



Twitter superstars don't win elections: A Poster on Twitter Campaigning and Electoral Realities in the 2021 West Bengal Assembly Elections

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ABSTRACT

Twitter's role in driving political discourse is well documented in scholarship, yet, its affect on electoral outcomes is unclear. In this work, we analyze the Twitter activity of candidates from four major political parties contesting in assembly elections in the Indian state of West Bengal, alongside the outcomes of the election. We find that winning candidates are more likely to have a Twitter presence. However, Twitter presence in itself does not increase the likelihood of winning. We also find that candidates with high degrees of social media influence, typically celebrities, are more likely to lose, as their high following comes to signify their status as outsiders in politics. Finally, studying sub-regional metrics of social media engagement and election outcomes, we find that Twitter offers us insight into the geographical logic of attention paid by parties in the electoral campaign.

CCS CONCEPTS

• **Human-centered computing** → **Social network analysis**.

KEYWORDS

Computational Social Sciences, Twitter, Election Outcomes

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1 INTRODUCTION

Over the last decade, we have seen a plethora of research related to social media use in politics, and by politicians. One strand of literature focuses on the potential of social media as a means of predicting electoral outcomes. Despite initial claims that social

media could predict outcomes, the emergent consensus is that it cannot [5, 7].

In India, most of the research around Twitter and elections has focused on the utilisation of the medium for campaigning and propaganda dissemination. Twitter became an important part of Indian elections following the 2014 General Elections, which saw the lead candidate and eventual winner, Narendra Modi, extensively use social media in his campaign [2]. Since then, there has been a steady increase in politicians across India investing in technology-mediated campaigning, leading to a rich body of work examining social media and elections [1, 14, 15].

In this study, we explore the effectiveness of social media use in the campaign outcomes. We examine Twitter use by 280 candidates contesting for legislative assembly seats in the Indian state of West Bengal in the 2021 elections. We add to the existing literature by addressing three questions on the relationship of Twitter use with election outcomes.

(1) Does presence on, and use of Twitter affect the election outcomes?

(2) Does a candidate being a Twitter influencer impact their election outcomes?

(3) Do regional factors around social media investment impact election results?

A few points of contextual explanation are valuable in making sense of the results. First, the party in power in the state of West Bengal is the All India Trinamool Congress (AITC), and its leader, Mamata Banerjee, has been chief minister of the state for two terms prior to the 2021 election. While the main opposition in the state has traditionally been the Indian National Congress (INC) or the Communist Party of India, Marxist (CPIM), both the parties are in decline. The expected challenger in the 2021 election was the right-wing party in power at the national level, the Bharatiya Janata Party (BJP). The BJP, while traditionally weak in the state, is the dominant party nationwide, having handily won two general elections, and running the state legislature directly or in coalition in roughly two thirds of the country's states. It is by far the most funded party, and its leader, Prime Minister Narendra Modi, is a widely popular figure. In the state elections of 2021, the main thrust of the campaign was to be over whether West Bengal would move closer to the nationalist and pan-Indian right wing narrative of the BJP, or stay with a state-centric, regionalist narrative of the AITC. The state's remaining opposition parties were expected to play a marginal role.

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2 RELATED WORK

The prediction of electoral outcomes from Twitter is a burgeoning field in computational data sciences, with two contrasting schools of thought - a subset of scholars believe that the platform can be instrumental in predicting election results, while others reveal antithetical findings. Researchers have engaged with this question by looking at democratic elections in Germany [8, 19], UK [3, 12], Italy [4], USA [6, 7, 10, 11], and Singapore [18]. A study led of the 2009 German federal election [19] concluded, optimistically, that the share of attention received by parties on Twitter corresponds to the election results.

We see two broad approaches in 'prediction' studies. The first associates the share of tweets mentioning a party or candidate with the chances of winning [6, 18], while other works use sentiment analysis of election-related tweets as a parameter for forecasting election outcomes [13, 16, 17]. While insightful, these approaches to forecasting results are widely critiqued. Tumasjan's study of German elections that used Twitter attention as an indicator for outcomes, has been debunked for unclear and arbitrary steps in deciding the users and time period of concern [7, 9]. Dissenters to the other method have also referred the use of sentiment analysis as "naivete" [5, 7].

Skoric et al. [18] point that the significance of Twitter in driving election results is more prominent on a national level as compared to the constituency level. The authors also state the coaxial influences that need to be included in making said predictions. The socio-political backdrop of the election, its competitiveness, and discrete demographic outlooks of voters can enrich further work [11].

In our research, we present a novel approach in analysing Twitter and election outcomes. Instead of broadly analysing content from the general public's tweets, our focus is on the Twitter activity of the contesting candidates through multiple vantages. Further, we compare online trends with election results, and match our findings with the context of regional political environment that has emerged as an affront to the dominant national polity.

3 DATA AND METHODOLOGY

Our data set is built on publicly available information of the election, that has been collated from the Election Commission of India¹. We collected a list of contesting candidates with party and constituency information, and used the GoogleSearch API² to identify their Twitter handles from the query results. Each matched handle was manually verified, providing us with a final set of 280 candidates with accounts on the platform. Using the Twitter API³, we obtained 184,132 tweets that were made by candidates between January 2020 and April 2021, when voting concluded.

4 RESULTS

4.1 Likelihood of Twitter Presence

In the early 2021 election, a total of 811 candidates from the four major political parties contested for 292 seats in the state assembly. The AITC won in nearly three-fourth of the constituencies, while the BJP was a distant second with 77 seats. Table 1 shows the party

¹<https://eci.gov.in/>

²<https://pypi.org/project/googlesearch-python/>

³<https://developer.twitter.com/en/docs/twitter-api>

wise distribution of our data set of 280 contesting candidates. We notice that the percentage of winners with a Twitter presence, 50.3% (147/292), is distinctly higher than the general proportion of contesting candidates with a Twitter account, 34.5% (280/811). A Chi-Square test gives us the p-value of < 0.001 . Thus, notion that winning candidates are more likely to have a Twitter account compared to losing ones, has a high statistical significance. However, an inverse relationship with the platform's influence on successful outcome is not true. Having Twitter presence does not in itself increase the chances of winning [11].

4.2 Does Being an Online Influencer Help?

The state's 2021 elections had a striking number of 'star' candidates, including Bengali actors, sportspersons with widely followed Twitter accounts. In Figure 1, we plot the Twitter activity of the celebrity candidates, and see that most of them lost - in fact 30 out of the 50 most followed candidates lost. We find no relationship between Twitter stature and the likelihood of winning. A possible explanation is that stars are propped up in constituencies where a party is weak, with the hope that their celebrity status will carry them through.

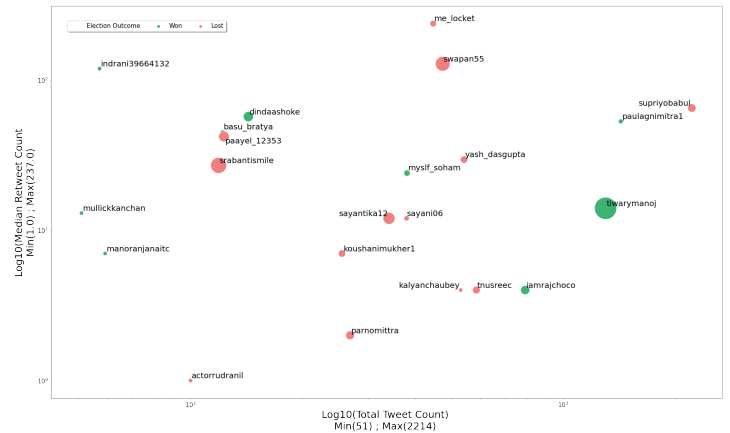


Figure 1: Celebrity candidates arranged by their frequency of tweeting (x-axis), median retweet rate (y-axis) and followers (bubble size)

4.3 Close Contests and Correlation with Winning Margin

We find that the median winning margin of votes in constituencies where two candidates are active on social media (18454.0) is lesser than the median margin of constituencies where a sole candidate is active (23512.0). On running Welch's t-test, we noticed that the differences between the two distributions are significant. In closely contested seats where two candidates have Twitter presence, we notice that social media activity did not increase the likelihood of winning. Instead, less followed candidates won in a majority of the constituencies under question. In seats where one candidate was active, they beat the opponent 61% of the time.

Table 1: Data Distribution

Party	First Position	Runner-up	Lost	Total
AITC	121***	40	0	161
BJP	26	67	7	100
CPIM	0	1	7	8
INC	0	0	11	11
Total	147***	108	25	280

4.4 Who is Portrayed by Candidates - Party, Leader or Self?

Political candidates tend to portray entities whose branding they feel might help them in winning. We used a bag of words technique to quantify the extent to which candidates referred to their parties, leaders, or themselves in their tweets (Table 2). We notice that the BJP candidates tend to talk about their party in tweets and do not focus as much on their leader, while AITC candidates focus relatively more on their leader, Mamata Banerjee. This suggests the BJP candidates focus on ideology than leader, an interesting contrast to the party’s strategy in the rest of the country, where Modi has been a central selling point in campaigns [15]. On antagonistic campaigning, ie mentions of the other party, we find that AITC candidates mention BJP much more than vice versa.

These trends correspond with on-ground patterns. While the AITC had a single clear leader, the BJP had national leaders, but no clear leader at the state level. In contrast, the AITC focused on promoting itself as closer to people of the state, crafting their opponents as the Delhi-centric outsiders whose aspirations for Bengal were not different from historical invasions of the state⁴. Essentially we see here the particularities of campaign focus are very different among the parties. This would suggest that it is not the Twitter behavior, but a broader set of factors at play with winning or losing.

4.5 Regional Analysis

To further discern the geographical variations between online activity and outcomes, we plot the total number of tweets from the two main parties (AITC & BJP) in the state’s districts against the percentage of seats won from each district (Pearson correlation coefficient = 0.845). In Figure 2, we see that AITC won a higher percentage of seats in districts with a high concentration of Twitter activity. This is especially true in the southern districts, where urbanisation and population density is higher compared to the northern parts of the state. On the other hand, the BJP won a high percentage of seats in districts where its tweeting activity was comparatively higher.

5 CONCLUSION

In our study of politicians’ Twitter activity and electoral outcomes, we find that participation on the platform is inadequate as an indicator for meaningful predictions. While triumphant candidates are likelier to have an account, being proactive on Twitter does not increase the likelihood of winning. This was especially true for celebrity candidates. We also find that the median winning margin

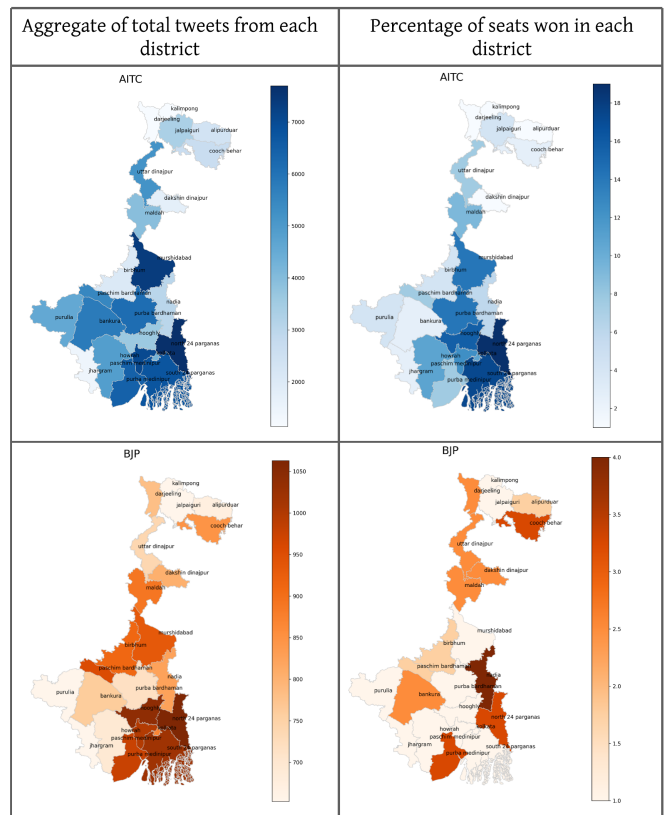


Figure 2: District-wise Twitter activity and percentage of seats won by each party

in constituencies with two candidates active on Twitter was lesser than median margin where only one candidate was on the platform. However, tweeting frequency did not help predict the winner between two competing candidates on the platform. Finally, while there is some correlation between Twitter activity and election outcomes in districts, overall, is not an accurate predictor of the election outcomes.

During the campaign period under analysis, BJP candidates sent nearly 25,000 more tweets than their opponents in the AITC. Yet, the latter won by a landslide. Combined with mainstream news coverage, opinions and exit polls⁵ that projected a close race (with a hung assembly or some that indicated a BJP win), we find that

⁴<https://indianexpress.com/article/explained/what-tmc-means-when-it-calls-the-bjp-bargis-7168917/>

⁵<https://timesofindia.indiatimes.com/india/west-bengal-exit-poll-2021-results-live-updates/liveblog/82301468.cms>

Table 2: Party-wise percentage of tweets related to candidates, party and leader (relations were tested for significance using Welch's t-test with 0.05 significance level)

Median percentage of tweets about	AITC			BJP		
	Winners	Losers	Total	Winners	Losers	Total
One's own party	23.33%	25.55%	23.72%**	48.7%	35.58%	40.61%**
Opposition party	16.66%	18.02%	17.14%**	7.5%	7.91%	7.89%**
One's own party leader	35.33%	37.59%	35.64%**	9.69%	7.75%	8.94%**
Opposition party leader	3.84%	2.77%	3.65%**	4.55%	7.15%	6.53%**
Candidates themselves	50.6%	61.01%	53.5%	49.22%	43.21%	44.02%
Number of candidates in the category	121	40	161	26	74	100

the 'buzz' of a head-to-head race was overstated. Instead, claims of prediction for regional elections can benefit from introspection about the illusion of equivalence they create, and its effect on a differing, localised reality.

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