

INVESTIGATING THE ROLE OF TWITTER IN MANIPULATION OF PUBLIC OPINION

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ABSTRACT

The Study aimed to explore the role of twitter in manipulation of public opinion. The main purpose of this study is to find out the impact of twitter in changing or transforming or creating the mind-set of the public. The data was collected through "N capture extension powered by Nvivo". The finding of this study demonstrates that on a remarkable level, politically exciting dissertation on Pakistani digital space was definitely observed in the months of April and May 2022. This study also revealed that using the popular hashtag derived by political parties, seems to have impact on public related to their choice to favour their liked one among political parties.

Keywords: Social media, Twitter, Public Opinion, Political communication

INTRODUCTION

Carr and Hayes (2015) deliver an outstanding social media discussion and analysis by stating that social media are Internet-based platforms that allow users to engage in opportunistic collaborations and selective self-presentation with both large and specialized audiences who value user-generated content and the appearance of social commitment. (Carr, 2015). Social media platforms provide a forum for the public to share information related to individual experiences, views, and stories. (Chew, 2010). Twitter is a social media network that has gained popularity among users for personal usage. Early study revealed that users shared information about current events as well as posts about their daily lives. (Java, 2007). Twitter may also be used to maintain social relationships, which can encourage people to adopt healthier habits (Smailhodzic, 2016). Social media has lately developed into a forum for political, informational, and social interchange, making it a powerful instrument for effectively influencing a variety of societal sectors. It is not surprising that politicians use these platforms for marketing and mass communication to define agendas, sway public opinion, and even affect the results of campaigns (Viewpoints, 2010). The appropriate platform for this sort of self-promotion is Twitter, a recently developed "micro-blogging" social media platform that enables politicians to virtually instantly tell large audiences about their political actions (Aharony, 2012).

The growing usage of social media platforms has raised high hopes for their ability to revolutionize political communication and interactions between political leaders and citizens. However, the impact of technologies like Facebook and Twitter on various types of political involvement is still being researched. Scholars have studied how social media affects the emergence of mass protests and revolutions, how they allow minority voices to be heard, how they increase citizens' access to a greater diversity of political views, and even whether it is possible to predict political events such as elections or demonstrations using social media data representation. This is not the case, as we show in a recent research that makes use of Twitter data. Contrarily, political figures who are more prominent in offline public discourse continue to dominate social media platforms, which exacerbates biases in political

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engagement. This result raises doubts about the validity of social media data as a source of knowledge about public opinion. Speaking about the discussion about estimate manipulation on Twitter is not unacceptable public opinion on social media. However, as (Anstead, N., & O'Loughlin, B., 2015), "Given that data of socio-political relevance can be quickly accessed on this platform's microblogging format on a large scale and right away, Twitter is an extremely intriguing instrument for assessing public opinion." (Anstead, N., & O'Loughlin, B., 2015). Ultimately, suggested, "Political leaders are able to communicate their own distinct agendas without being restricted or filtered because they utilize a platform like Twitter that is not vetted by regional or national media. Aharony in 2012 suggested, "Political leaders are able to communicate their own distinct agendas without being restricted or filtered because they utilize a platform like Twitter that is not vetted by regional or national media." (Aharony, 2012)

Objectives

- To find out the impact of twitter trends on the public.
- To explore that which type of content shared by the influencers.
- To identify the role of twitter hashtags in changing public opinion.
- To evaluate the usage of twitter by political parties.

REVIEW OF LITERATURE

The rise of social media has had a profound impact on the way people communicate and interact with one another. Twitter, in particular, has become a major platform for political discourse and has played a significant role in shaping public opinion. However, with its immense reach and influence, Twitter has also become a breeding ground for misinformation and manipulation.

Several studies have examined the role of Twitter in the devising of public opinion. (Arif, 2022) Investigated the influence of Twitter in devising public opinion during political crises. The study found that Twitter played a critical role in diffusing false information and information during political crises that leads public opinion.

Similarly, (Shah, 2022) conducted a systematic review of the literature on the influence of public opinion through Twitter. The review identified several strategies employed by actors to influence public opinion on Twitter, including the use of bots, fake accounts, and hashtags.

Althaus and Tewksbury (2021) conducted an updated review of the literature on social media, information processing, and political persuasion. The study found that social media platforms, including Twitter, have significant effects on public opinion and outcomes (Althaus, 2021). Dubois and Blank (2021) examined the impact of political interest and diverse media use on partisan selective exposure on Twitter. The study found that political interest and diverse media use can moderate the effect of partisan selective exposure, challenging the notion of the echo chamber on Twitter (Dubois, 2021). Gonzalez-Bailon et al. (2021) studied the dynamics of protest recruitment through an online network and found that Twitter played a crucial role in facilitating the organization of protests and shaping public opinion (Gonzalez-Bailon, 2021).

Wu and Jiang (2022) conducted a systematic review of the literature on the role of Twitter in political polarization and opinion manipulation. The review found that Twitter can be used to promote political polarization and manipulate public opinion through the use of bots and other strategies (Wu, 2022). Bessi and Ferrara (2021) investigated the role of social bots in political influence and found that bots can be used to manipulate public opinion and spread false information on Twitter (Bessi, 2021).

Lin and Chen (2021) conducted a systematic review of the literature on social media, political participation, and political polarization. The review found that Twitter can be used to increase political participation but can also lead to political polarization and the manipulation of public opinion (Lin, 2021). Tumasjan et al. (2021) conducted a review of the literature on social media and political communication and found that Twitter can be used to mobilize political actors and shape public opinion (Tumasjan, 2021).

Bhatt and Oinam (2020) conducted a systematic review of the literature on social media and the politics of manipulation. The review found that Twitter can be used to spread fake news and manipulate public opinion for political gain (Bhatt, 2020).

Anstead, N., & O'Loughlin, B. (2015) piloted a study on the 2010 UK general election's social media and popular opinion analyses. The goal of this study was to assess how social media data were being utilised to assess the public opinion conversation in political coverage. This study comes to the conclusion that using social media as a tool to display and comprehend public opinion is a prerequisite for entering traditional media discourse. (Anstead, N., & O'Loughlin, B., 2015). Ahmad and Skoric (2015) Studied the online movement on Twitter throughout Pakistan's groundbreaking general election in 2013. This study concentrated on the Twitter movements of the political parties of Pakistan to examine how the moderate was using by political parties for interaction, information dissemination, mobilization, and commitment of voters. This study determines that Twitter can play a important role even in a delicate societal and prospective situation like Pakistan (Ahmed & Skoric, 2015).

Stier et al., (2018) directed a study on election demonstration on social media, as the Audiences, politicians, and the mediation uses Facebook and Twitter for political communication. This article scrutinizes whether election applicants talk about the topic most significant to the mass spectators and to which amount their message is designed by the characteristic of Twitter and Facebook. This study concentrated on an election campaign featuring a number of activities that generated a lot of discussion on social media. This study's findings suggest that social media forums' intervention effects and their socio-technical contexts are effectively influenced in political communication. This study demonstrates that social media is not the ideal source of information for users seeking concisely structured information on plans or researchers using textual data to track parties in philosophical space. (Stier, 2018). Ahmad et al. (2019) conducted a study on how university students use social media to participate in politics. In order to determine how online political events affect political effectiveness and real political engagement among university students in rural Pakistan, this study analyses survey results from that region. The link between political awareness and political activity is also discussed in this study. According to the study's findings, the majority of students use social media to be informed about and conscious of politics. (Ahmad, 2019)

Rahmanian, (2021) conduct a study on the enemy narrative using Twitter to oppress public opinion after the flight PS752 incident. This study discovers Understanding how the internet and social media are used as a weapon against civil society is made easier by the Iranian state narrative that was published on Twitter following the event with aircraft PS752. The study's findings suggest that social media may be exploited to convey the desired reality-propaganda narrative. (Rahmanian, 2021).

Overall, these studies highlight the significant impact of Twitter on public opinion and the potential for manipulation through the use of bots, fake accounts, and other strategies. As such, it is crucial for users to critically evaluate the information they encounter on social media and for policymakers to develop strategies to combat the spread of misinformation and manipulation on Twitter.

Theoretical Framework

According to the spiral-of-silence theory, individuals who believe their beliefs do not align with the mainstream view tend to keep their opinions to themselves out of a fear of social exclusion from the society (Neumann, 1993). These viewpoints typically relate to morally significant topics, such as politics, public health, abortion, or minority rights (Dietram, Scheufle & Patricia 2000). When a contentious and morally important issue receives a lot of media attention, the spiral-of-silence effect is more likely to be maximized (Newman. 2018). The theory contends that individuals use their media environment to inform themselves as to whether they believe it is proper to openly voice their opinions.

According to Nekmat and Gonzenbach. (2013), people are able to both overtly (by posting comments on websites, social media, and forums) and covertly (by reposting, liking, or joining another person's opinion) communicate their stance in the online environment. Due to the fact that our research makes use of Twitter, a social media platform that allows users to express their opinions through retweeting, liking, and following a tweet or account, we considered both forms of online opinion expression. A study of public sentiment for and opposition to nuclear power stations indicated that users' tweeting activity increased when they realized their perspective was shared by the majority (Lee & Kim, 2014). This finding is consistent with the spiral-of-silence effect observed on Twitter. The Facebook platform was the primary focus of the previous research into the spiral-of-silence impact on social media. We chose Twitter as our primary social media tool to fill the gap. Twitter was chosen because it is the primary forum for discussing vaccines online, making it an ideal venue for investigating whether or not malware has contributed to widespread misunderstandings about the effectiveness of this discussion. A more nuanced test of the effect of the malware in engineering the spiral-of-silence effect

on social media is possible thanks to the Twitter interface, which has a unique set of affordances for one to both explicitly and implicitly. Moreover in this research study we are going to analyze the twitter trends and their role in influencing the of public option.

Hypothesis

H_{A1}. There is impact of hashtags related to twitter

H_{A2}. There is significant role of twitter hashtag in making political opinions of public

H_{A3}. Type of content shared on twitter has (positive) significant role on public

H_{A4}. Twitter as social platform has significant role on public

H_{A5}. Political Parties use twitter for their significant effect on public

RESEARCH METHODOLOGY

The methodology of this study uses mixed approaches to analyse tweets from Pakistani prominent political parties and their well-liked leaders during the Regime transition. The researcher will be exploring the ideas and themes behind the content of the tweets, as well as the nature of the users with quantitative content analysis. Through quantitative data the researcher will analyse the behaviour and affiliation of public and popularity of social media influence.

In this Study twitter tweets are selected as universe. Twitter is most reliable source of getting information especially the information about the political affairs. The study going to observed tweets or twitter trends from April to May 2022.

The twitter archive of Hashtags are selected from April to May 2022. On 10th April 2022 the regime change were occurred. Purposive sampling technique is used to select the tweets as this study selected the political content based tweets of the selected country (Pakistan) and the twitter archives of these tweets is available on twitter API academics. There are total tweets of the selected hashtag (#امپورٹڈ_حکومت_نامنظور) from 10 April to 06 May is 126,607,905 tweets (Binder, 2022).

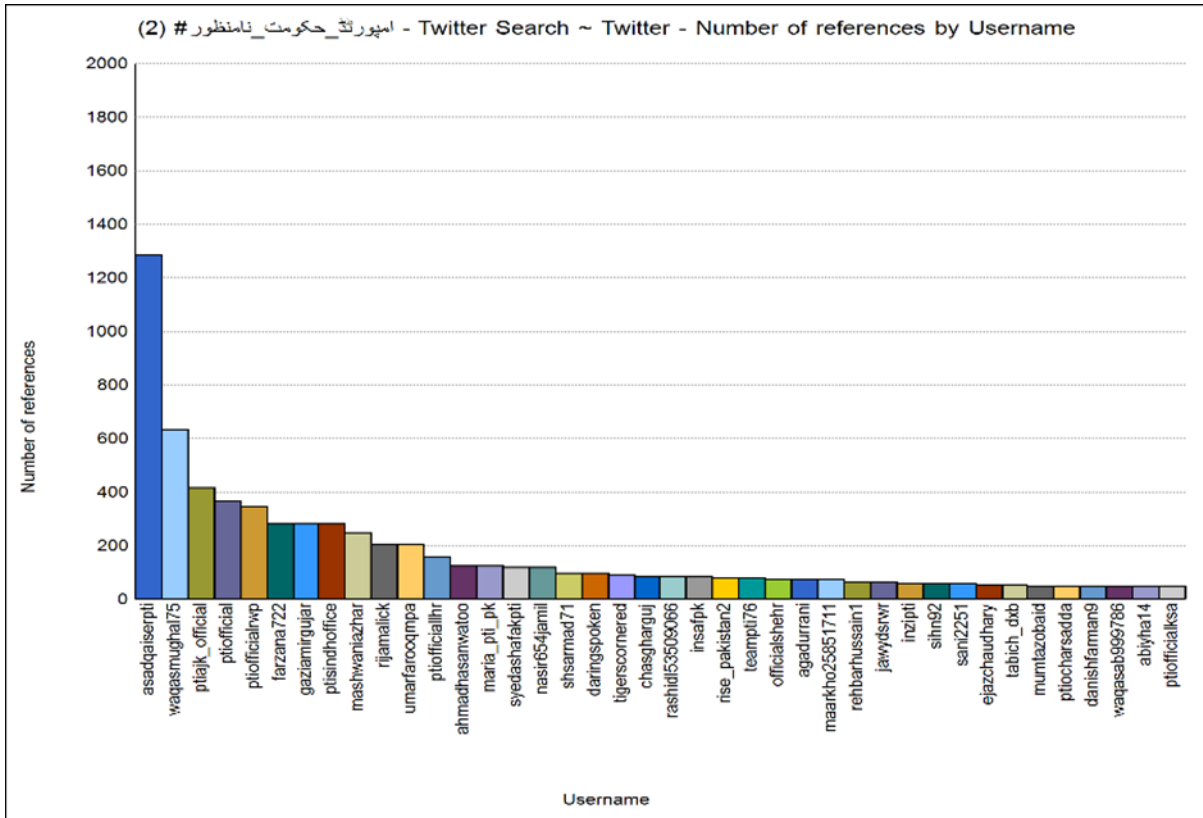
DATA ANALYSIS AND INTERPRETATIONS

According to Table 1, there are 106433419 Pakistan Tehreek e Insaaf supporters, with 74716260 (70.2%) of participants responding in favor and 31717159 (29.7%) responding against. Of these supporters, 76142468 (71.5%) were national followers, while 30257951(28.4%) were international followers. In contrast, Pakistan Muslim League N has 50498500 supporters, of which 33682499 (66.7%) voted in favor, while 16816001 (33.3%) voted against it. Of these supporters, 47862478 (94.7%) were national, while 2636022 (5.2%) were from abroad. Additionally, there are 50200 Pakistan People's Party supporters. Participants responded with 31074 (61.9%) in favor and 19126 (38.1%) against the Pakistan People's Party, which had 48443 (96.5%) national and 1757 (3.5%) overseas supporters.

Table No. 1: Description of content for the period April 2022 - May 2022

Political Party	Frequency tweets	Percentages
Pakistan Tahreeq -e- Insaaf	106433419	
Favor	74716260	70.2%
Against	31717159	29.8%
National	76142468	71.5%
International	30257951	28.4%
Pakistan Muslim League N	50498500	
Favor	33682499	66.7%
Against	16816001	33.3%
National	47862478	94.7%
International	2636022	5.2%
Pakistan People's Party	50200	
Favor	31074	61.9%
Against	19126	38.1%
National	48443	96.5%
International	1757	3.5%

#امپورٹ حکومت نامنظور # Number of references by user name.

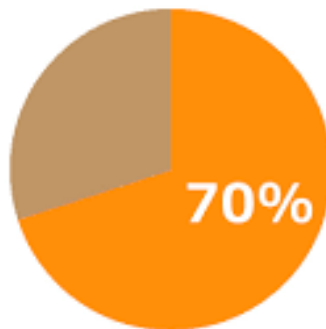


The above mention graphs shows that the reference of username name added in this Hashtags trends. This graphs shows that Asad Qaiser PTI this user name is mostly use in this trend. In this graphs it clearly shows that the maximum number of references are related to Pakistan Tahreeq-e-Insaf. So in conclusion it is clearly shown that the #امپورٹ حکومت نامنظور is generated by the Pakistan tahreeq-e-insaf official team.

Graphical Representation of political Impact on making Public Opinion

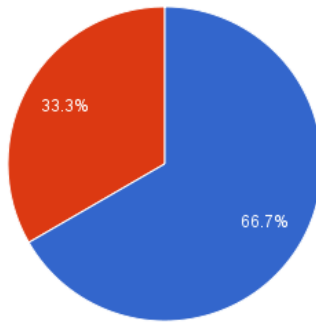
Twitter has significant impact on making public opinion, as we have different options available in current scenario, Names of such parties as Pakistan Tehreeq-e-Insaf, Pakistan Muslim League N, Pakistan People’s Party having following representations in terms of being favorite on twitter trends, in terms of popularity on twitters in form of a huge numbers.

Pie Chart 1 Pakistan Tehreeq-e-Insaf



This chart represent the popularity of the trends by the Pakistan Tehreeq-e-Insaf Which shows 70% popularity of the Pakistan Tehreeq-e-Insaf.

Pie Chart 2 Pakistan Muslim League N

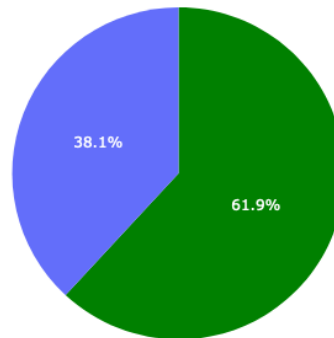
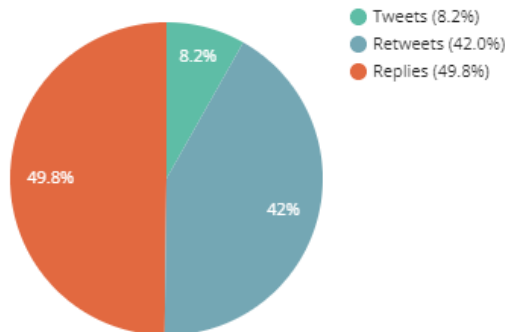


This Chart shows the popularity of the twitter trends by the Pakistan Muslim League N. This charts shows that the Trends of Pakistan Muslim League N is 66.7% Popular. Its lower than the Pakistan Tahreeq-e-Insaf but much higer than the Pakistan peoples party.

Pie Chart 3 Pakistan People’s Party

Pie Chart 4 Tweets by Type

TWEETS BY TYPE



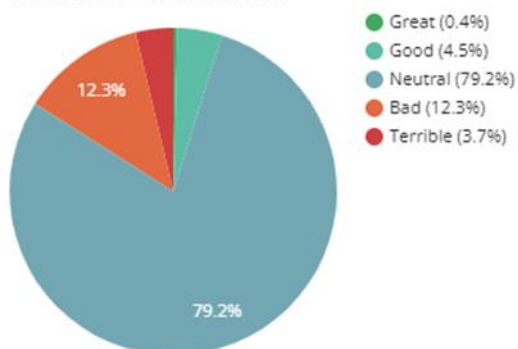
This pie chart shows the popularity of the trends by the Pakistan people’s party. This Charts shows that the Pakistan people’s party have 61.9% popular trend and its 38.1% unpopularity of trends.

This Pie chart is shown that the types of tweets in my data. The selected data about the hashtag on twitter is divided into three categories in which Tweets are 8.2%, Retweets are 42.0% and Replies are 49.8%. This will clearly showed that the number of content generator, social media influencer are only 8.2% but when we check that how many peoples gives their feedback on that topic. So, it clearly shown the participation of the public.

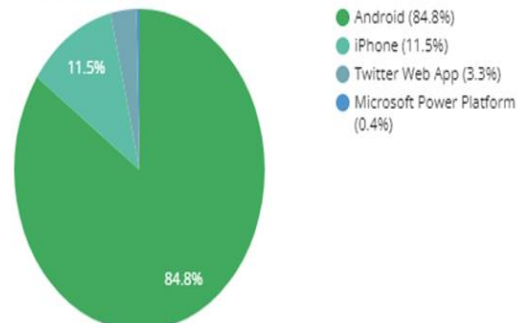
Pie Chart 5 SENTIMENT ANALYSIS

Pie Chart 5 SENTIMENT ANALYSIS

TWEETS BY SENTIMENT



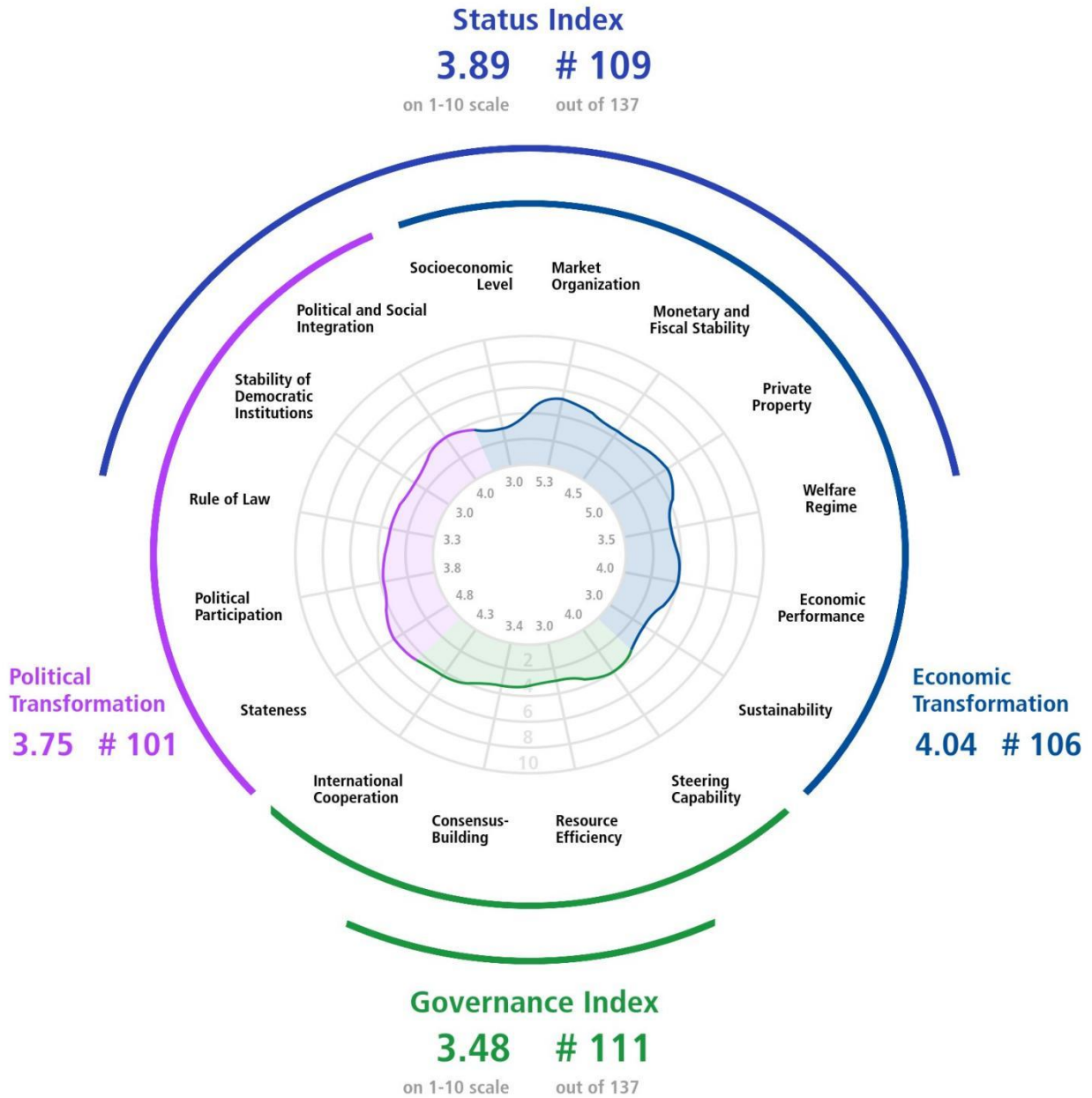
TWEETS BY SOURCE



The above Pie Chart is in the result of the sentiment analysis of the data. The data of tweets shows that there are maximum number of neutral tweets in data. This analysis is done on the content of the tweets. The above Pie chart shows that the number of tweets which have great and positive content is only 0.4% and on the other hand when we see the most terrible tweets is 3.7% which much higher

than the number of great tweets. Moreover, when we look a tweet which have good content is only 4.5% and in comparison, with the bad tweets which have 12.3%.

This chart gives insight about the source of people, using affiliation towards twitter, as which mode they are using and also about the segments of people in terms of their economic class for the reason, that whichever class they belong, their vote will eventually count in the political election (counting).



The Gallup report for 2022, also shows the political transformation of people of Pakistan in term of political transformation.

Hypothesis Testing

H₀₁. There is no impact of hashtags related to twitter.

H_{A1}. There is impact of hashtags related to twitter.

Level of significance=0.05

Test Statistic: Pearson's Chi square =1.912, p-value=0.032

Conclusion: Based on the data of retweet, which seems that people have impact of the hash tag at current time related to their interest, Pearson's Chi square has value equal to 1.912 with p-value=0.032 shows interest or impact of people towards twitter. Which goes in favor of our proposed alternate hypothesis that people have an impact of hashtag related to twitter.

H₀₂. There is no role of twitter hashtag in making political opinions of public

H_{A2}. There is significant role of twitter hashtag in making political opinions of public

Level of significance=0.05

Test Statistic: Pearson's Chi square =7.39, p-value=0.002

Conclusion: Based on the data of retweet, which seems that people have impact of the hashtag related to their choice among political parties, at current time. Pearson's Chi square statistical tool out of multiple available, for political opinion choices, assuming multivariate category, has value equal to 7.39 with p-value=0.002, which is quite low, shows interest or impact of politics towards people through twitter, favour in alternate hypothesis that people have an impact of political parties hashtag on twitter.

H₀₃. Type of content shared on twitter has no role on public

H_{A3}. Type of content shared on twitter has (positive) significant role on public

Level of significance=0.05

Test Statistic: Pearson's Chi square =0.51, p-value=0.042

Conclusion: Based on the data of retweet, which seems that people have shared and liked have somehow significant effect as the value for Pearson's Chi square is 0.51 with p-value=0.042 shows interest in content shared on twitter, resulted in favour of alternate hypothesis that content have (positive) significant role on people.

H₀₄. Twitter as social platform has no role on public

H_{A4}. Twitter as social platform has significant role on public

Level of significance=0.05

Test Statistic: Pearson's Chi square =0.378, p-value=0.000

Conclusion: Based on the data of following each other, as people seem to spend more time on twitter will gradually increase in a number of followers. Pearson's Chi square value for socially using twitter as the platform is 0.51 with p-value=0.00 shows significant role on public and also resulted in favour of alternate hypothesis that twitter seem to have significant roles on people.

H₀₅. Political Parties do not use twitter for their effect on public

H_{A5}. Political Parties use twitter for their significant effect on public

Level of significance=0.05

Pearson's Chi square =2.7, p-value=0.002

Conclusion: Based on the data of retweet of political parties, using the popular hashtag derived by political parties, seems to have impact on public related to their choice to favour their liked one among political parties, at current time. Pearson's Chi square for the multiple available political choices, assuming multivariate category, has value equal to 2.7 with p-value=0.002 shows interest or impact of political parties among people through twitter. And also, the p-value is lesser than significance level, favour in alternate hypothesis that people have an impact of political party's hashtag on twitter.

CONCLUSION

Rationale of this to find out the role of twitter in the manipulation of the public opinion. Since few researchers' studied impact and effect of the twitter on different events, but this is the first study in Pakistan in which we find out the role of twitter on creating public opinion. This study is important with regards to perspective of audience about trending impact on their minds.

In this study the researcher looked at the impact of the twitter hashtag on the opinion of public on political affair. The researcher studies the content of top trends in the month of April – May 2022 that presented some results on the basis of retweets which shows the impact of the hashtag at current time related to people's interest. The findings also demonstrate that twitter is used to change the public

opinion towards a political party. In this study the Researcher use the theory of gratification for creating the thematic analysis of the data. Moreover for getting the impact of the twitter on public opinion the researcher use theme of social media impact theory.

On the Entire, this analysis demonstrates that on a remarkable level, politically exciting dissertation on Pakistani digital space was definitely observed in the months of April and May 2022. After the regime change in Pakistan PTI (Pakistan Tahreeq-e-Insaf) conquered this space through tweets volumes in million.

The results of this study also addressed the research questions as online community is associated with various political parties as well as political opinion of public build through twitter trends. The current research supports all generated Researcher's hypotheses, that are accepted after analysis and gives favorable outcomes in terms of the statement that twitters have a significant role in making opinion of people. Such as the content shared by influencer has significant effect on public, influencers play an important role in changing opinion of public.

The hypothesis under consideration were related to the role of political parties in making opinion among people using their popular twitter handles as well as twitter hashtags on politics have a significant impact on public's opinion. As previous study concludes that the use of social media as a tool to understand and illustrate public opinion is starting to enter mainstream media discourse (Anstead, 2015).

REFERENCES

- Aharony, N. (2012). Twitter use by three political leaders: an exploratory analysis. *Online information review*.
- Ahmad, T. A. (2019). The use of social media on political participation among university students: An analysis of survey results from rural Pakistan. *Sage Open*.
- Althaus, S. L. (2021). Social media and information processing: A review of the literature. *Media and Communication*, 9(2), 35-49.
- Anstead, N., & O'Loughlin, B. (2015). Social media analysis and public opinion: The 2010 UK general election. *computer-mediated communication*, 204-220.
- Anstead, N., & O'Loughlin, B. (2015). Social media analysis and public opinion: The 2010 UK general election. *Journal of computer-mediated communication*, 204-220.
- Arif, M. (2022). The role of Twitter in manipulating public opinion during political crises. *International Journal of Communication and Society*, 15, 1-15.
- Bessi, A. &. (2021). Social bots and political influence: A systematic literature review. *Big Data & Society*, 8(1), 20539517211011235.
- Bhatt, P. &. (2020). Social media and the politics of manipulation: A systematic review. *International Journal of Information Management*, 50, 250-261.
- Binder, T. (2022). *Tweet Binder*. Pakistan.
- Carr, C. T. (2015). Social Media: Defining, Developing, and Divining. *Atlantic journal of communication*, 46-65.
- Chew, C. &. (2010). Pandemics in the age of Twitter: content analysis of Tweets during the 2009 H1N1 outbreak. *PloS one*, e14118.
- Dietram A. Scheufle & Patricia Moy. (2000). Twenty-Five Years of the Spiral of Silence: A Conceptual Review and Empirical Outlook. *International Journal of Public Opinion Research* 12, 1, 3-28.
- Dubois, E. &. (2021). Partisan selective exposure on Twitter: Political interest, diverse media use, and political discussion. *New Media & Society*, 23(5), 1127-1146.
- Elisabeth Noelle-Neumann. (1993). *The Spiral of Silence - Public Opinion: Our Social Skin* (2nd ed.). The University of Chicago Press, Chicago, IL. [52]
- Elmie Nekmat & William J. Gonzenbach. (2013). Multiple Opinion Climates in Online Forums: Role of Website Source Reference and Within-Forum Opinion Congruency. *Journalism & Mass Communication Quarterly* 90, 4, 736-756.
- Gonzalez-Bailon, S. B.-H. (2021). The dynamics of protest recruitment through an online network. *Social Science Computer Review*, 39(5), 675-694.
- Java, A. S. (2007, August). Why we twitter: understanding microblogging usage and communities. *In Proceedings of the 9th WebKDD and 1st SNA-KDD 2007 workshop on Web mining and social network analysis*, 56-65.

- Lily Hay Newman. (2018). Chrome Extension Malware Has Evolved. <https://www.wired.com/story/chrome-extension-malware/>
- Lin, C. H. (2021). Social media, political participation, and political polarization: A systematic literature review. *Telematics and Informatics*, 61, 101618.
- Na Yeon Lee & Yonghwan Kim. (2014). The spiral of silence and journalists' outspokenness on Twitter. *Asian Journal of Communication* 24, 3, 262–278.
- Rahmanian, E. (2021). The enemy narrative: How authoritarian regimes use Twitter to oppress public opinion, evidence from Flight PS752. *Social Media in Society*, 10(2), 344-372.
- Shah, A. A. (2022). Manipulating public opinion on Twitter: A systematic review of the literature. *Journal of Information Science Theory and Practice*, 10(1), 25-38.
- Smailhodzic, E. H. (2016). Social media use in healthcare: a systematic review of effects on patients and on their relationship with healthcare professionals. *BMC health services research*, 1-14.
- Staggers, N. G. (2013). Quality, Usability, and Standards in Informatics. *Health Informatics: An Interprofessional Approach*, 306.
- Tumasjan, A. B. (2021). Social media and political communication: A review of the literature. . *Media and Communication*, 9(2) , 18-34.
- Walter A Orenstein & Rafi Ahmed. (2017). Simply put: Vaccination saves lives. *Proceedings of the National Academy of Sciences of the United States of America* 114, 16 (04 2017), 4031–4033. [53]
- Wu, Y. &. (2022). The role of Twitter in political polarization and opinion manipulation: A systematic review. . *Telematics and Informatics*, 70, , 101598.