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Dynamics of Intermedia Agenda-Setting Between Social and Traditional Media in Pakistan: An Analysis

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ABSTRACT

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Keywords

Intermedia Agenda Setting; Social Media; X; Television News; Newspapers.

This study examines the intermedia agenda-setting dynamics between social and traditional media in Pakistan. As digital communication expands and platforms like X (formerly Twitter) gain increasing influence in shaping current information flows, traditional media including television and newspapers continue to play a vital role in framing public discourse. Using quantitative content analysis and purposive sampling, the study examined agenda salience across X, television channels and national newspapers during January 2025. Directional agenda-setting relationships were tested using cross-lagged correlation analysis and the Rozelle-Campbell baseline. The results reveal a bidirectional but asymmetric relationship between X and television, with social media demonstrating a marginally stronger predictive influence on the TV news agendas. Conversely, the connection between newspapers and X was more unidirectional, with the print media exerting greater influence in the discussions of social media.

1. Introduction

The Pakistani media has undergone significant changes over the past few decades. The Pakistani media landscape is no longer dominated solely by print media like Dawn, Pakistan Times, Daily Jung and Nawa-i-Waqt; it has developed into a hybrid media system whereby the social and

1.1 Background of the Study

traditional media are becoming interdependent on each other and consequently have a vested interest in shaping public discourse. Traditionally, print media played a central role in framing public opinion and highlighting the salient social and political matters of the time (Ali & Khan, 2021;



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Qureshi, 2022)

Television broadcasting in Pakistan was significantly transformed after media liberalization in the early 2000s. PTV, the state broadcaster, was formed in the 1960s and took decades to dominate news and programming, and its content tended to be based on official accounts. Private television channels now cover news and serve as the primary sources of real-time data, especially during elections, crises, and other socio-political events (Raza & Ahmed, 2023; Siddiqui, 2024).

The informational production, distribution, and consumption have been significantly changed by the blistering development of social media platforms, including X (formerly Twitter), Facebook, YouTube, Instagram, and TikTok. Face-to-face interaction between politicians and the general population can reach millions of people, and as a result, the trending topics of social media networks are frequently reflected on the agenda of the traditional media. These trends describe the intermedia agenda setting, where the salience of an issue in one media platform has an effect on the salience of such issue in other platforms (Guo & Vargo, 2021; Neuman et al., 2022; Gilardi et al., 2021).

Socio-political movements in Pakistan, including, but not limited to, the ones named, #JusticeForZainab and #JusticeForArshadSharif, initially trended on social media, and were later reinforced by the media and press, affecting not only the conversation among the public and the institutions of Pakistan but also the institutions themselves. Social media is being used by politicians to establish political salience, and fact-checking and corrective journalism in mainstream media have become necessary because of misinformation (Mirza et al., 2025; Reuters Institute, 2025). The two-way influence of agendas between forms of media is reflected on these examples.

Although digital platforms have rapidly developed and interacted with traditional news media, not much empirical evidence exists to clarify how issue salience is transferred between the social and traditional media in Pakistan (Rauf, 2018; Raza & Ahmed, 2023; Neuman et al., 2022).

Most existing studies either interested in the impact of social media or looks at the coverage of traditional media in a vacuum without more systematically analyzing the interaction between their effects over time and direction in a hybridized media environment. Recent agenda-setting research emphasizes the fact that media power has become increasingly networked and multi-directional in the digital era and entails the active interactions between different media actors and platforms (Almakaty & Weaver, 2025).

Therefore, this study investigates the directional intermedia agenda-setting relationship among X, television news and newspapers over time using time-lagged analysis. Using both cross-lagged correlation and the Rozelle Campbell baseline, the study aims to determine the transfer of agendas across platforms along with how it can be explained within the context of the hybrid media system in Pakistan, which would help in advancing empirical and theoretical knowledge on cross-platform agenda interaction (Almakaty & Weaver, 2025).

1.2 Justification of the Study

The intermedia agenda-setting in Pakistan is not well-investigated due to barriers of censorship, political interference, limited access to the media archives, and broken information streams (Rauf, 2018; Khan, 2020). The constraints pose a challenge to systematically researching the impact of social and traditional media on priorities on issues of the people.

With the growth of social media especially X, politicians and journalists among other actors with power utilize the social media platforms to create saliency of issues which is under usual circumstances adopted or confirmed in television and newspapers (Guo & Vargo, 2021; Neuman et al., 2022).

Both media represent their own editorial, political and business agendas and it is crucial to focus on the way in which the two forms of social and traditional media interplay to influence the mainstream agenda in Pakistan. The use of cross-lagged correlation analysis and Rozelle-Campbell baseline makes the study possible to identify directional agenda-setting effects across platforms (Kim et al., 2024; Wang et al., 2024).

This research is significant as it brings intermedia

agenda-setting studies to a hybrid media scenario of non-Western environments, where digital and traditional media have to work within the limits of political, institutional and structural boundaries (Neuman et al., 2022).

The current studies highlight the changing quality of media impact in the digital age, which indicates that social media trends have the ability to influence traditional media discourse and vice versa through intricate networks (Weaver, 2025; Almakaty, 2025).

This study has theoretical, methodological, and contextual meanings of the paper on hybrid media systems, which fills the gaps in existing empirical studies by focusing on Pakistan, where social media, television, and newspapers interrelate to shape the public discourse and impact the political communication (Neuman et al., 2022; Raza & Ahmed, 2023).

1.3 Objectives of the Study

- To examine the mutual influence between social media (X) and traditional media (TV and newspapers) on the news agenda in Pakistan.
- To assess the degree and direction of intermedia agenda-setting between social media (X) and traditional media in Pakistan.
- To identify trends in issue salience across social media (X) and traditional media platforms.

1.4 Research Questions

RQ1: Does the intermedia agenda-setting interaction exist between social media (X) and Traditional media (TV, Newspapers), in Pakistan?

RQ2: Is the agenda-setting relationship between social media (X) and traditional media (TV, Newspapers) unidirectional or bidirectional?

RQ3: What are the trends and patterns of issue salience across social media (X) and traditional media (TV and newspapers) in Pakistan?

1.5 Hypothesis

H1: There is a significant agenda setting influence between X and TV in Pakistan.

H2: There is a significant agenda setting influence between X and Newspapers in Pakistan.

2. Literature Review

2.1 Agenda-Setting Theory

The agenda setting theory explains how the mass media can play a role in the way the audiences prioritize issues in the public discourse. Maxwell McCombs and Donald Shaw were the first ones to introduce the theory when they revealed that the influence of the media on issues is a strong factor that creates certain perceptions of the importance of the issue among public (McCombs & Shaw, 1972).

Instead of determining what people think, media influence what people think about by prioritizing on some issues in the news productions. The growth of the agenda-setting research over time encompassed the second-level agenda setting, attribute agenda setting, and intermedia agenda-setting processes since the contemporary media systems are becoming more complex (McCombs et al., 2014; Weaver, 2025; McCombs, 2020).

Recent changes in agenda-setting studies have broadened the theory to encompass the interaction among the media platforms other than between the media and the public. Digital communication environment eliminates a linear agenda formation process: a variety of media agents of agenda formation at the same time determine the salience of issues across platforms (McCombs, 2020; Neuman et al., 2022; Gilardi et al., 2021).

2.2 Intermedia Agenda-Setting

Intermedia agenda-setting can be described as the process whereby the news agenda of a given media organization can affect the agenda of other media organizations in terms of their priority in issues. The early works of intermedia agenda-setting studies focused mainly on the inter-relationship of the traditional media, and it has been shown that powerful newspapers commonly influenced the agenda of other news outlets and television networks (Vliegenthart & Walgrave, 2008; Reese & Danielian, 2018). In these situations, the elite media entities tend to act as an agenda setter, the news content of which informs the agendas of other news producers.

As the digital communication technologies progress, relationships in agenda-setting between intermedia have evolved to be more intricate. Interactions between classic media outlets are no

longer the only determinants of media agendas, but rather, several platforms are engaged in the agenda-building process at the same time (Gilardi et al., 2021; Neuman et al., 2022).

Intermedia agenda-setting is the process of influencing the priorities of issues of one media organization by the priorities of issues of other media organizations. As digital communication technologies grow, these relations have gotten complicated and two-way, both in older news sources and social media networks. Modern studies reveal that the issue salience is currently distributed through platforms reciprocally wherein social media and the traditional media are shaping one another on their agendas (Guo & Vargo, 2021; Jungherr, 2023; Bruns, 2022; Harder et al., 2017).

2.3 Social Media and Traditional Media Interaction

The social media has grown at a very high rate and has brought about several changes in the manner of production, distribution, and consumption of news. X, Facebook and YouTube platforms enable journalists, political actors and even ordinary citizens to engage in direct communication in the society.

According to recent empirical studies, the discussions on social media can influence the agenda of the traditional media by bringing into the limelight upcoming issues which are then reported by the professional news agencies. In fact, a study that examined cross-platform communication to understand the COVID-19 pandemic discovered that online conversations were usually followed by mainstream news regarding health-related matters (Kim et al., 2024).

Correspondingly, the research of social media patterns of digital communication demonstrates that the topics and hashtags that are trending in social media usually receive journalist coverage and are further discussed in the television news and newspaper articles (Guo & Vargo, 2021; Jungherr, 2023; Bruns, 2022).

Meanwhile, the traditional media still have significant presence in intermedia agenda-setting networks. Professional news organizations have both editorial norms and institutional credibility that allow them to put issues in perspective and

offer tested information. As a result, the traditional media tend to dominate the social media discourse with influencing elements in the form of policy-driven issues and investigative journalism that further spread through the online media (Shoemaker & Reese, 2014; Sulistyanto & Jamil, 2023).

2.4 Hybrid Media System

The hybrid media system is a concept which offers a significant model to understand the relationship between traditional media and social media. Modern media spaces are composed of inter relational digital and traditional communication spaces and have established dynamic impacts on one another (Chadwick, 2013).

On hybrid media systems, social media tend to promote the quick appearance of a problem whereas the traditional media amplify and legitimize these problems by use of professional journalism.

In the same line of thought, there is empirical evidence on the topic of political communication within the global community that institutional sources of media tend to stay the core of the network of agendas in spite of the increasingly popular digital platforms (Ahmed, & Mustafa, 2025; Neuman et al., 2022).

2.5 Intermedia Agenda-Setting in Pakistan

In Pakistan media has transformed significantly within the last twenty years. The privatization of the television news sources occurred in the beginning of the 2000s and the introduction of the internet access and smartphones enhanced the popularity of the social media platforms (Ali & Khan, 2021; Hussain & Saeed, 2023).

In the situation of Pakistan, the social media, especially X, has gained significance as the platform of political communication and debating. These platforms are constantly used by politicians, journalists, activists and citizens to pass information and opinions as well as to draw attention to emerging issues. The agenda-setting processes in social media spill over to the news outlets and television stations, which means that intermedia agenda-setting relations are present (Harder et al., 2017; McCombs, 2020).

Therefore, the systematic empirical research that is required is one that explores the issue salience

transfer between digital and traditional media, in Pakistan, within the context of the changing hybrid media environment.

Nevertheless, despite these theoretical developments, there is limited empirical data on intermedia agenda transfers in the context of hybrid media in Pakistan. This study addresses this gap by providing a systematic analysis of agenda relationships between X, television, and newspapers using time-lagged analysis (Harder et al., 2017; Bruns, 2022; McCombs, 2020; Reuters Institute, 2023)

3. Research Methodology

The methods used in this study are quantitative content analysis, which was used to understand the intermedia agenda-setting relationship between social media (X) and traditional media (television and newspapers) in Pakistan. Content analysis is recognized as a systematic, objective, and replicable approach to communication content and issue salience analysis (Krippendorff, 2022). The main purpose was to measure the issue salience on the platforms and establish the agenda-setting impacts as either unidirectional or bidirectional between social media and traditional media.

The study was focused on X and sampled traditional media outlets that reach the whole country and have agenda-setting power. The sample of the traditional media included three of the most popular television news channels (Geo News, ARY News, and Samaa TV) and three popular newspapers that are published in the English language (Daily Dawn, The Nation and The News). The selection of these outlets was due to their large audiences and well-established positions in political communications in Pakistan, in line with the trends in agenda setting research that focuses on mainstream media dominance and integration with digital (Sulistyanto & Jamil, 2023).

The study period covered sixteen days (1–16) of January 2025, chosen to have a short term dynamic of the agenda and day to day news prioritization.

3.1 Population and Sampling

The agenda relevant news and social media content on X and a sample of traditional media

outlets in Pakistan over the period of the study were used as the target population of this study. The media outlets were purposively chosen due to the fact that they are the most influential and agenda setting of the Pakistani media space. X was selected because it is documented role in facilitating public discussion, real time distribution of trending issues, and its impact on the traditional media agenda in intermedia agenda setting research (Qayyoom et al., 2022).

The major television news channels, Geo News, ARY News, and Samaa TV, were chosen due to their large viewership and popularity in terms of prime time bulletins and being the major sources of national news leading to the formation of the discourse. The sample size of the leading newspapers, including Daily Dawn, The Nation, and The News, was selected because they have a wider national coverage, credible, and history of agenda setting stories due to the prominent placement (McCombs & Shaw, 1972; Qaisar & Raza, 2021). Purposive sampling was used to concentrate on information rich and agenda relevant content that could significantly contribute to the analysis of intermedia agenda-setting effects (Nyimbili & Nyimbili, 2024).

In this study, agenda salience was operationalized as the number of times the issues were covered in each medium in the chosen period. Measuring the social media agenda was based on the issue related posts on X. The agenda of television was evaluated in terms of the coverage of issues in the prime-time news bulletins of Geo News, ARY News, and Samaa TV. The newspaper agenda was quantified by calculating the coverage of the issues in the prominent national newspapers such as Dawn, The Nation, and The News. Intermedia agenda-setting effects were studied to analyze cross-lagged correlation analysis in order to establish the directional relationships of media agendas over time.

3.2 Data Collection

Data were collected systematically during the study period across social, electronic, and print media.

Social Media (X): data were gathered through a systematic process of monitoring using a personal account created by one of the researchers to monitor the Pakistani Twitter. The top ten

trending topics on Twitter were only reviewed (daily between 10: 00 a.m. and 8. 00 p.m.) and only tweets that had over twenty engagements (likes, retweets or comments) were taken into account and individual posts, jokes or irrelevant information were avoided. This strategy guaranteed uniform real-time data gathering, reduced algorithmic biases, and the opportunity to apply strict inclusion requirements, including engagement levels (Jungherr, 2016; Murthy, 2018; Bruns, 2022). It was necessary to create a personal account to track trending issues in order to avoid personal feed algorithms and biases, which would interfere with the observation, and guarantee a reliable and replicable data point (Bruns & Stieglitz, 2014; Graham et al., 2022).

Electronic Media (Television): News bulletins at 8: 00 p.m. to 10: 00 p.m. on Geo News, ARY News and Samaa TV were analyzed. The contents of the television were acquired in official streaming archives in order to attain completeness and precision. The choice of these channels was based on their large national viewership, the ability to shape the public opinion (Raza & Ahmed, 2023; Siddiqui, 2024). The monitoring of prime-time bulletins identifies the news that is most likely to influence the public discourse and engage social media trends (Shoemaker & Vos, 2009; McCombs, 2018).

Print Media: Newspapers (Daily Dawn, The Nation, and The News) were examined on the front, back, and metropolitan pages, where usually carry most salient and agenda setting stories (McCombs and Shaw, 1972; Shoemaker and Reese, 2014). The newspapers were accessed through their e-paper editions for consistency, convenience, and accurate replication of the coverage. They were chosen because these outlets have national presence, credibility, and history of shaping the public discourse, and the mainstream print media agenda was efficiently targeted (Qaisar & Raza, 2021; Sulistyanto & Jamil, 2023).

3.3 Data Aggregation Procedure (Television and Newspaper).

To ensure comparability with X, the salience scores of the daily issues of the three chosen television channels (Geo News, ARY News, and Samaa TV) were averaged to obtain one composite television agenda score of each issue category. The same was done to the three

newspapers (Dawn, The Nation and The News) in order to have a composite newspaper agenda score.

This aggregation represents the overall agenda of television and print media separately rather than the editorial priorities of individual outlets. Intermedia agenda-setting studies commonly employ such composite measures in order to enhance reliability and minimize outlet-specific bias, as well as achieve a larger media agenda patterns cross platforms (Guo & Vargo, 2015; Neuman et al., 2014; Weaver, 2025).

3.4 Units of Analysis

Daily trending hashtags and topics on X, prime-time news stories on television, and the most prominent newspaper stories in chosen sections were the units of analysis in the present study. In the case of X, the unit of analysis was represented by the tweets that featured in the top ten trending topics and received at least twenty likes, retweets, or comments, as frequency and engagement are typically widely used indicators of issue salience on social media (Jungherr, 2016; Murthy, 2018). Television news broadcasting on prime time bulletins were analyzed as it is likely the news that reaches the most people and shapes their and the media agenda (McCombs, 2018; Shoemaker & Vos, 2009).

Newspaper articles on the front page, back page and metropolitan were used as they are included based on their prominence and relative importance of news stories, which is in accordance with the principles of the agenda-setting research (McCombs & Shaw, 1972; Shoemaker & Reese, 2014).

3.5 Coding Procedure

The researcher developed a structured codebook to systematically classify the issues reported in the media platforms into fifteen mutually exclusive categories: political and governance issues, economic crisis, energy crisis, crime and security, judicial affairs, foreign affairs, floods and natural disasters, education, health, human rights, military affairs, environmental issues, sports, cultural events, and other issues.

This categorization was adapted from established content analysis practices, which focus on reliability and comprehensibility in classifying

issues (Neuendorf, 2017; Riffe et al., 2019). The coding of each news item or social media post reflected the dominant issue that the post addressed, and issue salience was calculated by the number of times the same issue appeared in one day on each platform. To ensure coding consistency, repeated coding checks and category validation were conducted during the analysis process. The detailed operational definitions, inclusion and exclusion criteria, and examples for all fifteen news categories used in the coding process are provided in **Appendix A**.

3.6 Data Analysis

In order to analyze similarity and association between media agendas, Pearson correlation coefficients were calculated. It is a statistical approach used to determine the degree to which the patterns of issue salience differ among the media platforms (X, television, newspapers), and the statistical significance is assessed at $p < 0.05$ (Field, 2020).

Cross-lagged correlation analysis was used to

determine the possible agenda transfer effect and directional influence across the media sources over time. This method allows the assessment of temporal precedence and influence across media agendas by comparing the relationships between the salience of one media issue at time t and at time $t+1$ with the salience of an issue in another media.

Moreover, it was established through the Rozelle Campbell baseline methodology of setting up intermedia agendas related to the strength and direction of the observed cross-lagged, which helps to evaluate whether observed cross-lagged correlations are greater than the expected correlations or not (Lopez Escobar et al., 2020; Wanta et al., 2019).

4. Results and Findings

4.1 Descriptive Analysis

The descriptive analysis displays the following aspects of the problem as the general tendencies, the prevalence and distribution of the types of issues in the social and traditional media.

Figure 1: Overall Issues Coverage Across Media Platforms

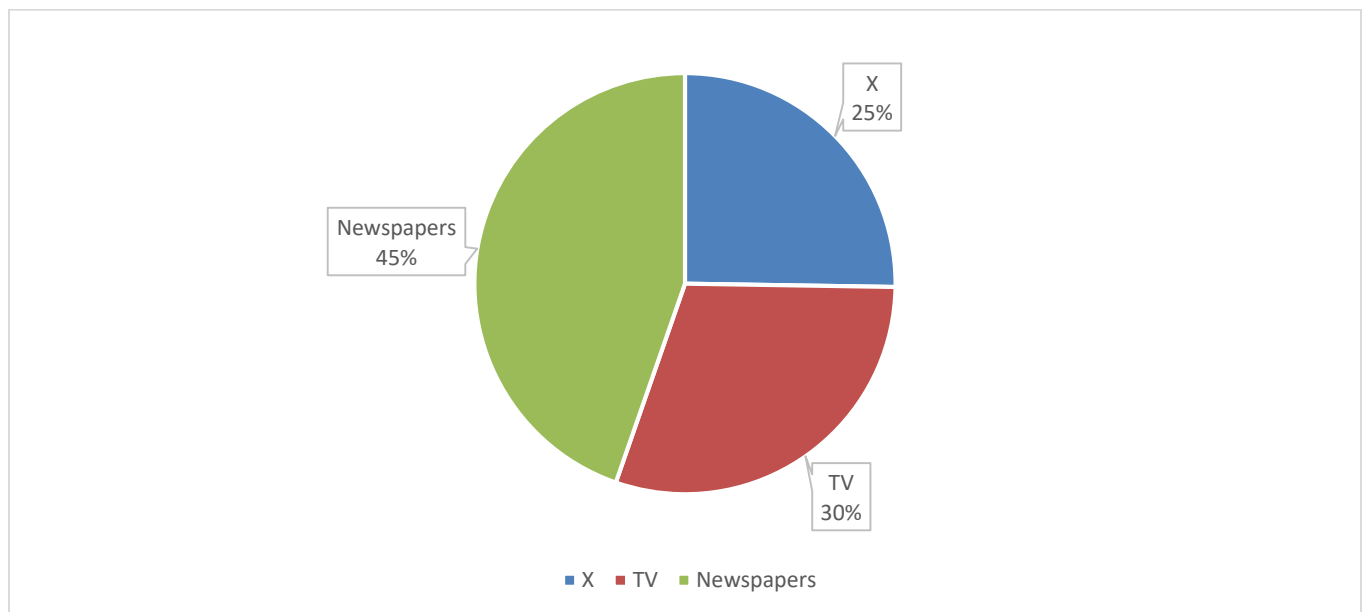


Figure 1 presents the overall distribution of issue coverage across social media (X) and traditional (television and newspapers) media. For visualization, percentages are shown, but for

subsequent statistical analyses, the daily issue frequencies of the television channels and newspapers were averaged separately to produce composite scores for TV and print media.

Table 1: *Frequency of News Stories Week Wise across Media*

Media Type	T1 (Week 1)	T2 (Week 2)	Total
X	757	785	1,542
TV Channels (Mean)	310	302	612
Newspapers (Mean)	451	458	909
Total	1,518	1,545	3,063

Table 1 presents the frequency of news stories covered were covered by X, TV channels (Geo News, ARY News and Samaa TV) and newspapers (Daily Dawn, The Nation and The News) reported on the same news in two weeks in January 2025. The results show that X generated 1,542 news items altogether with the mean coverage of TV channels of 612 and newspapers

of 909.

The three media platforms had 1,518 news stories recorded during the first week and it slightly increased to 1,545 in the second week. Overall the media platform of the newspapers showed better mean coverage than the TV channels, and X had a total number of the most news stories compared to both the TV channels and newspapers.

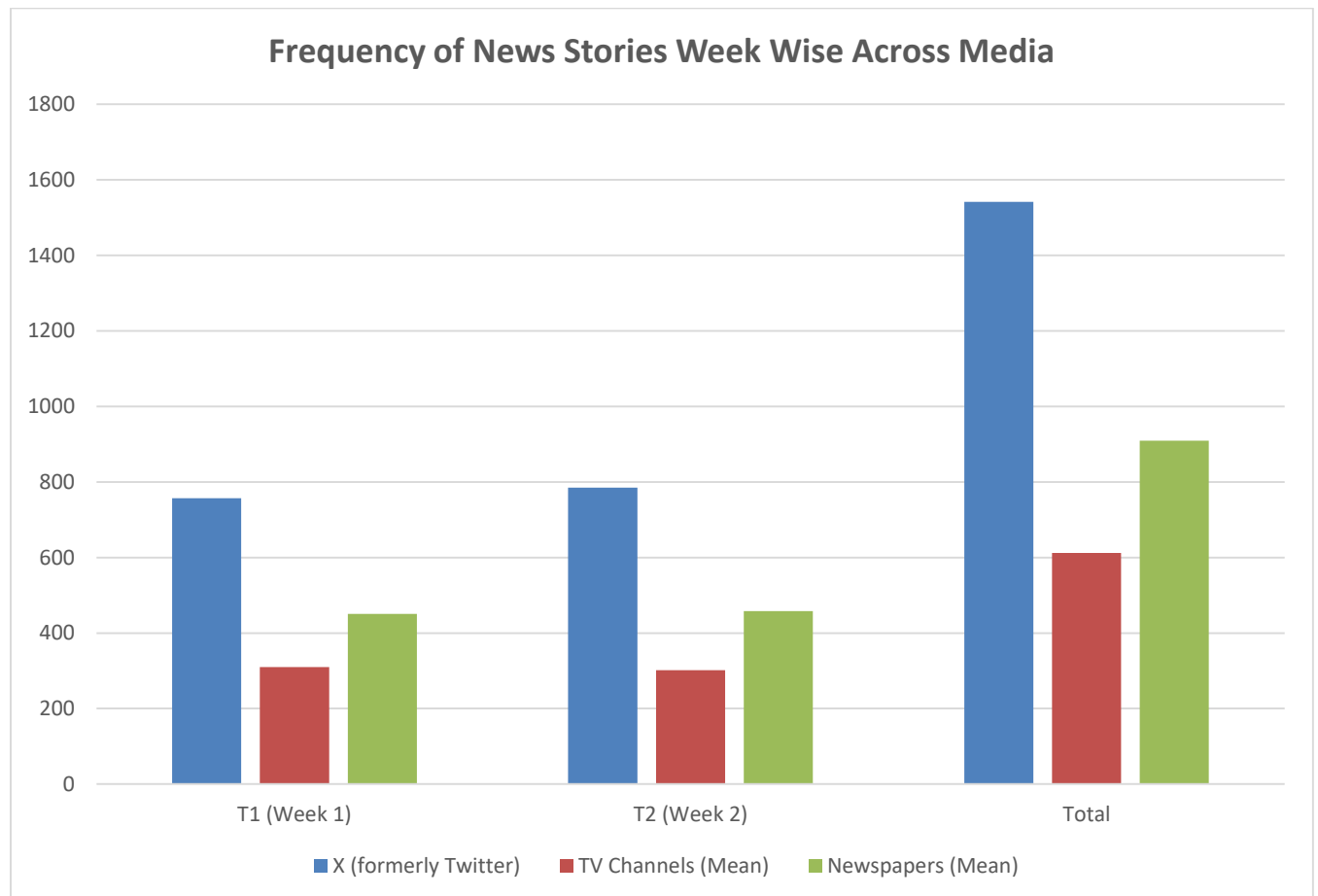
Figure 2: *Frequency of News Stories Week Wise Across Media*

Figure 2 shows week-wise issue coverage in both the social media. To be comparative, the covering of the three television channels and three

newspapers on a daily basis averaged to reflect the TV Channels (Mean) and Newspapers (Mean).

Table 2: *Frequency of Issue Categories on the Three Different Media Platforms Across Time*

Sr.	Issue Wise Categories	X	TV Mean & Newspapers Mean	Total	%
1	Political, Corruption, and Governance	195	235	430	14%
2	Sports	154	124	278	9%
3	Judicial Matters	170	116	286	9%
4	Military	126	133	259	8%
5	Security, Kidnapping and Crime	144	113	257	8%
6	Economic Crisis	90	116	206	7%
7	Foreign Affair	157	90	247	8%
8	Energy Crisis	57	109	166	5%
9	Health	72	89	161	5%
10	Cultural Events	65	78	143	5%
11	Human Rights	87	69	156	5%
12	Flood & Weather	54	75	129	4%
13	Environmental Issues	52	67	119	4%
14	Education	57	60	117	4%
15	Others	62	47	109	4%
16	Grand Total	1542	1521	3063	100%

Table 2 shows frequency distribution of the key categories of issues that were covered in three media platforms during the period of study, including X and mean value of TV channels and mean value of newspapers.

The findings indicate that, the media prioritized Political, Corruption, and Governance issues received the highest coverage of 430 items (14%), which means that the media prioritized political issues on the agenda. The next most covered (286, 9 in judicial Matters and 278, 9 in Sports) were the Judicial Matters and Sports. Other issues were those concerning Military (259, 8%), Security,

Kidnapping and Crime (257, 8%), and Foreign Affairs (247, 8%). Meanwhile, the issues of Energy Crisis, Health, Human Rights, and Cultural Events were covered moderately around 5%.

Flood and Weather, Environmental Issues, Education, and Others, in its turn, were covered comparatively less (around 4%. each). Overall, the table shows that the issues of political and governance-related issues dominated in the media agenda on the social and traditional media platforms in the period of the study.

Table 3: *Distribution of Issue Coverage across Media Platforms*

Sr.	Issue Wise Categories	X		TV Channels		Newspapers	
		N	%	Mean	%	Mean	%
1	Political, Corruption, and Governance	195	13%	122	20%	113	12%
2	Sports	154	10%	39	6%	85	9%
3	Judicial Matters	170	11%	64	11%	52	6%
4	Military	126	8%	52	8%	81	9%
5	Security, Kidnapping and Crime	144	9%	53	9%	60	7%
6	Economic Crisis	90	6%	36	6%	79	9%
7	Foreign Affair	157	10%	36	6%	54	6%
8	Energy Crisis	57	4%	26	4%	83	9%
9	Health	72	5%	21	4%	68	7%
10	Cultural Events	65	4%	25	4%	54	6%
11	Human Rights	87	6%	26	4%	44	5%
12	Flood & Weather	54	4%	30	5%	45	5%
13	Environmental Issues	52	3%	31	5%	35	4%
14	Education	57	4%	32	5%	28	3%
15	Others	62	4%	19	3%	28	3%
16	Grand Total	1542	100%	612	100%	909	100%

Table 3 reveals that the coverage of the issues in the X, television channels, and newspapers were observed to be distributed as in two weeks of January 2025. On X, a total of 1,542 news items were monitored, television channels mean coverage was of 612 and newspaper mean of 909. The political, corruption, and governance presented the greatest coverage on all the media platforms, then sports, judicial, and military issues were in next rank.

Other issues like economic crises, energy, health and cultural events provided more coverage, with

less coverage on environmental issues, education and others. Overall, political issues dominated the agendas across all platforms.

4.2 Cross-lagged correlation analysis.

For cross-lagged correlation, X values were compared with the mean values of selected TV channels (Geo News, ARY News, and Samaa TV) and newspapers (Daily Dawn, The Nation, and The News) to examine the direction and strength of influence between social and traditional media over time.

Table 4: *Social Media (X) and Electronic Media (TV)*

Time	X and TV Mean (r, p-value)	TV Mean and X (r, p-value)	X Stability (r, p-value)	TV Mean Stability (r, p-value)	Rozelle- Campbell [$X_1Y_2 - Y_1X_2$]
T1 and T2	0.128** (.006)	0.102* (.027)	0.219*** (< .001)	0.037 (.425)	0.026
T2 and T3	0.128** (.006)	0.103* (.027)	0.219*** (< .001)	0.037 (.431)	0.025
T3 and T4	0.128** (.006)	0.102* (.028)	0.220*** (< .001)	0.036 (.435)	0.026
T4 and T5	0.128** (.006)	0.102* (.028)	0.220*** (< .001)	0.036 (.436)	0.026
T5 and T6	0.128** (.006)	0.102* (.028)	0.220*** (< .001)	0.036 (.438)	0.026
T6 and T7	0.127** (.007)	0.102* (.030)	0.219*** (< .001)	0.036 (.448)	0.025
T7 and T8	0.127** (.007)	0.100* (.033)	0.217*** (< .001)	0.036 (.446)	0.027
T8 and T9	0.126** (.007)	0.100* (.033)	0.215*** (< .001)	0.036 (.445)	0.026
T9 and T10	0.126** (.007)	0.101* (.031)	0.218*** (< .001)	0.036 (.447)	0.025
T10 and T11	0.124** (.008)	0.101* (.031)	0.217*** (< .001)	0.036 (.445)	0.023
T11 and T12	0.124** (.008)	0.101* (.032)	0.217*** (< .001)	0.036 (.443)	0.023
T12 and T13	0.125** (.008)	0.101* (.032)	0.218*** (< .001)	0.036 (.445)	0.024
T13 and T14	0.124** (.008)	0.100* (.034)	0.217*** (< .001)	0.035 (.453)	0.024
T14 and T15	0.129** (.006)	0.101* (.033)	0.218*** (< .001)	0.039 (.410)	0.028
T15 and T16	0.127** (.007)	0.099* (.036)	0.218*** (< .001)	0.026 (.580)	0.028

* $P < .05$, ** $p < .01$, *** $p < .001$

Table 4. Represents day-to-day agenda setting association between Social Media (X), and with the mean of three TV channels. The results indicate that social media (X) has a slightly more impact on TV ($r \approx .124-.129$, $p < .01$) than the latter has on the former ($r \approx .099-.103$, $p < .05$), and a relatively small but significant effect in both directions of influencing the daily news agenda. The correlation coefficients do not change substantially over time, which is an indication that problems highlighted on social media platforms will also be present on the TV news and the reverse.

Social media proves to be very stable over time ($r \approx .215-.220$, $p < .001$), compared to TV shows, which have weak and statistically insignificant stability ($r \approx .026-.039$), as the television coverage is much more dynamic and locomotive. Rozelle–Campbell values are positive, indicating that cross-lagged correlations exceed the baseline expectation, and it is still possible to say that the two platforms are complementary, the social media plays a more active and stable role in establishing daily media priorities.

Table 5: Social Media (X) and Print Media (Newspapers)

Time	X and Newspaper (r, p-value)	Newspaper and X (r, p-value)	X Stability (r, p-value)	Newspaper Stability (r, p-value)	Rozelle-Campbell [$X_1Y_2 - Y_1X_2$]
T1 and T2	-0.020 (.664)	0.166*** (< .001)	0.219*** (< .001)	0.103* (.027)	-0.186
T2 and T3	-0.018(.694)	0.167*** (< .001)	0.219*** (< .001)	0.104* (.025)	-0.185
T3 and T4	-0.018(.700)	0.169*** (< .001)	0.220*** (< .001)	0.108* (.021)	-0.187
T4 and T5	-0.018(.700)	0.169*** (< .001)	0.220*** (< .001)	0.108* (.021)	-0.187
T5 and T6	-0.018(.699)	0.169*** (< .001)	0.220*** (< .001)	0.108* (.021)	-0.187
T6 and T7	-0.018(.704)	0.168*** (< .001)	0.219*** (< .001)	0.108* (.021)	-0.186
T7 and T8	-0.021(.657)	0.169*** (< .001)	0.217*** (< .001)	0.109* (.020)	-0.190
T8 and T9	-0.023(.623)	0.166*** (< .001)	0.215*** (< .001)	0.107* (.023)	-0.189
T9 and T10	-0.024(.603)	0.168*** (< .001)	0.218*** (< .001)	0.106* (.024)	-0.192
T10 and T11	-0.023(.618)	0.169*** (< .001)	0.217*** (< .001)	0.105* (.025)	-0.192
T11 and T12	-0.023(.618)	0.169*** (< .001)	0.217*** (< .001)	0.105* (.025)	-0.192
T12 and T13	-0.024(.609)	0.169*** (< .001)	0.218*** (< .001)	0.105* (.025)	-0.193
T13 and T14	-0.023(.623)	0.170*** (< .001)	0.217*** (< .001)	0.104* (.027)	-0.193
T14 and T15	-0.021 (.660)	0.170*** (< .001)	0.218*** (< .001)	0.102* (.030)	-0.191
T15 and T16	-0.019 (.693)	0.169*** (< .001)	0.218*** (< .001)	0.111* (.019)	-0.188

* $P < .05$, ** $p < .01$, *** $p < .001$

Table 5. Presents the relationship of agenda-setting in day-in day out between the Social Media (X) and with the mean value of three newspapers. Largely, the findings show that the influence of X on newspapers is not statistically significant, the cross-lagged correlations are low and non-significant ($r \approx -0.024$ to -0.018 , $p > .05$, whereas newspapers always influence social media ($r = 0.166$ - 0.170 , $p = .001$), which represents a

unidirectional effect.

The stability of social media does not change with time ($r \approx 0.215$ - 0.220 , $p < .001$), but the newspapers are not as stable ($r \approx 0.102$ - 0.111 , $p < .05$). The effect size values (approximately - 0.188 - 0.193) is negative, which proves that print media exert a leading influence on social media agendas.

Table 6: Hypotheses Summary

Hypotheses	Conclusion	Direction of Influence	Key Insight
H1 (X ↔ TV)	Supported	Bidirectional	X has a predictive and leading influence on TV agendas; reciprocal agenda-setting exists.
H2 (X ↔ Newspapers)	Supported (Asymmetrical)	Unidirectional	Newspapers dominate the agenda-setting; X has little effect on print media.

5. Discussion

This research provides empirical results suggesting that the social media (X) is an important tool in defining the news agenda in the hybrid media system in Pakistan. The cross-lagged correlation analysis and Rozelle-Campbell test confirm that the X to television agenda-setting effect ($r \approx 0.124-0.129$, $p < .01$) is a little stronger than that of television to X ($r \approx 0.099-0.103$, $p < .05$), which is a bidirectional relationship but asymmetrical. Those are consistent with the current studies indicating that networked digital platforms have an effect on the agenda of traditional media more and more (McCombs, 2020; Weaver, 2025; Kim et al., 2024).

Television, while responsive to social media trends, contributes amplification and narrative structuring, putting online debates into visual and live and narrative-based reports, which solidifies the societal focus on problems. The given interaction upholds the hybrid media system model, introduced by Chadwick (2013), as the active interaction between the digital and legacy media towards the construction of the discourse among people. The amplification of X-originated issues by television aligns with global findings, where social media often sparks issue emergence that is subsequently institutionalized by professional news outlets (Wang et al., 2024; Mohammed et al., 2025).

In newspapers case, the interdependence of social media seems to be unidirectional. X is more influenced by the newspapers than the other way round (correlations are higher: X ($r \approx 0.166-0.170$, $p < .001$) than vice versa ($r \approx -0.024$ to -0.186) with values of Rzele-Campbell being negative (-0.186 to -0.193).

These findings are in line with the classical agenda-setting theory as they also mirror the standing editorial authority and framing power of old fashioned print media (Iyengar & Kinder, 1987; de Vreese, 2005; Vliegthart & Walgrave, 2008; Tewksbury & Scheufele, 2009). Newspapers remain more inclined toward structuring policy-oriented issues, including energy, health, and economic reforms that are then diffused to social media discussions (McCombs, 2004; Entman, 1993; Sulistyanto & Jamil, 2023).

The asymmetry observed across platforms is

consolidated by the socio-political environment in Pakistan. The use of social media as a key agenda-setting tool became particularly visible during 2024 general elections when traditional media had restrictions in providing live or full coverage. The two-way interaction of television and social media is in contrast to the comparatively low-impact of print media, which depicts the platform-specific impact strategies and considerability of the issue characteristics in intermedia influence (Mirza et al., 2025; Raza & Ahmed, 2023).

In general, the results contribute to the idea of platform-specific and multidirectional intermedia agenda-setting in Pakistan. The social media is mainly the site of activation of emerging issues, television amplifies and stabilizes the salience, and the newspapers offer analytical and policy-focused narratives. This trend builds on existing literature by offering empirical results of a non-Western hybrid media system to demonstrate that digital and traditional media mutually depend on each other to shape the discourse of the population, although the level and direction of influence depend on the type of media, its content, and the socio-political environment (Neuman et al., 2022; Gilardi et al., 2021; Jungherr, 2023).

These insights not only reiterate the applicability of intermedia agenda-setting theory within the digital age, but also highlight the critical requirement to factor in platform-specific roles and contextual factors into the analysis of the news flows within the hybrid media, especially in politically pluralistic and developing media markets such as Pakistan.

6. Conclusion

This study explored intermedia agenda-setting relationship between social media (X) and Traditional media in Pakistan which are television and newspapers. The results based on content analysis, cross-lagged correlation and the Rozelle Campbell baseline approach reveal that the concept of intermedia agenda-setting is present in the context of Pakistani media.

The outcomes reveal that there is a bidirectional relationship between X and television with respect to both platforms affecting the news agenda of each other, but X has a more predictive power on television coverage. Conversely, the correlation of X and newspapers seems to be more

unidirectional with newspapers having a greater effect in the social media discussions.

In general, the findings indicate the hybridity of the media system in Pakistan, where X accelerates the emergence of issues, television amplifies them via broadcasting, and newspaper provide deeper analytical framing of issues.

Despite these contributions, the study also has limitations due to the rather short observation period of two weeks, since intermedia studies often employ short time span to understand the dynamic flow of the agenda. Further studies can be done on longer time bases and other platforms like Facebook, Instagram or YouTube.

Appendix A**Operational Definitions of the Fifteen News Categories Used for Coding**

S.no	Category	Definition
1.	Political, Corruption, and Governance	Discussions related to political instability such as election matters governance structure; conflicts among ruling and opposition; political corruption. Twitter, postings, and articles concerning new government initiatives, creation of ministries, local governance, misappropriation of funds, and acts of corrupt officials are notable.
2.	Economic Crisis	In this category, the economic problems facing Pakistan are analyzed, including national debt, inflation, and their negative effects on people in this country.
3.	Energy Crisis	It includes power shortages, rising energy prices, and government responses, covering the management and distribution of electricity, gas, and fuel.
4.	Security, Kidnapping, and Crimes	This category focuses on incidents of violence, security threats, and criminal activities, including terrorist attacks, border security issues, the CPEC security situation, bombings targeting military personnel, and reports of robberies, kidnappings, or financial fraud.
5.	Judicial Matters	These are judgments, legal proceedings, lawsuits, unconstitutional claims and actions of the court in Pakistan, in particular, judicial decisions and history making cases that will be a part of this category, especially highlighting judgments and high profile cases related to political figures and sensitive topics.
6.	Foreign Affairs	This deals with diplomatic relation, the work of diplomats, things concerning with foreign affairs, foreign policy or foreign leaders' visits.
7.	Flood	It includes news on the monsoon season, rain-related incidents, meteorological updates, flood damages, and coverage of recovery efforts of the floods.
8.	Education	It includes articulation of the examination processes, financial arrangement of academic associations in Pakistan, and the guide of the Higher Education Commission (HEC), accessible grants choices, beginning and end of academic organizations including schools, colleges and universities.
9.	Health	It would include not only health related tweets or updates from media sources but also news related to health emergencies especially vaccination campaigns, public health challenges and deficiencies of infrastructure in care centers.
10.	Human Rights	This domain encompasses reports on issues of human rights violation including rights of minorities, freedom of expression and issues of gender bias.
11.	Military	Matters pertaining of the air force, armed forces, military, navy, security forces, troop deployments, military exercises, promotions to higher ranks, and activities of Ministry of Defense in Pakistan and other matters concerning the armed forces are covered in this category.
12.	Environmental Issues	This covers environmental issues, including degradation, the impacts of climate change, and related policies and initiatives
13.	Sports News	This category covers Pakistani teams and athletes competing at national and international levels, including their achievements, challenges, and celebrations. It includes sports such as cricket, football, athletics, local leagues, and other notable events.
14.	Cultural Events	This category focuses the important cultural festivals, public celebrations, and cultural events, measured by their influence on society and economy.

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15. **Other Issues** Other issues are classified as fields of issues that do not fall into the aforementioned categories.
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Conflict of Interest

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