



“Solution Journalism” in Pakistani Print Media: A Comparative Analysis of English Press Coverage of Environmental Reporting in Pakistan

Khayam Hassan

PhD Scholar, Department of Media and Communication Studies, NUML, Islamabad

khayamhasan@gmail.com

Dr. Aqeel Ahmed

Lecturer, Department of Media and Communication Studies, NUML, Islamabad,

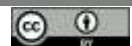
aahmed@numl.edu.pk

Dr. Sajjad Ali

Assistant Professor, Department of Journalism & Mass Communication, University of Malakand, sajjadjmc@uom.edu.pk

Abstract

This study provides a comparison of problem-solving journalism in the context of environmental issues reported in Urdu and English print media in Pakistan. Solution journalism, also known as constructive journalism, focuses on solving social problems as well as traditional journalism. This study explores how environmental issues are presented in Urdu and English newspapers in Pakistan, with particular emphasis on the presentation of solutions and their impact on public discourse, language and policy-making. This study uses content analysis techniques to analyze articles published in a sample of major Urdu and English newspapers during a specific period. The review included determining the environmental issues discussed types of solutions, tone of the report, and level of stakeholder involvement. This study also discusses editorial content that may affect the differences between Urdu and English newspapers. Preliminary findings show that there are differences in depth and scope in the coverage of environmental issues between Urdu and English newspapers. While Urdu newspapers tend to focus more on local and community-based solutions, considering the importance of readers, English newspapers often talk about international projects and the country. The study also found a difference on environmental issues, where Urdu newspapers focused on human stories, while English newspapers focused on policy implementation and research. The study's results have implications for journalistic practices in Pakistan and highlight the potential of problem-solving journalism to foster meaningful dialogue and encourage work on environmental issues. These findings are leading to a growing



body of research on problem-solving journalism and its role in promoting social change.

Keywords: Solution Journalism, Print Media, A Comparative Analysis, Urdu and English Press Environmental Reporting, Pakistan

Introduction

The United Nations has set its seventeen Sustainable Development Goals (SDGs) as global framework to address global challenges and achieve sustainable developed societies by 2030. Journalism, while performing information-communication role, also serves as an extra-legal check over government and society. The traditional journalism with a focus on news reporting and holding the powerful accountable has transformed over the years in view of increasingly complex challenges that the societies face (Farid, 2023). The contemporary challenges have warranted a more comprehensive and proactive approach that should extend its domain beyond simply highlighting problems. Solution journalism, also identified as constructive journalism actively explores and proposes solutions, fosters societal and social change and encourages informed public discourse (Dũ, 2024). It offers an approach that may help societies advance towards achieving these sustainable development goals by emphasizing on social issues, rather than simply reporting problems. This approach may inform and inspire the audiences, and ultimately foster societal innovation and resilience. Pakistan's media landscape has been diverse with range of traditional print and broadcast industries to modern digital outlets, reflective of varied sociocultural and linguistic representations that cater to different local audience and globally-connected segments. This is, however, unfortunate, that, this diverse media landscape is yet to adopt modern tactics of constructive reporting in the society.

Solution Journalism

The problem-centric orthodox journalism has transformed into solution or constructive journalism, focusing on societal development and positive change. It does not mean that exposing malpractices is no more essential. The societal modernization trends emphasize on going beyond the traditional negativity and public disillusionment. Journalism's diverse functions, especially the civic and service functions, in today's society play an significant role in growth and development of societies (A. Ahmed & Shah, 2023). Derived out of these functions is the solution journalism that lays down a way forward to guarantee viable solutions to

developmental challenges. One of the key approaches practiced by solution journalism is creating awareness on various societal challenges and issues (Lough, 2018). By doing so, the journalism professionals not only inform masses but also engages, persuade and empower them for initiatives, aligning journalism objectives to serve public interest of the societies.

Among the myriad challenges faced by the modern societies today, the climate change and environment have been the worst pressing global challenge, which has altered natural ecosystem. The rising global temperature with recurrent and intense heatwaves depicts a frightening picture (Forster et al., 2023; P. Singh et al., 2021). The climatic calamities have worst-affected the Subcontinent region during the last few years, disturbing the annual traditional monsoon cycle with abrupt and simultaneous rainfalls and droughts. The devastating floods in Pakistan in 2022 leading to one of the biggest humanitarian crises in the country followed by similar condition in India and Bangladesh the following year, leaving thousands of men dead, millions of people homeless and hectares of agricultural land lost have made the region the worst-affected parts of the earth due to climate and environmental changes. Besides this growing pollution, enhanced deforestation, and shrinking biodiversity fall among the global issues that require immediate attention and solution. Effective environmental journalism, constructive in nature and suggestive of logical solution is need of the hour to raise awareness on environmental issues to persuade public opinion, and shape managerial policies (Kumar, 2023). However, the typical traditional, event-based environmental journalism that reports time-specific issues can only contribute to helplessness and inaction. Solution journalism, on the other hand, offers a suitable alternative, with balanced narrative of highlighting the challenges and providing potential solutions.

In view of the dearth of research and practice in the field of solution of constructive journalism, this study aims to focus on comparative portrayal of environmental issues in the leading Pakistani Urdu and English newspapers in view of solution or constructive journalism. The study has selected editorial pieces with an emphasis on the presentation of solutions and impact on public discourse, language and policy-making. While selecting the editorial content, the researchers considered various types of solutions presented on environmental issues, tone of the report, and level of stakeholder involvement. The researchers also attempted to explore the difference of effect of portrayal between the Urdu and English newspapers.

Objectives of the Study

- To explore the coverage of environmental issues and dependency of leading Pakistani English newspapers on national & international information sources
- To examine the coverage of audience engagement methods & techniques and responsible stakeholders & bodies of environmental issues in the leading Pakistani English newspapers
- To investigate the existence of Solution journalism qualities (Problem response, evidence, insight/lesson for audience and limitations) in the coverage of environmental issues in the leading Pakistani English newspapers

Research Questions

RQ1: Why the leading Pakistani English newspapers covered the environmental issues and is there difference between national & international information sources dependency?

RQ2: What methods & techniques applied in coverage for the audience engagement and who considered responsible stakeholders & bodies of environmental issues in the leading Pakistani English newspapers?

RQ3: What is the level of existence of Solution journalism qualities (Problem response, evidence, insight/lesson for audience and limitations) in the coverage of environmental issues in the leading Pakistani English newspapers?

Literature Review

The solution journalism or the constructive journalism is identified as one of the contemporary journalistic approaches that prioritizes the response coverage of social issues rather than merely presenting facts and figures on problems in the society. The solution journalism is marked by rigorous reporting with effective evidence on the responses to social issues, also highlighting challenges and limitations on the subject matter. It is considered as more productive and constructive approach because of its work on building informed citizenry, and proactive public engagement in solving societal issues. The concept, though, is not entirely new, it has significantly evolved over time, dating back to the early 20th century when the advocacy journalism, focusing on social reformation, started emerging. Demand of the solution journalism,

however, has been intense in the recent times in wake of bigger global threats rather challenges like climate change faced by the world today. Various studies conducted involving different aspects of the solution journalism indicate an impact on public engagement and constructive contribution to sustainable development of societies.

Lowes and Ferguson (2021) stated that the field of journalism has experienced significant changes, transitioning itself to the solutions journalism, mainly because of social media and the rise of citizen journalism in the recent times. They suggested that this new form has been different from the traditional journalism because of its focus on investigation of issues, presentation of solutions to the issues, and proactive public engagement. Thanh et al. (2023) examined the rise and role of solution journalism in the society, recognizing that many journalism setups have now transitioned themselves towards solutions journalism, while documenting the training of over 3,000 journalists by 2017. Murray and Stroud (2019) argued that the organizations which aim to attract larger audiences must focus on solutions journalism, and the journalists should explain both issues and response before offering comprehensive solutions to challenges under discussion in news and current affairs.

Rice (2021) in during research carried out at Appalachian State University explored that the climate change had gained prime focus of media and the journalists had explored something new to work on as reporters in context of solutions journalism. Boyagoda (2016) in her study carried out, while adopting qualitative in-depth interviews methodology, explored the challenges that the journalists working on environmental beats for Sri Lankan newspapers faced. The research revealed impediments like editors' lack of acquaintance with environmental issues, insufficient institutional support and professional training, work pressures, political economy, complex nature of environmental issues, and snags in access to information from the sources that could be counted as challenges to the solutions journalism in Sri Lanka in context of environmental reporting. In a similar kind of study conducted in Pakistan, Manzoor and Ali (2021) explored the perception of Pakistani journalists about coverage of issues related to climate change in the country through qualitative interviews and found out that limitation of resources and equipment, lack of trainings and skilled workforce and misinformation were among the major drawbacks in reporting climate change and environmental issues.

Trionfi and Salzenstein (2024) in their report for International Press Institute (IPI) that they based on 40 in-depth interviews of the journalists reporting on environmental and climate change issues from 21 countries stated that independent and accurate journalism was vital to address the global climate change threats. They also revealed that the journalists who exposed malpractices, disinformation and illegal activities while reporting on climate change and issues related to environment faced life threats and harassment, and censorship. AbdelGhaffar (2023) conducted a study at Amiran University in Cairo involving the area of solutions journalism in context of climate change and environmental issues with a particular focus on Egypt and United Arab Emirates. The researcher explored that the climate change was a significant global threat rather than merely a challenge that could be countered through solutions journalism, which may engage and empower the audience to do so. This research also highlighted that there was a growing need of more and in-depth research in the Global South, also providing a basis for the current study. In one of the rarest of its kind studies conducted in Pakistan, Ahmed et al. (2020) examined the perception of environmental journalists about media coverage of climate change through survey by applying snowball sampling technique. The study explored that climate change and environmental threats posed risks to life of people in Pakistan. Coverage of environmental issues by media in Pakistan was unsatisfactory according to the journalists themselves.

The literature quoted above demonstrates that there is dearth of academic research about solutions journalism in Pakistan, particularly with a focus on environmental journalism. The review of literature also provides the researchers a gap in term of exploration of frames in the print media. Hence the current study has explored portrayal (framing) of environmental issues in the leading Pakistani Urdu and English newspapers. It has attempted to investigate the impact of solutions or constructive journalism on public discourse, language and policy-making. Furthermore, the study has also examined the difference of effect of portrayal between Pakistani Urdu and English newspapers about various types of solutions presented on environmental issues, tone of the report, and level of stakeholder involvement.

Method and Materials

This applied exploratory sequential method (qualitative methodology) to know that how Pakistan English leading newspaper coverage the environmental issues and to find out existence of Solution journalism qualities (Problem response, evidence, insight/lesson for audience and

limitations) in the coverage of environmental issues in the leading Pakistani English newspapers. While contents analysis of two leading English newspaper i.e. *Daily Dawn and Daily The News International* were explored of one Years from January 01, 2023 to December 31, 2023 to determine the coverage and presence & type of Solution Journalism in environmental stories. A deductive coding approach was used in the coding sheet for the data collection. Themes and codes were based on the Solution Journalism qualities including Problem response, evidence, Insight/lesson for audience and limitations.

Data was collected from all pages of the selected newspaper excluding editorial and op-ed pages while Sunday Magazine stories were also included. The coverage of environmental issues were measured in month & date and pages & columns, whereas, environmental issues theme was adopted to find out the different kinds & types of environment in Pakistan (pollution, climate change, biodiversity, plants, wildlife etc.). To investigate the responsible bodies to environmental issues in Pakistan, a theme named stakeholders was put in the coding sheet (government, NGOs, community, experts, academic research etc.). Additionally, audience engagement is an art to change the mentality of them that's why the researchers applied two themes including audience engagement (call for action, feedback, information, awareness, education etc.) and engagement techniques (infographics, photos, experts quotes, charts, tables etc.). On the other hand, two more themes including source of information and dateline were used in coding sheet to find out the national & international sources of information of the news stories because it has been observed that developing countries media mostly dependent on foreign source of information.

For the data collection, two graduate students were trained and collected data of three months from the selected newspaper to ensure reliability in the data. Inter-coder reliability was checked and then deployed to collected data from the one year of Daily Dawn and Daily The News International. Data was processed for cleaning in spread sheet through Open-Refine process to remove errors and spelling mistakes and duplication in names/titles etc. descriptive statistics were applied for data analysis and data presented in frequencies tables and cross-tabulations.

Findings Discussion

Topic: coverage of environmental issues in print media of Pakistan

Table 1 News Stories related to environmental issues in Daily Dawn & Daily The News

Newspaper	Frequency	Percent
Daily Dawn	280	39.7
Daily The News International	425	60.3
Total	705	100.0

Table 1 illustrates the coverage of both newspapers related to environmental issues that 40% (280 out of 705) stories were published by daily Dawn, while 60% (425 out of 705) news stories were published by daily The News International. Both newspapers covered the issue but huge coverage given by daily The News International instead of daily Dawn because it is more public oriented as compare to the later one.

It has been observed that most of the time daily The News international highlighted public problems while daily Dawn focused on elite and government stances. The results of the study aligned with studies of Riaz, 2020 and Afzal, 2024 that print media is not more vigilant regarding environmental issue coverage as compare to other media in Pakistan.

Table 2. Month wise coverage of the Newspapers

	Month * Newspaper Cross-tabulation		
	Daily Dawn	Daily The News International	Total
January	52	32	84
February	24	42	66
March	30	51	81
April	19	45	64
May	23	60	83
June	41	81	122
July	24	20	44
August	9	23	32
September	15	23	38
October	15	12	27
November	11	21	32

December	17	15	32
Total	280	425	705

The percentage of print environment-related news stories by Daily Dawn and The News International over one year. Daily Dawn published 7.4% of the total number of stories published in the year, whereas The News International published 4.5%, which together totaled 11.9% in the month of January. There was a change in February when Daily Dawn contributed 3.4% and The News International 6.0%, totaling 9.4% of the total annual stories. In March, it reached 11.5% in all with Daily Dawn at 4.3% and The News International at 7.2%. There was actually a decline in April to 2.7% for Daily Dawn and 6.4% for The News International, making a total of 9.1%. There was an upswing in May, with Daily Dawn publishing 3.3% and The News International 8.5%, adding up to 11.8%. June was when the highest percentage was recorded; 5.8% by Daily Dawn and 11.5% by The News International, adding up to 17.3%. In July, there was a drastic decline: only 6.2% of the stories were counted in the final tally. August was the lowest total recorded for the year. Daily Dawn was responsible for only 1.3% and The News International for 3.3%, making a combined total of 4.5%. In September, it slightly improved to 5.4%, where Daily Dawn published 2.1% and The News International at 3.3%. In October, it dropped to 3.8%, where Daily Dawn published 2.1% and The News International 1.7%. December reproduced the record of August with 4.5% of the total annual stories, the contribution being 1.6% by Daily Dawn and 3.0% by The News International. For December, it amounted to the same percentage for November, which is 4.5%, but this time, Daily Dawn made more with 2.4% while The News International came up with 2.1%. Overall, The News International was the leader in environmental reporting, with 60.3% of the total 705 stories throughout the year, while Daily Dawn followed closely behind with 39.7%.

The data points out that both newspapers did have constant coverage when it came to environmental issues, but The News International showed a higher focus, especially in months like June. The coverage saw some high fluctuations for both newspapers, particularly a low point

for August. While, in the month of July in August months both the newspapers less coverage to the issue though these months are the peak time of summer. The studies suggested that most of the time in Pakistan coverage of an issues divert by another accident or ancient that's why the coverage of climate change least in the months of selected newspaper (Chhachhar, , Arain, & Chandio, 2020, Rauf, Ali, & Irfan, 2021).

Table 3.Source wise coverage of the Newspapers

Source of Information * Newspaper Cross-tabulation						
	Daily Dawn	Daily The News International	Total			
Academia	0	1	1	anwar iqbal	3	0 3
AFP	63	180	243	App	1	0 1
Afshan S.khan	0	1	1	App	1	1 2
Agencies	3	0	3	APP	2	16 18
Agencies	3	1	4	Asad zia	0	1 1
AGENCIES	0	1	1	Asim yasin	0	1 1
Aleezeh fatima	2	0	2	Bereau Report	0	4 4
Ali Raza	0	1	1	Bureau	0	6 6
Ali Tauqeer opinio	3	0	3	bureau report	0	4 4
Amin Ahmad	5	0	5	Bureau report	1	0 1
Amjad Mehmood	1	0	1	BUREAU REPORT	0	11 11
				center of space	1	0 1
				climate science un	1	0 1
				copi head shiza as	1	0 1
				correspondent	14	85 99
				Correspondent	0	63 63

Dawar hameed Butt	2	0	2	moniyoring desk	1	0	1
faiza ilyas	2	0	2	Muhammad akbar not	1	0	1
Iftikhar A.khan	1	0	1	Muhammad Qasim	0	1	1
Ikram junaidi	1	0	1	Myra Imran	0	1	1
imran gabol	1	0	1	news desk	0	3	3
imran khalid the writer multim	0	1	1	News desk	0	1	1
infocus.pk	1	0	1	NEWS DESK	0	4	4
ishaq tanoli	1	0	1	NGO	0	1	1
jamal shahid	3	0	3	ONLINE	0	1	1
jamila achakazai	0	2	2	opinion	3	0	3
Journalist	0	1	1	our correspondent	0	8	8
kazim alam	2	0	2	our reporter	1	0	1
khaleeq kiani	1	0	1	pakistan agricultu	1	0	1
khalid mustafa	0	1	1	PPI	0	2	2
M uhammad saleh zaafir	0	2	2	prof altaf agricul	1	0	1
M.waqar Bhatti	0	1	1	pubic	0	1	1
Maleeha sattar	0	1	1	public	0	4	4
monitring desk	2	0	2	Rashid Khalid	0	2	2
				reporter	101	5	106
				reuters	23	0	23

shazia hasan	3	0	3	wasi haider	1	0	1
sher alam	1	0	1	opinio			
shinwari				Writer	2	0	2
sindh	1	0	1	writer Samir	1	0	1
agriculture				Wwf	0	1	1
staff reporter	13	0	13	yousaf ali	0	1	1
syed irfan raza	1	0	1	zaki abbas	1	0	1
syed zahid jan	0	1	1	Zofeen	1	0	1
umaid wasim	1	0	1	T.Ebrahim			
UN	0	1	1	Total	280	425	705
wajid Ali syed	0	1	1				

Table 3 displays the frequency of stories attributed to different sources in each of the two Pakistani newspapers, Daily Dawn and Daily The News International, through a cross-tabulation of news sources. The purpose of the table is to demonstrate how these newspapers rely on various information sources.

Daily The News International contains 425 entries, whereas Daily Dawn has 280 entries from various sources. This suggests that, as comparison to Daily Dawn, Daily The News International covers a wider range of sources or maybe mentions sources more frequently.

AFP (Agence France-Presse) has been mentioned source of information 243 times in total, the most in both newspapers (63 times in Daily Dawn and 180 times in Daily The News International). The next most often cited source is the reporter, who is particularly well-known in Daily Dawn (101 mentions compared to just 5) and Daily The News International (5 mentions). Correspondent is another often referenced source, although there is a noticeable variation in how often it is mentioned across the two newspapers: Daily Dawn mentions it 14 times, while Daily The News International mentions it 85 times.

In order to cover worldwide news and guarantee timely reporting, both newspapers significant reliance and dependency on wire services such as AFP. Daily The News International, where AFP alone makes up over 42% of its total sources, is one publication where this dependence is more obvious.

Table 4. Dateline wise coverage of the Newspapers

Dateline * Newspaper Cross-tabulation				BRITISH COLUMBIA	0	1	1
	Daily Dawn	Daily The News International	Total				
0	26	4	30	cabo sun locas	0	1	1
ABBOTABAD	0	2	2	Chagi	1	0	1
abu dhabi	1	0	1	Charsadda	1	0	1
Amsterdam	3	0	3	Cheongie	0	1	1
Angeles	0	2	2	CHIANG MAL, THAILAND	0	2	2
ANTAKYA Turkiye	0	1	1	CHIBAYISH MARSHES	0	1	1
ASHGABAT	0	1	1	CHICAGO	1	1	2
Athens	1	2	3	Chitagong	0	1	1
Balochistan	1	0	1	Chitral	1	1	2
Bangkok	1	4	5	Copenhgen	1	0	1
BARA	0	2	2	Cugo	1	0	1
Beijing	1	4	5	Dadu	1	0	1
BELEDWEYNE	0	1	1	Davos	2	0	2
Belem	0	1	1	Dehradun	0	1	1
Benghazi	0	1	1	dera ismail khan	0	2	2
Berlin	2	4	6	Derna	0	1	1
BLANTYRE	0	2	2	DHAKA	0	1	1
BRASALIA	0	1	1	DHERADUN	0	1	1
				Dir	0	1	1
				Diyarbakir	1	0	1
				Dubai	7	5	12
				Dubai/Islamabad	1	0	1

Felton	1	0	1	KERATSINI, Greece	0	1	1
Geneva	6	9	15	KHAR	0	1	1
GERMANY	0	3	3	Kherson	1	0	1
GHALANAI	0	1	1	KINSHASA	0	1	1
Gilgit	3	0	3	KUAUKTAW, MYANMAR	0	1	1
GWA, Myanmar	0	1	1	Lahore	13	26	39
HAMBURG	0	1	1	lakki marwat	2	2	4
HANOI	0	1	1	Libreville	1	0	1
HERAT	0	1	1	Lisbon	0	1	1
hong kong	0	1	1	little rock	1	0	1
Houstan	0	1	1	London	4	2	6
HWZREH, Syria	0	1	1	LOS ANGELES	3	3	6
Hyderabad	2	0	2	Lower Dir	5	0	5
international thin	1	0	1	LUGO, Italy	0	1	1
Islamabad	62	111	173	MADRID	2	7	9
Islamabad/Rawal pindi	0	8	8	MANDVI, India	0	1	1
ISTANBUL	0	1	1	Manila	1	0	1
JAEN, Spain	0	1	1	Mansehra	3	4	7
JAKARTA	2	1	3	MANSEHRA	0	9	9
JAMRUD	0	1	1	MARDAN	0	1	1
KAMPALA	0	1	1	Marrakese	1	0	1
Karachi	27	9	36	Marrennes/france	0	1	1
Kardona	0	1	1	MEXICO CITY	0	1	1
KATHMANDU	0	1	1	MILLBROOK, UNITED KINGDOM	0	1	1
Kelowna	0	1	1				

Mithi	1	0	1	Santa cruz	1	0	1
Montreal	1	0	1	SAPPORO< JAPAN	0	3	3
MONTREAL	0	2	2	Sappro	1	0	1
MOSCOW	0	1	1	Seoul	1	1	2
MOUNT MAUNGANUL	0	1	1	SHANGAI	0	1	1
Muzafarabad	1	0	1	Shangla	1	0	1
Myanmar	0	1	1	Singapore	1	2	3
Nairobi	1	2	3	SITTWE, Myanmar	0	2	2
NAKHON NAYoK	0	1	1	Sohbatpur	1	0	1
NAPIER	0	1	1	SUKKUR	0	1	1
NEW DEHLI	1	4	5	Swat	3	0	3
new delhi	1	2	3	Sydney	3	0	3
new york	0	1	1	SYDNEY	0	1	1
NORTHAMTON	0	1	1	TAEZ, Yemen	0	2	2
Okara	0	1	1	Tawa	1	0	1
Oslo	1	0	1	Tehran	0	2	2
OSLO	0	1	1	Tephan	1	0	1
OTTAWA	0	1	1	TIMERGARA	0	1	1
Pajaro	1	0	1	TOKYO	2	2	4
Paris	25	34	59	Tripoli	0	1	1
Peshawar	16	32	48	umm aqrab	1	0	1
Rawalpindi	3	19	22	united nations	6	1	7
ROME	1	4	5	UNITED NATIONS	0	3	3
Salinas	1	0	1	UNITED STATES	0	1	1
Sanliurfa	1	0	1				

Vienna	2	0	2	WASHINGTON	0	4	4
VIENNA	0	2	2	west kelwna	0	1	1
Volchos	0	1	1	YONG PENG, Malaysia	0	1	1
WALLINGTON	0	1	1	Zhuozhou	0	2	2
WANA	0	3	3	Total	280	425	705
Warsow	1	0	1				
Washington	4	4	8				

The table illustrates the disparities between Daily Dawn and Daily The News International's coverage patterns. Daily Dawn published 280 news stories overall, while Daily The News International produced 425 stories, for a total of 705 articles published between the two publications. With significant representation in places like Paris (25 news stories), Geneva (6 news stories), and Dubai (7 news stories), Daily Dawn often carries more foreign coverage. But Daily The News International focusses more of its coverage on Pakistan's largest cities, including Islamabad (111 news stories), Lahore (39 news stories), and Peshawar (16 news stories).

Additionally, the international datelines suggest that both newspapers are engaged in global reporting, with a particular emphasis on cities that are either political hubs (e.g., Washington, Geneva) or have significant Pakistani diaspora communities (e.g., Dubai, London).

The difference in international coverage might reflect the editorial priorities of each newspaper, with "The News International" potentially focusing more on diplomatic and international relations coverage, given the higher number of reports from global cities like Paris and Geneva.

Table 5. Page wise coverage of the Newspapers

page * Newspaper Cross-tabulation				2	11	30	41
Daily Dawn	Daily The News International	Total		3	29	30	59
				4	14	1	15
page 1	22	14	36	5	16	16	32

6	6	0	6	29	2	0	2
7	2	6	8	32	0	3	3
8	22	16	38	33	0	3	3
9	7	74	81	45	0	1	1
10	61	32	93				
11	13	72	85	Total	280	425	705
12	32	17	49				
13	11	54	65				
14	5	39	44				
15	12	1	13				
16	1	1	2				
18	3	0	3				
19	1	7	8				
20	3	5	8				
21	2	0	2				
22	1	1	2				
23	1	1	2				
24	2	0	2				
25	0	1	1				
27	1	0	1				

On page 3, 8.4% of the stories were seen, split almost evenly between Daily Dawn at 4.1% and The News International at 4.3%. On page 4, 2.1% of the total stories were hosted, with Daily Dawn contributing 2.0% and The News International just 0.1%. Page 5 contained 2.3% of the stories, with each newspaper contributing equally at 2.3%. On page 6, there was minimal coverage, adding up to 0.9% of the total, with contributions from Daily Dawn at 0.9% and none from The News International. The stories that appeared on page 7 summed to 1.1% of the total, where 0.3% was for Daily Dawn and 0.9% for The News International. On page 8, the number of stories covered was 5.4% of the total: 3.1% from Daily Dawn and 2.3% from The News International. The News International had a prominence of 10.4% of the total stories covered on page 9, while Daily Dawn had 1.0%, totaling 11.5%. Page 10 also recorded the highest total of 13.2%, where Daily Dawn registered 8.7% and The News International 4.5%. Lastly, page 11 also had extensive coverage, recording 12.1% of the total stories, with Daily Dawn at 1.8% and The News International at 10.2%. On page 12, 7% of the total stories were published, where Daily Dawn took 4.5% and The News International took 2.4%. Page 13 had 9.2% of the total stories, where Daily Dawn contributed 1.6% and The News International 7.7%. On page 14, there were 6.2% of the stories in total, and among them, Daily Dawn stood at 0.7%, while The News International stood at 5.5%. There were only 1.8% of the total stories on page 15, contributed by Daily Dawn with 1.7%, while The News International contributed only 0.1%. Page 16 turned out to be even worse: there was minimal coverage of 0.3% of the total stories, where each newspaper made its own contribution with 0.1%. On page 18, stories totaled 0.4% from Daily Dawn, whereas The News International had no stories on page 18. Page 19 covered 1.1% of the total stories, with Daily Dawn at 0.1% and The News International at 1.0%. Page 20 had 1.1% coverage of the total stories, with Daily Dawn at 0.4% and The News International at 0.7%. Pages 21-24 have contributed very poorly and covered 1.1% of the total stories, with Daily Dawn at 0.9% and The News International 0.3%. A minuscule number of stories could be found on pages 25, 27, 29, 32, 33, and 45, making up just 2.0% of the stories, and these mostly

belonged to Daily Dawn. The overall analysis shows that The News International reported more about environment-related stories over a broader spectrum of pages in contrast to Daily Dawn, where the more significant percentage was that of pages 9 (10.4%), 11 (10.2%), and 13 (7.7%); Daily Dawn focused on pages 1 (3.1%), 10 (8.7%), and 3 (4.1%).

Table 6. Column wise coverage of the Newspapers

column * Newspaper Cross-tabulation				
		Daily Dawn	Daily The News International	Total
Column	1	42	48	90
	2	46	112	158
	3	62	90	152
	4	35	90	125
	5	42	66	108
	6	43	9	52
	7	10	6	16
	8	0	3	3
	9	0	1	1
Total		280	425	705

Table 6 considers the number of columns each environmental news story occupies in Daily Dawn and The News International and considers 705 stories of environmental news. Stories that occupy 1 column total 12.8%, while Daily Dawn contributed 6.0% or 42 stories; and The News International contributed 6.8% or 48 stories. Stories occupying 2 columns accounted for 22.4% of the total, with 6.5% (46 stories) coming from Daily Dawn and 15.9% (112 stories) from The News International. Stories taking up 3 columns equaled 21.6% of the total, with

8.8% (62 stories) from Daily Dawn and 12.8% (90 stories) from The News International. The four-column stories made up 17.7% of the total: Daily Dawn contributed to this 5.0% (a total of 35 stories), and The News International, 12.8% (or 90 stories). Five-column stories contributed 15.3% of the overall coverage in this category: Daily Dawn gave 6.0% (42) to the class, while The News International offered 9.4% (66 stories). Six-column stories were far less common, making up 7.4% of the total. Within that, Daily Dawn accounted for 6.1% (or 43 stories), with The News International contributing only 1.3% (9 stories). Seven-column stories made up 2.3% of the total, with Daily Dawn contributing 1.4% (10 stories) and The News International contributing 0.9% (6 stories). The stories that took up 8 columns were really scarce, amounting to a mere 0.4% of the total, all from The News International, 0.4%, 3 stories. The rarest ones were 9-column stories, gathering only 0.1% of all, with The News International contributing again to this portion, accounting for 0.1% (1 story). Data indicate that while both newspapers continued to cover environmental stories on various column lengths, The News International tends to provide more columns per story than Daily Dawn, especially in the 2, 3, and 4-column ranges.

Table 7. Environmental Issues covered by of the Newspapers

environmental issues * Newspaper Cross-tabulation				
		Daily Dawn	Daily The News International	Total
environmental issues	Pollution	32	92	124
	Climate change	132	157	289
	Biodiversity	3	7	10
	Wildlife	5	30	35
	Plants	5	15	20

Ecosystem	2	4	6
Deforestation	3	8	11
Others	98	112	210
Total	280	425	705

Table 7 illustrates environmental issues mentioned in Daily Dawn and The News International news stories. Climate change was the most frequent issue, with a total of 289 mentions, of which 132 occurred in the Daily Dawn and 157 in The News International. The next major area was pollution with 124 mentions in all, Daily Dawn registered 32 while The News International had 92. The third category of "Others" consisted of a mixed bag of environmental issues that had a total of 210 mentions out of which 98 were from Daily Dawn and 112 from The News International. Wildlife issues form a substantial concern with 35 mentions out of which 5 appeared in Daily Dawn and 30 in The News International. Plants mentions fared relatively less with 20 only: Daily Dawn contributed 5, and The News International had 15. Biodiversity and deforestation fared less well with biodiversity mentioned in only 10 stories: Daily Dawn contributed 3, and The News International had 7; deforestation was mentioned 11 times: 3 in Daily Dawn and 8 in The News International. Ecosystem was the least cited with only 6 mentions: 2 in Daily Dawn and 4 in The News International. The overall data suggest that both newspapers have focused much more on climate change and pollution than on other environmental issues, and on the whole, The News International gives much more space to almost all environments compared to Daily Dawn. This is specifically true for pollution, wildlife, and the "Others" category, which seems a bit more diversified in its environmental coverage.

Table 8. Stakeholders in Environmental Issues covered by of the Newspapers

		Daily The News		Total
		Daily Dawn	International	
Stakeholders	Government	96	199	295
	NGO	56	75	131
	Community	66	98	164
	Experts/scientists	49	42	91
	Academic research	13	11	24
Total		280	425	705

Table 8 shows the stakeholders covered by Daily Dawn and The News International. Government entities were the most prominently covered, representing 41.8% of the total coverage, with Daily Dawn accounting for 13.6% and The News International for 28.2%. Community stakeholders were the next most covered group, making up 23.3% of the total, with 9.4% from Daily Dawn and 13.9% from The News International. A value of 18.6% for NGOs was reported and included Daily Dawn at 7.9% and The News International at 10.6%. Experts and scientists were covered in 12.9% of the cases, with Daily Dawn at 7.0% and The News International at 6.0%. Academic research received the least coverage, comprising just 3.4% of the total, with Daily Dawn contributing 1.8% and The News International 1.6%. The results above indicate that most frequency by both newspapers was given to government and community stakeholders, and that The News International covered most categories more in-depth compared with Daily Dawn.

Table 9. Audience Engagement in News Stories in the Newspapers

		audience engagement * Newspaper Crosstabulation		
		Daily Dawn	Daily The News International	Total
audience engagement	Call for action	105	118	223
	Feedback	17	61	78
	Awareness	73	52	125
	Information	68	179	247
	Education	17	15	32
Total		280	425	705

Table 9 breaks down audience engagement when it comes to the environmental news published by Daily Dawn and The News International. All in all, there are 705 cases of engagement counted, which are categorized into different subcategories. "Call for action" was the most common type of engagement, at 31.6% of the total, with Daily Dawn accounting for 14.9% (105 cases) of that and The News International 16.7% (118 cases). "Information" was the second most common type of engagement, at 35.0% of the total, with Daily Dawn accounting for 9.6% (68 cases) of that and The News International 25.4% (179 cases). The other popular engaging post type was "Awareness," which represented 17.7% of the total: 10.4% (73 posts) were from Daily Dawn and 7.4% (52 posts) were from The News International. "Feedback" accounted for 11.1% of the total engagements, of which 2.4% (17 posts) were by Daily Dawn and 8.7% (61 posts) were from The News International. "Education" was among the least common engagement types, with 2.4% out of 4.5% going to Daily Dawn, and 2.1% going to The News International with 17 and 15 cases respectively. The results indicate that the two

newspapers gave much emphasis on calls for action to their audience and providing them with relevant information, with The News International particularly strong in these areas, while feedback and education received relatively less emphasis.

Table 10. Audience Techniques in News Stories in the Newspapers

		engagement techniques * Newspaper Cross-tabulation		
		Daily Dawn	Daily The News International	Total
engagement techniques	Nil	234	367	601
	Infographics	11	1	12
	Photos	35	25	60
	experts quotes	0	27	27
	Charts	0	3	3
	Tables	0	2	2
Total		280	425	705

Table 10 analyzes the engagement techniques used in environmental news stories across Daily Dawn and The News International, with a total of 705 instances across various techniques. The majority of stories did not use any specific engagement technique, accounting for 85.3% of the total, with Daily Dawn contributing 33.2% (234 instances) and The News International 52.1% (367 instances). Photos were the next most common technique, making up 8.5% of the total, with Daily Dawn accounting for 5.0% (35 instances) and The News International 3.5% (25 instances). Infographics were used in just 1.7% of the stories, with Daily Dawn contributing 1.6% (11 instances) and The News International 0.1% (1 instance). Expert quotes appeared in 3.8% of the stories, exclusively in The News International (3.8%, 27 instances). Charts and

tables were the least used techniques, each making up less than 1% of the total engagement techniques, with The News International using charts in 0.4% of the stories (3 instances) and tables in 0.3% (2 instances). The data shows that both newspapers predominantly did not use specific engagement techniques in the majority of their environmental stories. In addition, The News International was more likely to incorporate expert quotes, while Daily Dawn made slightly more use of infographics.

Table 11. Solution Journalism Qualities in News Stories of the Newspapers

Solution Journalism Qualities * Newspaper Cross-tabulation

		Daily Dawn	Daily The News International	Total
Solution Journalism Qualities	Nil	118	120	238
	Problem response	90	171	261
	Evidence	22	32	54
	Insight/lesson for reader	14	35	49
	Limitations	36	67	103
Total		280	425	705

The table displays a cross-tabulation of the Solution Journalism Qualities found in news articles from Daily Dawn and Daily The News International. Nil (qualities of no solution journalism), Problem Response, Evidence, Insight/Lesson for the Reader, and Limitations are among the categories that are examined. 705 stories in all are analysed, 425 from Daily The News International and 280 from Daily Dawn.

With a total of 238 stories, the largest category in both publications is Nil (no solution journalism traits) (Daily The News International 28.2% (120 out of 425), and daily Dawn have 42.1% (118 out of 280). This indicates that a sizable percentage of the news items lack the traits of solution journalism, accounting for about 33.8% of all the stories examined.

Problem response is the most frequently mentioned solution journalism quality in the stories, appearing in 261 of them (37% of all stories). This implies that although solution-oriented reporting does exist, it is primarily concerned with problem solving rather than offering in-depth answers or insights.

The data suggests that **Daily The News International** might have a more structured approach to solution journalism, as evidenced by the higher number of stories with specific solution-oriented qualities.

The relatively high number of stories categorized as **Nil** across both newspapers could point to a traditional reporting style that prioritizes problem identification over solution exploration. This may reflect the editorial choices or possibly the training and focus areas of journalists at these publications.

Table 12. Differences in the presence of Solution Journalism Qualities in News Stories of the Newspapers

Correlations

		Newspaper	Solution Journalism Qualities
Newspaper	Pearson Correlation	1	.102**
	Sig. (2-tailed)		.007
	Sum of Squares and Cross-products	168.794	48.567
	Covariance	.240	.069
	N	705	705

** . Correlation is significant at the 0.01 level (2-tailed).

The statistical analysis reveals a weak but statistically significant positive correlation between the type of newspaper and the presence of solution journalism qualities in news stories, as indicated by a Pearson correlation coefficient of 0.102 and a p-value of 0.007.

While the relationship is statistically significant, the weak correlation suggests that the type of newspaper explains only a small portion of the variance in the presence of solution journalism qualities. This indicates that other factors likely influence by editorial policy, reporter preferences or audience inclinations not captured in this analysis may play a more significant role in determining whether solution journalism qualities are present in news stories.

Conclusion

It is concluded that print media particularly English leading newspaper are covering environmental issues but some studies explored that it is not up to mark which bring awareness among the masses. The study revealed that most of the news stories taken from the foreign news agencies ,while most of the news stories were international based datelines.

It is also found that most of the news stories were not published on front page which show the importance and preferences of the newspaper towards climate changes issues. Additionally, the news related to environment was filed in 3 and 4 columns that make sense of importance but not so much to divert the opinion of the reader towards the prominence and threat of environmental issues.

Similarly, it is also found that both newspapers given importance of climate change in environmental issue instead of population, biodiversity, wildlife, plants, ecosystem, deforestation etc. while, these issues were mostly linked with government instead of NGOs, community, experts, scientists and academic research in the country. This is not only the issue related with government but the community originated and oriented.

Audience engagement strategies and techniques are the basics of journalism to build opinion of the target audience towards a specific issue. It has found that majority of news stories were based on call for action instead of feedback, environmental information, awareness and education. Additionally most of the news stories had lacking engagement techniques but very

limited information were given in the form of infographics, photos, experts quotes, charts, tables etc. which are easy understandable for the readers.

It is concluded that both newspapers news stories lacking solution journalism qualities (developed by International Solution Journalism Network) but the news stories were just based on problem instead of problems response, evidence of the problem, lacking less for readers and didn't mention limitation of environmental issues in Pakistan.

References

- AbdelGhaffar, N. M. N. E. A. (2023). *Solutions Journalism and Climate Change Journalistic Narratives: Comparative Insights from Egypt and the United Arab Emirates*. American University in Cairo.
- Afzal, M. S. (2024). Print Media Coverage of Climate Change Crisis in Pakistan: A Comparative Study of Two Newspapers Dawn and Daily Times. *Journalism, Politics and Society*, 2(01), 21-39.
- Ahmed, A., & Shah, M. A. (2023). Understanding Media Functions Through Belief into Action Scale : A Case of Islamabad-based Pakistani News Reporters. *Qlantic Journal of Social Sciences*, 4(4), 51–59. <https://doi.org/10.55737/qjss.718470488>
- Ahmed, M., Minhas, S., & Hussain, T. (2020). Environmental Journalists Perspective on the Coverage of Environmental Issues in Media of Pakistan. *Journal of Peace, Development and Communication*, 04(2), 418–432. <https://doi.org/10.36968/JPDC-V04-I02-22>
- Boyagoda, S. (2016). Analysis on Environmental Journalism and the Challenges of Journalists in Sri Lanka. *Journal of Global Communication*, 9(2), 88–92. <https://doi.org/10.5958/0976-2442.2016.00015.X>
- Chhachhar, A. R., Arain, G. S., & Chandio, D. A. (2020). Assessing print media coverage on environmental issues in Pakistan: A study of major newspapers in Pakistan. *Progressive Research Journal of Arts & Humanities (PRJAH)*, 2(2), 92-103.
- Dũ, V. T. (2024). Solution Journalism : A Look at Its Development and Recommendations for Vietnam. *International Journal of Religion*, 5(7), 195–199. <https://doi.org/10.61707/m6x3gz46>
- Farid, A. S. (2023). Changing the Paradigm of Traditional Journalism to Digital Journalism : Impact on Professionalism and Journalism Credibility. *Journal International Dakwah and Communication*, 3(1), 22–32. <https://doi.org/10.55849/jidc.v3i1.374>
- Forster, P. M., Smith, C. J., Walsh, T., Lamb, W. F., Lamboll, R., Hauser, M., Ribes, A., Rosen, D., Gillett, N., & Palmer, M. D. (2023). Indicators of Global Climate Change 2022 : annual update of large-scale indicators of the state of the climate system and human influence. *Earth System Science Data*, 15, 2295–2327. <https://doi.org/10.5194/essd-15-2295-2023>
- Kumar, Y. (2023). Environmental Journalism as a tool for raising awareness about environmental problems in Kazakhstan. In L. Tashanova (Ed.), *Global impact of CSR, ESG & Sustainability: Bridge between Academia and Industry* (Issue August, pp. 530–544). KIMEP University, Almaty, Kazakhstan.
- Lough, K. (2018). Journalists ' perceptions of solutions journalism and its place in the field.

Internaitonal Symposium on Online Journalism, 8(1), 33–52.

Lowes, M., & Ferguson, S. D. (2021). Solutions Journalism : Strategies for Effecting and Managing Change. *Canadian Journal of Media Studies*, 2(1), 60–85.

Manzoor, S., & Ali, A. (2021). Media and Climate Change in Pakistan: Perception of the Journalists in Mainstream Media. *Annals of Social Sciences and Perspective*, 2(2), 145–155. <https://doi.org/10.52700/assap.v2i2.82>

Murray, C., & Stroud, N. J. (2019). *The Keys to Powerful Solutions Journalism*.

Rauf, A., Ali, S., & Irfan, M. (2021). Pakistani print media coverage of environmental issues: A comparative study of Urdu and English newspapers.

Riaz, S. (2020). Framing of Environmental Issues in National Newspapers of Pakistan. *Pakistan Journal of History & Culture*, 41(2).

Rice, G. J. (2021). *A New Era in Climate Change CoverageL Can Applying Solutions Journalism Alter Audience Attitudes?* Appalachian State University Submitted.

Singh, P., Yadav, D., & Elumalai, S. P. (2021). Link Between Air Pollution and Global Climate Change. In S. Singh, P. Singh, S. Rangabhashiyam, & K. K. Srivastava (Eds.), *Global Climate Change* (pp. 79–108). Elsevier Inc. <https://doi.org/10.1016/B978-0-12-822928-6.00009-5>

Thanh, D., Huu, L., & Thi, N. (2023). Solution journalism - New Trends in the Current Style of Reporting Practices. *Journal of Law and Sustainable Development*, 11(12), 1–14. <https://doi.org/10.55908/sdgs.v11i12.1810>

Trionfi, B., & Salzenstein, L. (2024). *Climate and Environmental Journalism Under Fire: Threats to Free and Independent Coverage of Climate Change and Environmental Degradation*.