

**Twitter Dialogue: An analysis of Pakistani Politicians'
Information Sharing**

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**Twitter Dialogue: An analysis of Pakistani Politicians’
Information Sharing**

Abstract

Purpose: The use of Twitter by political parties and politicians has been well studied in developed countries. However, there is a lack of empirical work which has examined the use of Twitter in developing countries. The present study aims to explore the information sharing patterns of Pakistani politicians through Twitter accounts during the pre-election campaign of 2018.

Design/Methods/Methodology: Data of three weeks of the official party accounts and the politicians running for prime minister was analysed. The mixed methods approach has been employed to analyze quantitative and qualitative data retrieved through Twitonomy.

Findings: It was found that the most active Twitter account belonged to the winning party. The prominent Twitter account functions were call to vote, promotional Tweets, promises and tweeting about party developments. The present study provides evidence that there is a difference between the tweeting behaviour of established and emerging parties. The emerging party heavily posted about changing traditional norms/culture/practices.

Practical Implications: The study contributed to existing knowledge and has practical implications for politicians, citizens and social media planners.

Originality/Value: The present study was designed carefully and based on empirical research. The study is unique in its nature to fill the research and knowledge gap by adding variety of Twitter functions used by politicians.

Background

Social networking sites (SNS) have emerged as significant communication platforms within 21st century society and enable citizens to connect with each other from all around the world. Recent technological innovations have seen the wide-spread usage and adoption of the platforms by developed and developing nations. These novel communication services allow users to share personal updates, general information, discussions, shopping choices, educational information, political updates and so on.

The use of social media during election campaigns is increasing worldwide and politicians have successfully utilised this medium for their popularity (Casero-Ripollés, 2017; Lopez-Meri, Marcos-García Stieglitz and Dang-xuan, 2013; Weaver et al., 2018

; Lee et al., 2020). To communicate on Twitter with 280 characters may seem challenging, however, politicians and other groups are extensively using this medium for developing online connections. Recent studies have identified significant use of Twitter by global politicians, more specifically during election campaigns. It has been argued that the use of digital platforms such as Twitter during the US 2008 elections led Barack Obama to victory. Politicians use Twitter in a number of ways to mobilize voters, share private messages, sometimes to share images to stimulate retweets (Lopez-Meri, Marcos-García and Casero-Ripollés, 2017; Tumasjan, Sprenger, Sandner and Welp, 2010; Stier et al., 2018; Sun et al., 2019; Sundstrom & Levenshus, 2017). Extensive use of Twitter has been witnessed globally, specifically within the USA, UK, Sweden, Finland, Australia and New Zealand (Ahmed and Skoric, 2014). Most recently, study evidenced that Donald J. Trump and his supporters mobilized their following through Twitter and overcome traditional Republican party during US elections 2016 (Bryden and Silverman, 2019). Twitter is a silent political tool of Trump's success and he utilized this to spread politicized information more efficiently and widely (Hollinger, 2017). Research has also highlighted how misinformation can exist around popular topics on Twitter (Ahmed, Vidal-Alaball, Downing and Seguí, 2020).

The focus of this paper is related to major political parties and political leaders during the 2018 elections in Pakistan. In previous years corruption has plagued Pakistani politics and the 2018 election is likely to have been closely followed around the world including the United States which works closely with Pakistan related to the war on terror. The first time Pakistani politicians used Twitter to share information and to mobilize voters was during the 2013 elections. A significant reason of this exponential growth of online information sharing is terrorism threats in the country.

Twitter played a significant role in engaging Pakistani youth in politics. Statistics show that male population and, specifically, youth (18-24 years) is more actively engaged on social media than female (Digital 2019 Pakistan, 2019). Previous research has highlighted how online campaigns increased voters' turnout (Ahmed and Skoric, 2014). Research has also explored political information sharing through social media by educated Pakistani youth and an emerging party Pakistan Tehreek-i-Insaf (PTI) played substantial role in increasing social media trafficking (Eijaz, 2013; Ahmed and Skoric, 2014). Presently, there are three popular political parties in Pakistan, Pakistan Muslim League Nawaz (PMLN), Pakistan Peoples Party (PPP) and Pakistan Tehreek-i-Insaf (PTI). The present study aims to analyze popular political leaders of selected parties and their official Twitter account during the pre-election campaign in 2018. This research project has potential for practical and theoretical implications for politicians, social media policy makers and information providers. To the best of the authors' knowledge, this is the first empirical study to examine information sharing patterns during the 2018 elections in Pakistan.

The overall research aim of this project is to explore the information sharing patterns of Pakistani politicians through their and their parties' Twitter accounts during pre-

election campaigns of 2018. The study will attempt to answer the following research questions: which party Twitter account was 1) most active 2) most replied to 3) which hashtags were used 4) most retweeted and 5) most mentioned users. Moreover, the study highlighted content appeared on Twitter (functions/categories) during election campaign, and, 7) Word cloud of Politicians' Twitter accounts. The study findings will highlight distinct tweeting behaviour of politicians, particularly in the context of developing countries. The results will have theoretical and practical implications for politicians, social media analysts and researchers. Although previous research has examined the Pakistan election this study is among the first to conduct an in-depth analysis of tweets sent by those running for election.

Literature Review

Many studies have been published globally on social media political communication. There has been a significant amount of research which has investigated Twitter's political usage and information sharing by candidates and citizens (Ahmed and Skoric, 2013; Graham, Broersma, Hazelhoff and Guido van 't Haar, 2013; Graham, Jackson and Broersma, 2014; Ahmed, Jaidka, and Cho, 2016). Related research highlights Twitter use, usage & information sharing patterns, Twitter functions, comparison of parties and political leaders and comparison of usage pattern from politicians of different countries (Larsson and Moe, 2014; Graham, Jackson and Broersma, 2014). Fewer studies have focused on the type of published Twitter content and how fast information is spread and retweeted (Stieglitz and Dang-xuan, 2013).

Twitter as a communication tool is successful in connecting ordinary and influential people (Ahmed, Bath, Sbaffi and Demartini, 2018). Twitter provides more enhanced opportunities to connect with general public than traditional communication means (Kim and Lee, 2020). It also becomes a source of information for journalists and other media professionals (Ahmed and Lugovic, 2019). To be popular and more powerful, less established and emerging political leaders use Twitter more than established leaders. Some have argued that emerging leaders receive less coverage on traditional media, therefore, they use new medium to mobilize their voters (Ahmed, Choa and Jaidka, 2017). However, candidates' age and gender have no impact on their usage of Twitter account (Grant, Moon and Grant, 2010). Social media platforms are providing opportunities to newly established parties to engage and interact with their voters (Larsson and Moe, 2014; Stier et al., 2018; Sundstrom & Levenshus, 2017; Weaver et al., 2018) . It has also been evidenced that Twitter usage is significantly related with the victory of the winning party (Ahmed, Jaidka and Cho, 2016; Singh et al., 2020). Interestingly, this study found that being straight forward and having open approach distinguished Trump from other politicians on Twitter. Researchers argued that Trump's political stance and judging opponents' capabilities made him popular and mobilize his victory in US elections 2016 (Ross and Caldwell, 2019).

A number of empirical researches focus on Twitter's function or information sharing behaviour of political leaders and their parties. Most of the studies conducted content analysis and quantitative analysis to highlight these aspects. Generally, politicians and political parties' Twitter accounts share campaign updates, promotional content, criticism on opponents, call to vote, political news, acknowledgements, advice giving, other news and party details (Graham, Jackson and Broersma, 2014; Lopez-Meri, Marcos-Garcia and Casero-Ripollés, 2017; Stieglitz and Dang-xuan, 2013; Tumasjan, Sprenger, Sandner and Welp, 2010). Frequent tweeting behaviour involves, tweeting about campaigns, party details and criticism of opponents. Political retweets can be associated with positive and negative sentiments. The quantity of retweeting of negative messages is more than positive messages (Stieglitz and Dang-xuan, 2013).

Studies have also examined that the majority of political tweets address the general public, other politicians, journalists, party activists, experts and celebrities (Graham, Broersma, Hazelhoff and Guido van 't Haar, 2013; Ahmed and Skoric, 2013). It has also been established that politicians' Twitter image trigger their social media campaigns more positive than their traditional communication (Lee, Lee and Choi, 2020). A comparative study of political candidates of Norway during two elections of 2011 and 2013 classified Twitter user groups into three classes, *Retweeters*, who retweet only, *Eite*, who do not retweet but message their own and *Networkers*, who retweet and tweet simultaneously (Larsson and Moe, 2014). Another study investigated Twitter messages' impact during the German federal election and found that important messages could be delivered even in 140 characters and citizens are more engaged in political dialogue on Twitter than other social media platforms (Tumasjan, Sprenger, Sandner and Welp, 2010). The research also identified that politicians involved in Twitter propagation networks during election campaigns are more likely to win elections (Sun, Ch'ng and See, 2019). The rapid growth of social media through a large number of community engagements helps in identifying real world problems (Singh *et al.*, 2020).

Abundant use of Twitter in political campaigns is increasing. One of the significant reasons of Twitter's popularity is that social media may select stories which may be ignored by traditional media. Studies evidence politicians' Twitter blunders or high claims influence significantly on their public image (Lee, Lee and Choi, 2020). Mainly, in Pakistan individuals' can launch free campaigns and run movements on social media to engage others. Also humanitarian aspects can be highlighted more on social media than traditional media (Eijaz, 2013). Few studies shed light on social media and Twitter usage of Pakistani politicians during 2013 elections (Ahmed and Skoric, 2013; Eijaz, 2013).

A study investigated the social media usage of Pakistani political parties. The study reported Imran Khan as a popular leader on Twitter having more followers than others. And his party, Pakistan Tehreek-e-Insaaf (PTI) involved more in writing blogs and using social media during 2013 elections (Ahmed and Skoric, 2013; Eijaz, 2013). Another study confirmed these facts by investigating supporters' networks through

Social Network and Semantic analysis (Khan, et. al. 2020). The study used pre-election 2017 dataset and found that Imran Khan (IK) is more vigilant in posting his comments and popular leader and sentiments of supporters indicate more positive comments for IK and neutral and negative for other politicians. The latest elections were held in Pakistan during 2018 on July 25th. There is a need to examine recent election trends on Twitter and popular leaders' information sharing patterns in comparison with previous elections. Previously, studies examined politicians' popularity in terms of followers' statistics, however, analysis of content posted on Twitter is a big research gap, which needs to be addressed.

Methodology

The methodology of the present study is mixed methods in nature, quantitative and a qualitative content analysis of tweets published by Pakistani popular political parties and their popular leaders during pre-election campaigns 2018 was conducted. The criterion to select popular political leaders was based on the number of Twitter followers they had. Three popular political parties, Pakistan Muslim League Nawaz (PMLN), Pakistan Peoples Party (PPP) and Pakistan Tehreek-i-Insaf (PTI), and the respective leaders for these parties were also selected. These included Imran Khan (PTI leader), Shehbaz Sharif (PMLN), and Bilawal Bhutto Zardari (PPP Leader). A dataset was built using Twitter data for each of the aforementioned political parties and their respective leaders (6 datasets in total). Each dataset consisted of 3200 of the account's latest tweets which is the maximum that can be retrieved using Twitter's Search API. Tweets analysed in this study were published three weeks before the 2018 elections including Election Day (5th July-25th July, 2018). Data was retrieved using free version of Twitonomy. The free version of Twitonomy had custom dates and data modification limitations, however, it is easy to use, fast and was helpful to obtain basic level data.

The first phase of data exploration involves statistical descriptive analysis of Pakistani politician tweets revealing basic data about tweeting behavior, most mentioned user, most used #hashtag and most retweeted users. The second data analysis phase involves conceptual content analysis which can be used to construct replicable and valid inferences from text (Krippendorff, 2018). More specifically, the process involved reviewing the data in order to develop the initial coding scheme in line with previous seminal research on Twitter (Chew and Eysenbach, 2010). The study drew on code-frames developed by previous studies (Lopez-Meri, Marcos-Garcia and Casero-Ripolles, 2017; Ahmed, Jaidka and Cho, 2016; Graham, Jackson and Broersma, 2014). Once a code frame was developed tweets were then manually coded into the 14 categories.

The text used within in tweets was carefully read and reduced to meaningful and specific categories and patterns. We utilized a deductive approach to fit in words, sentences, phrases into already derived categories from previous studies.

6

The process was done carefully to avoid irrelevant and inaccurate connections. The final 14 categories emerged as a result of data extraction and constant comparison with already defined themes from previous studies.

However, few new categories were introduced based on the politicians' and their parties' Tweet content and could not fit in any available category (Appendix). The following new categories (a) Condemning terrorism acts and/or country's situation/link with country's safety, (b) Own position, (c) Religious, (d) Energizing party workers, (e) Targeting youth, and (f) Political report/Highlighting efforts for developments were introduced as an addition into literature. These categories show information sharing patterns of Pakistani politicians and their parties' Twitter accounts.

Findings

Table 1 and 2 highlight tweeting statistics three weeks before the 2018 election including Election Day (5th July-25th July, 2018). Tweets per day refer to the number of Tweets which were sent by a Twitter account. Retweets by users refer to the number of retweets which a user performed. Hashtags used by a user simply refer to the number of times a hashtag was used in a Tweet. The user-mentioned statistic examines the number of times a user mentioned another user.

Insert Table 1 here

The results in Table 1 indicate that the most active Twitter account in the lead up to the elections belonged to the PTI which sent on average 119.62 Tweets per day. The account with the least amount of Tweets per day was related to the account of the PPP with an average of 31.1 Tweets. The party which used the most hashtags related to the PTI account which had a total of 1821 Tweets. The party with the least hashtags used belonged to the PMLN which had a total of 235 hashtags which were used in tweets. The Twitter account of PTI was the account which would mention most other users with 763 mentions. The account which mentioned other accounts the least was that of the PMLN with 44 Tweets.

Insert Table 2 here

The results in Table 2 highlight that the most active Twitter user in the lead up to the elections was that of Bilawal Bhutto Zardari with an average of 6.29 Tweets per day. The least active Twitter user was Shehbaz Sharif whom had a total of 2.43 Tweets per day. An interesting finding here is that the political leaders of parties were tweeting significantly less than the official party accounts. There were no significant differences in the number of users that each of the accounts were mentioning.

Insert Table 3 here

What stands out in Table 3 is that the most mentioned users by the political leaders during the election. The most interesting aspect is that Imran Khan mentioned Actor/Singer mostly in his tweets as he is one of his big supporters and mentioned Imran Khan in his tweets as well. This actor/singer is emerging and mostly appears within TV dramas and advertisements these days.

The Tweets data (Figure 1) also shows that Imran Khan intends to target youngsters, therefore, he may have mentioned the young actor/singer in his tweets tactically.

From Table 3, it can also be seen that Shehbaz Sharif mentioned three users ‘@youtube’, a party supporter and his niece. His niece is a popular and active leader of his own party and was actively engaging in the political campaign. The party supporter which is mentioned by Shehbaz Sharif, has had his account suspended by Twitter. Twitter suspends accounts if they spam, if there is a security risk with the account and on the basis of abusive behavior. It seems that this account was spam or created by the leader or his media because the user appears as among the most mentioned users. The abusive behavior towards competitors could also be a reason for the account suspension.

Bilawal Bhutto’s most mentioned user is @YouTube. YouTube is mentioned because Bilawal would often Tweet YouTube videos which were critical of opponents. Shehbaz Sharif also mentioned @youtube to show some sentimental videos related to his brother Nawaz Sharif, who was the party leader and sentenced to imprisonment.

Twitter is emerging in Pakistan, specifically to communicate political messages. Political leaders mentioned only one user in their communication, it is because Facebook users are majority in Pakistan. Further analysis shows that political leaders mostly used #hashtags were their party slogans, symbol and campaign hashtags created by them or their media teams.

The political leaders were mostly retweeted by their own party supporters and their party’s official Twitter account. The overall findings demonstrate that political leaders were very much central to their Twitter account activities and sharing information and mentioning only their supporters and own party’s political leader (such as niece).

Tweet Content Analysis

Figure 1 shows the total number of Tweet counts per category and the results of the tweet classification will now be discussed. The 14 categories (Appendix) were a result of conceptual content analysis of the Tweets of politicians and their party account. A manual process was adopted to analyse single Tweet as a unit of analysis. As mentioned in the methodology, the coding scheme has been adopted from literature (Ahmed, Jaidka and Cho, 2016; Graham, Jackson and Broersma, 2014; Lopez-Meri, Marcos-

Garcia and Casero-Ripolles, 2017). Replies came on the Tweets, website links, video links and pictures were excluded from the analysis. Only text Tweets, including Urdu and English languages, were examined. Urdu language Tweets were not translated into English to retain the context, only important extracted codes were translated into English language. In case, the Tweet falls into two categories, the dominant category is considered for analysis purpose.

However, there was a need to introduce a few new categories due to specific situations in the country and religious values that had arisen such as (a) condemning terrorism acts and/or country's situation/link with country's safety(b) Own position, (c) Religious, (d) Energizing party workers, (e) Targeting youth, and (f) Political report/Highlighting efforts for developments. A few categories which the present study introduced were merged with their main categories, however, the present study used individual categories due to their dominance in Tweets for instance, (d) energizing party workers and (f) political report.

This section will discuss which and how new categories emerged from data (Appendix). Interestingly, the category "*condemning terrorism acts and/or country's situation/link with country's safety*" specifically emerged from the Tweets of Imran Khan. This political leader has never been in the government and his party was emerging in Pakistani politics. Imran Khan demonstrated his concern on current country situation (terrorism) and put this responsibility on the previous government (led by Shehbaz Sharif). While condemning on terrorists attacks, the other politicians showed their concern about country's present condition (Shehbaz Sharif and Bilawal Bhutto). Due to the prevailing situation in the country, this specific category appeared from data. The following Tweets evidence this fact:

Strongly condemn the terrorist attack on X; his convoy. There seems to be a conspiracy to sabotage the 25 July elections but the people of Pakistan will not allow any design intended to target these historic elections to succeed (Imran Khan).

Y family has suffered the worst terrorist violence & rendered sacrifices for Pakistan.....Pray for his & others' early recovery (Shehbaz Sharif).

Devastated by continued attacks on innocent Pakistanis..... must ensure this mindset is defeated. Have suspended my political activities in solidarity (Bilawal Bhutto).

The second significant category was "own position," which was derived only from Imran Khan's Tweets. Imran Khan heavily Tweeted about his personal efforts for the country as he was a famous cricketer in past (Pakistan's team's captain who led them to world cup victory in 1992). Imran Khan is also a humanitarian, who built the first cancer hospital in Pakistan through donations. Therefore, he reminded the nation about his personal efforts through Tweets. The following Tweet is an example of this expression

By Monday night I had done 60 different jalsas in the most difficult times under serious terrorist threats... (Imran Khan).

Pakistani politicians used Twitter to voice their religious beliefs, connection and trust on God. Interestingly, this was also visible from Imran Khan’s Tweets. He and his party has never been in government, so he demonstrated his strong belief in God that his efforts will not go in vain and God will reward him this time.

To energize party workers, these politicians also used Twitter as a communication tool. Imran Khan and Shehbaz Sharif most Tweeted messages for their party workers, while addressing to a young supporter Imran Tweeted: *“Proud of @farhan_saeed for this composition for our Movement for Justice. Election 2018”*.

Shahbaz Sharif Tweeted about the torture on party supporters and senior party leaders and saluted to their passion as *.....they were tortured without any reason & FIR was also registered against them including against the senior leaders*

Imran Khan and his party were mostly targeting to youth of Pakistan through their Tweets, assuming that Twitter must be a commonly used medium among youth. It is their strategy to target youth during elections being the future of Pakistan. Khan Tweeted as:

Setting a new trend as they launch PTI merchandise and encourage the youth to play their part in the elections and come out to vote on 25 July (Imran Khan).

Politicians’ (Shehbaz Sharif and Bilawal Bhutto) tweeting behaviour also highlighted their messages about efforts and developments for the country. The parties of these leaders remained in government several times and Tweeted about the best projects for the uplift and progress of Pakistan. They also claimed to resolve major issues.

For example: ShehbazSharif Tweeted:

Establishment of peace in Karachi, Pakistan's financial capital, was the result of sustained efforts by former PM Nawaz Sharif ... (Shehbaz Sharif).

In another tweet Shehbaz Sharif noted:

After months of hard work by the PPP government Phase 1 of S3 - 77 million gallons of sewerage treated daily - is online. This is a big step forward for #Karachi and will help meet its #water needs (Bilawal Bhutto).

Insert Figure 1 here

An overall finding is that courtesy messages (condolence, appreciation, anniversaries) were tweeted more. Imran Khan Tweeted more of these messages to

10

potentially show him as a more connected and vigilant politician. He was a famous cricketer, keeping in view his previous affiliation, he Tweeted:

“Congratulations to Fakhar Zaman for becoming the first Pakistani to score a double century in One Day cricket” (Imran Khan).

Shehbaz Sharif also Tweeted some courtesy messages, such as: *“Remembering Edhi sahib on his second death anniversary today. What an iconic figure he was who taught us how service of the people over...”* (Shehbaz Sharif)

The second most Tweeted category was “call to vote /link with criticism of adversary. Bilawal Bhutto had the most number of tweets in this category *call to vote messages. I ask for your support in eradicating this menace from our society. Together, we can fight extremism and create a peaceful, progressive and prosperous Pakistan...* (Bilawal Bhutto).

However, Imran Khan mostly linked call to vote with criticism of adversary.

People of Pakistan must come out and vote tomorrow in this historic election...the nation has a chance to defeat the entrenched status quo... (Imran Khan)

Bilawal Bhutto heavily focused on posting messages about “political report/efforts for development,” future “promises” and “promotion.” Shehbaz Sharif also posted about promotional content. This includes messages about huge participation and overwhelming response of the nation in their rallies and processions. Tweets in this category include the following:

Party has a history of proving shelter to the homeless and I promise you that following our mandate, even this time we will provide homes to those in deed (Bilawal Bhutto, Translated from Urdu language)

Heartening to see the hordes of people lining the streets today in the cities I passed through... (Shehbaz Sharif)

Bilawal Bhutto and Shehbaz Sharif also Tweeted more in the *Personal life backstage political campaign category*. A big reason to Tweet such messages is that both politicians belong to political dynasty and inherited family politics. Therefore, both leaders focused on posting about former leaders’ sacrifices and used the names of those leaders/ family members emotionally. Shehbaz Sharif also tweeted about his brother who was former Prime Minister.

“People are aware of the injustice done to Nawaz Sharif... keen to take revenge on July 25. No corruption charges proved against NS ... there is no doubt about his integrity...”

Shehbaz Sharif used Twitter to post about “campaign updates”, “promotional stuff”, “energizing party workers”, and “call to vote”.

Bilawal Bhutto also used Twitter to spread messages about their “political efforts”, “party position” and “promises” to work on remaining issues in future. Bilawal Bhutto belonged to one of the traditional and dynasty party of the country. Therefore, he was tweeting more about his family and wanted to trigger people’s sentiments by posting about party position and promises.

Politicians mostly used words were highlighted (Figures 2, 3, 4) through word clouds in order to see influential words used by them. Word clouds were generated using free website, wordclouds.com. Word clouds were created by analyzing English language tweets only. The tweets showing pictures, videos and website links were not included in this process. Also articles, names of procession places, most mentioned users and most used hashtags were excluded from this analysis. Only important words were extracted and their frequencies were noted for this purpose.

Insert Figure 2 here

An overview of Figure 2 shows that this politician’ mostly used words are “martyr,” “Bhutto (family name),” “Benazir (mother’s name),” “Pakistan” and “mandate.” Most of his family members were killed and sentenced to death on the cost of politics. Therefore, this man wanted to warm people’s sentiments about his family’ sacrifices by using the words, martyr, Bhutto and Benazir.

Insert Figure 3 here

From Figure 3, it is evidenced that Shehbaz Sharif used his brother’s name (Nawaz) and his family name (Sharif) in most of his Twitter messages. He also used his party name (PMLN) and the word ‘Pakistan’, ‘people’ and interestingly the word ‘mother’ in his Twitter posts.

Insert Figure 4 here

The winning party leader Imran Khan’s messages were dominant with words ‘new’, ‘change’, ‘justice’, ‘youth’, ‘overwhelming’, his party name (PTI), ‘hot’ and ‘money’. Imran Khan, stimulated people with the dream of new Pakistan and change in the country. He targeted youth and induced people with the promise of ‘justice in new Pakistan’. Similarly, he posted promotional messages to highlight that there is overwhelming response from public in his processions. He also mentioned in his messages that he is a man, who is still in public in hot weather and even with danger of

terrorism. His posts about that he would bring change may have given him an edge over other contenders. Our results have highlighted how the content of tweets varied across the different accounts studied and that the most popular types of tweets sent related to courtesy-related messages.

Discussion

Our preliminary analysis revealed an insight into the frequency of tweets sent by major political parties and their leader's personal accounts during the 2018 Pakistan elections. Based on the initial exploration of content it was found that the political Twitter account with the most activity belonged to PTI Official account which was the eventual winner of the 2018 elections. It is interesting to note that the winning party's account was more active, Tweeted more and retweeted than the opposing parties' accounts. Previous studies also evidenced that there is a significant relationship between increased tweeting behaviour and their winning position (Ahmed, Jaidka and Cho, 2016; Khan, et.al., 2020). In contrast (Bright, et.al., 2019) researchers found Twitter campaigns didn't impact election outcomes during 2015 and 2017 UK elections.

Another interesting finding highlights that emerging political parties for example Pakistan Tehreek-e-Insaf (PTI) Tweeted more than established parties (Pakistan Muslim League Nawaz (PMLN), and the Pakistan Peoples Party (PPP). Previous research has also found this to be the case (Larsson and Moe, 2014; Ahmed, Choa and Jaidka, 2017; Kelm, 2020).

Another important finding relates to most mentioned users, it was found in line with previous studies (Ahmed, 2016; Graham, Broersma and Hazelhoff, 2013) that politicians mostly interact with political leaders, party activist/supporter and celebrities. Imran Khan mostly mentioned a celebrity who was also his party activist and Shehbaz mentioned a party supporter (fake account/self-managed) and own party political leader (his niece). Unlike previous research, we found that the two established party leaders (Shehbaz Sharif and Bilawal Bhutto) most mentioned user was @YouTube. The reason for this is that they would direct their followers towards videos which were critical of their opponents. The most noticeable finding is that these leaders used Twitter in a very limited manner by mentioning one or two users only and by using hashtags related to party slogans, symbols and campaign. In contrast to present study findings, Grant (2010) explored that politicians mentioned users in thousands and minimum in hundreds.

The tweeting behavior of politicians was generally in line with the results of previous studies (Ahmed, 2016; Graham, Broersma and Hazelhoff, 2013; Larson and Moe, 2011; Khan, et.al., 2020). However, out of 14, six (Condemning terrorism acts and/or country's situation/link with country's safety, Own position, Religious, Energizing party workers, targeting youth and Political

report/Highlighting efforts for developments) categories were introduced due to the dominance of content. Graham, Broersma and Hazelhoff (2013) also reported that politicians tweeted about their own position or stance. This is because of the specific country's safety situation (Terrorism), different political background and religious values. In accordance with the present findings, one may conclude that tweeting behaviour and information sharing patterns vary with the country's own situation and political context. Politicians facing war and conflict situations in their countries mostly focused on statements related to peace (Graham, Broersma and Hazelhoff, 2013; Noa, 2012).

The candidates heavily focused on posting about courtesy, call to vote and promotional material, this also accords with observations reported in previous studies (Noa, 2012; Ahmed, Jaidka, and Cho, 2016; Ahmed, 2016). Another interesting fact is that winning party leader and his supporters established about oponents as old and traditional by mentioning themselves as new/change and choice of youngsters. Imran Khan's word cloud visualization gives prominence to the word 'change', 'new Pakistan' and 'youth'. This fact is also consistent with the findings reported by Ahmed (2016) about Indian politicians. It is significant to highlight that both countries (Pakistan and India) have almost similar cultural, social and political values. The present study's results further support the literature findings (Ahmed, 2016; Larsson and Moe, 2011; Stier et al., 2018; Xeller & Atkin, 2019; Ross and Caldwell, 2019.) that politicians used Twitter traditionally which is very much linked with their offline activities (speeches, rallies, events, meetings). However, researchers identified new and interesting findings not reported in previous studies. Namely, that politicians, who belonged to a political dynasty (Shehbaz Sharif and Bilawal Bhutto) heavily posted about their family members (who are or were political leaders) and personal life to make people sentimental about the legacy and values they have.

Conclusion & Implications

Our study has outlined results of a research project which sought to develop an insight into political parties' use of Twitter during the 2018 election. We found that the winning party in 2018 had engaged with Twitter significantly more by sending more tweets and retweets and which had a larger amount of Twitter followers. Our findings are in line with previous studies which found a significant relationship between winning an election and having sent the most Tweets with a larger follower base. The present study also found that less established parties used more social media platforms than established political parties. We also defined two classification code frames; one which will derive insight into interaction habits and another into the content of tweets.

The tweeting behaviour of politicians and their party's accounts was in line with published literature, however, few categories emerged based on specific elements for instance country's safety situation, political situation, cultural and religious values. One may conclude that politicians' tweeting trends are more similar than different. Another implication of these results is that politicians heavily link their offline activities with their messages on Twitter. These results also suggest that there is a difference between information sharing patterns of established political parties' leaders and emerging leader. This study also established the fact that the winning political party or leader heavily focused on messages about courtesy, to bring change, foster development of new country and devalue traditional political practices. These results encourage politicians to make active participation on social media and directly answer to public twitter accounts on their issues, problems and challenges. As the number of tweets and retweets matter, politicians must understand that their role is extended to be active, concerned and vigilant on social media platforms. Another important implication of our study indicate that social media campaigns are more effective than traditional ones, so information sharing through these channels enhanced visibility and timely communication. The results improve our understanding that continuous tweeting behaviour encouraged to have more following and likes on twitter. Our finding in accordance with mentioning young activists and celebrities, those have already a good number following on twitter, increased politician's visibility and information sharing circle. Targeting youngsters and famous people help politicians to easily spread their words, is another significant finding which has implication for policy makers and concerned stakeholders.

Moreover, the present study contributes to literature by adding new Twitter categories and functions. The results also provide an insight into the understanding about tweeting behaviour of politicians in different contexts. The results also have practical implications for politicians, researchers focusing on people's information engagement with social media and social media planners and managers.

The current study was limited by a small sample size and examined three weeks of data with a limit of 3200 tweets across the 6 datasets. In addition, study did not analyze posts on other social media platforms such as Facebook. Moreover, the study was not specifically designed to investigate comments on the tweets and retweeting behavior of Twitter users. Advance techniques such as Social Network Analysis and Semantic Analysis have not been used in this study to analyze the data. Considering this, future research is needed to analyze general public Twitter accounts before election and after election days/weeks to determine the real indicators of politicians' popularity. The Twitter information sharing patterns of different population groups including youngsters, educationists, journalists, knowledge workers and socialists must be analyzed to examine different tweeting behaviours, the results would be helpful for active social media campaigns. A longitudinal study is also needed to validate the present study findings. Additional methods such as interviews and surveys are needed to complement the twitter analysis method and so on.

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Information Discovery and Delivery

Tables

Table I. Tweet Statistics Associated with Political Parties during the 2018 Election in Pakistan from 5th July to 25th July 2018

Political Party Twitter account	Tweets per day	Retwe ets by user	Hashtag used by user	User mentioned	Position during Elections
PTI Official account	119.62	815	1821	763	1 st
PMLN Official account	46.52	235	240	44	2 nd
PPP Official account	31.1	251	1456	323	3 rd

Table II. Tweet Statistics Associated with Political Leaders during the 2018 Election in Pakistan from 5th July to 25th July 2018

Leaders of Political Party	Twee ts per day	Retweet s by user	Hashtag used by user	User mentioned
PTI Leader: Imran Khan	4	0	3	1
PMLN Leader: Shehbaz Sharif	2.43	1	9	3
PPP Leader: Bilawal Bhutto	6.29	5	200	1

Table III. Twitter accounts that were most mentioned by each of the political leaders during the election

	Imran Khan	Shehbaz Sharif	Bilawal Bhutto Zardari
Mostly mentioned users	Actor/Singer	@youtube Party Supporter Famous party leader (niece)	@youtube
Mostly used #hashtags	#awaskafaisl apti	#pmlncampaign2018	#jeetkanishaa nteer
Users most retweeted	-	Party supporter	Party's Twitter Account

Topic	Bilawal Bhutto N=133	Shahbaz Sharif N=51	Imran Khan N=84
Personal life backstage political campaign	10	2	0
Political report/Highlighting efforts for...	20	0	0
Promises	18	0	0
Party position	10	1	0
Updates	2	5	0
Targeting youth	0	0	5
Criticism on media	0	0	1
Promotion	19	5	1
Acknowledgement	10	0	1
Energizing party workers	0	5	3
Religious	0	0	1
Courtesy (Appreciation, condolence etc.)	0	2	35
Call to vote/link with criticism of...	36	10	3
Own position	0	0	2
Condemn on terrorism acts or present...	10	0	12

A word cloud centered around the name 'Benazir Bhutto' and the word 'martyr'. The words are arranged in a circular pattern, with 'Benazir Bhutto' in the center. Other prominent words include 'Pakistani', 'martyr', 'progressive', 'prosperous', 'Pakistan', 'Bilour', 'support', 'martyr', 'Pakistani', 'Bilour', 'support', 'martyr'. The words are in various colors and sizes, creating a dense, circular arrangement.

Figure 3: Word cloud of Shehbaz Sharif



Figure 4: Word cloud of Imran Khan



Appendix
Analysis protocol used in study with examples

Categories	Description	Tweets
Condemning terrorism acts and/or country's situation/link with country's safety	Politicians Tweeted about current country situation (inflation/economic crisis/terrorism act to highlight opponents	Beginning to wonder why whenever Nawaz Sharif is in trouble, there is increasing tension along Pakistan's borders and a rise in terrorist acts? Is it a mere coincidence? (Imran Khan)
Own position	Highlighting personal efforts and sacrifices	This has been the culmination of 22 years of struggle. I can honestly say I have given my best for Pakistan. (Imran Khan)
Call to vote/link with criticism of adversary	Calling people to come out for vote or also relating vote call with criticism of adversary	People of Thatta! I am here for the first time on election campaign, to ask you to vote for PPP. (Bilawal Bhutto)
Courtesy (Appreciation, condolence etc.)	Messages including condolence, appreciation, anniversaries etc.	My condolences to the bereaved families suffered in terrorism. (Shehbaz Sharif)
Religious	Building connection with God, Prayers	Now I leave the rest to Allah. (Imran Khan)
Energizing party workers	Messages to mobilize party workers	Our relationship is deep rooted in several generations. I salute all those workers who stand by me. (Translated from Urdu to English, Bilawal Bhutto)
Acknowledgement	Acknowledging supporters' participation in rallies and processions	Thank you to the people of #Gojra for coming out in droves to support Pakistan Peoples Party. You have shown that you stand for a peaceful, prosperous and progressive Pakistan. (Bilawal Bhutto)
Promotion	Highlighting huge participation of nation in their processions and rallies	Biggest jalsa (procession) ever in history, Karachi hasn't seen such a large jalsa in six years. (Imran Khan)
Criticism on media	Highlighting private media's bias	The blatant bias of Dawn (newspaper) against PTI has now come out in the open. So much for Dawn's neutral and liberal credentials! Complete

		farce! Full marks to Stevan Sackur for exposing Dawn in his BBC HardTalk interview. (Imran Khan)
Targeting youth	Energizing youth to participate in election campaign	Another first for our young team of volunteer activists. Setting a new trend as they launch PTI merchandise and encourage the youth to play their part in the elections and come out to vote on 25 July. (Imran Khan)
Updates	Updates about rallies, processions, timing and place	These hurdles cannot stop us, I have reached Lahori Gate, we will start our peaceful journey soon from Muslim Mosque Lahori Gate right after jumma prayers IA. (Shehbaz Sharif)
Party position/details	Sharing Mandate and Party's Values and Vision	We do not believe in making promises and tall claims, but actually doing meaningful welfare work; the evidence of this lies in the establishment of hospitals of international standards and other medical institutions within Sindh in the last five years, where quality and free medical care is being provided. (Translated from Urdu to English, Bilawal Bhutto)
Promises	Future plan and promises	It is our history that we always supported homeless people, I promise that we will act on our and we will provide home to all. (Translated from Urdu to English, Bilawal Bhutto)
Political report/Highlighting efforts for developments	Highlighting developments when they were in government	PEEF is the largest endowment fund in Pak under which 375,000 students belonging to the poorest families got scholarships. 1000s of them have become Doctors & Engineers. Scholarships worth Rs.17B have been distributed. PEEF will become flagship project of PMLN (Shehbaz Sharif)

Personal life backstage political campaign	Aspects of personal life (i.e.family) to show love with family backstage political campaign	Motherly love: the best feeling in the world! I was in Raiwind for a Jalsa & just dropped in to see my mother at Jati Umra & seek her blessings (Shehbaz Sharif)
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