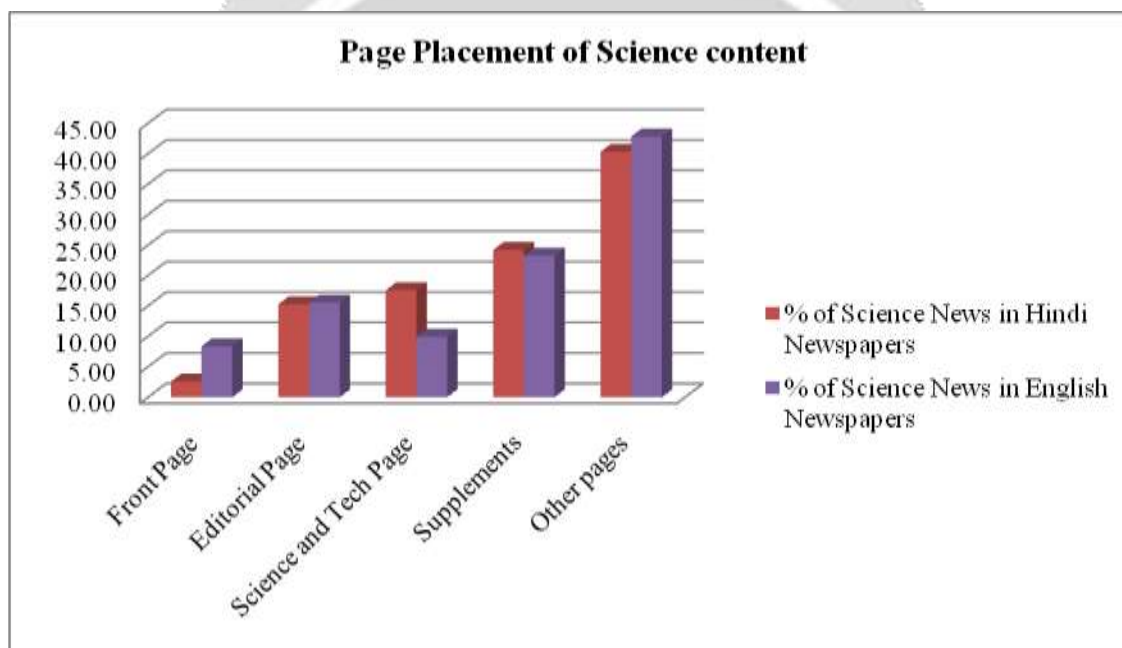
**Graph 4.1.4: Percentage distribution of Page Placement of Science content in selected Hindi and English Newspapers**

Table 4.1.6 and graph 4.1.4 indicates the page placement of the science news in selected Hindi and English Newspapers. In Hindi Newspapers, out of **347** science items 140(40.35%) items are placed on other pages followed by 84(24.21%) on supplements, 61(17.58%) on science and tech page, 53(15.27%) on Editorial Page and 09(2.59%) on Front page. In English Newspapers, out of **322** science items, 138 (42.86%) items are placed on other pages followed by 75(23.29%) on supplements, 50(15.5%) on Editorial page, 32(9.93%) on Science and Tech page and 27(8.38%) on Front page. It gives an analysis that science items have been given the least importance in both Hindi and English Newspapers as most of them are placed on other pages.

**Table 4.1.7(a): Distribution of Space on Pages to Science content in selected English Newspapers**

Page Placement/ Name of English Newspaper	The Hindu		The Indian Express		Hindustan Times		Times of India	
	Space	%	Space	%	Space	%	Space	%
Front Page	3768.11	8.39	4615.72	8.37	3809.21	8.38	4980.02	8.40

<b>Editorial Page</b>	<b>6988.31</b>	<b>15.56</b>	<b>8045.80</b>	<b>14.59</b>	<b>6927.50</b>	<b>15.24</b>	<b>9124.12</b>	<b>15.39</b>
<b>Science and Tech Page</b>	<b>6534.69</b>	<b>14.55</b>	<b>7455.73</b>	<b>13.52</b>	<b>4704.69</b>	<b>10.35</b>	<b>5525.46</b>	<b>9.32</b>
<b>Supplements</b>	<b>9602.20</b>	<b>21.38</b>	<b>12258.96</b>	<b>22.23</b>	<b>11082.18</b>	<b>24.38</b>	<b>14886.71</b>	<b>25.11</b>
<b>Other pages</b>	<b>18018.69</b>	<b>40.12</b>	<b>22769.79</b>	<b>41.29</b>	<b>18932.42</b>	<b>41.65</b>	<b>24769.69</b>	<b>41.78</b>

Table 4.1.7(a) indicates the distribution of the space on the pages given to science content in selected English News papers. 'Times of India', 'Hindustan Times', 'The Indian Express' and 'The Hindu' have given 41.78%, 41.65%, 41.29% and 40.12% of space respectively on the other pages of the newspapers. Supplements are on the second place in space distribution with 'Times of India' (25.11%), 'Hindustan Times' (24.38%), 'The Indian Express' (22.23%) and 'The Hindu' (21.38%). On Editorial page, 'The Hindu' (15.56%), 'Times of India' (15.39%), 'Hindustan Times' (15.24%) and 'The Indian Express' (14.59%) space. 'The Hindu' (14.55%) followed by 'The Indian Express' (13.52%), 'Hindustan Times' (10.35%) and 'Times of India' (9.32%) for space given on science and tech page. Front page has the least space for the science items and almost all the selected English newspapers have given 8.40% space to science content on the front page.

## 5. DISCUSSION AND CONCLUSION

Table 4.1.1 and Graph 4.1.1 indicates about the coverage of science content in selected Hindi and English newspapers. It also gives a clear picture that the coverage of science content is below 5% with exception of only Rashtriya Sahara which has given 5.14% space during the study period. As far as the edit space is concerned, science content has been given lesser coverage than other categories published in newspapers.

Table 4.1.2(a), 4.1.2(b), 4.1.3 and Graph 4.1.2 analyses about the format weightages given to different science content. Among all the science content published in the selected Hindi and English newspapers Science News has got the highest weightage followed by the photos/ graphics, features, news analysis, interviews/ discussion, queries and letter to editors.

Table 4.1.5(a), 4.1.5(b), 4.1.6 and Graph 4.1.4 analyses about the page preferences for different science content. Among all the science content published in the selected Hindi and English newspapers Other Pages has got the maximum coverage followed by the Supplements, Editorials, Science and Tech and Front Page.

So, it can be concluded after extensive content analysis that the coverage of science news in some selected newspapers is poor, The categorical weightage of different science news is also studied it has been concluded that Science news has got the maximum space in between the all other science items, news related to science have been published maximum on the other pages rather of science tech page or front page or in supplements.

## 6. REFERENCES

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