



State Governor's Crisis Communication Strategy during COVID-19 : A Computation Analysis of Governor's Tweets across 50 States

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Introduction

- Importance of Leadership during a Crisis
 - Organization goal strategy could maintain pre-crisis and post-crisis consequence
 - Communication with audience is key in mitigating panic
- Theoretical framework: Public Service Dominant Paradigm
- Potential effect: Government-Citizen Communication
- Literature Review
 - The Use of Social Media in Crisis Communication
 - Public Officials' Usage of Social Media in Crisis
- Purpose: To provide insights into how best to use Twitter as a social media to increase citizen engagement, and improve communication



Research Questions

1. How do state governors communicate with citizens on social media during the COVID crisis?
2. How does social media input affect crisis communication effectiveness and citizen engagement?

Methodology

- Twitter timeline of 50 state governors 3/1 - 8/31
 - Total tweets: 47,119
 - COVID-related tweets: 29,545 (62.7%)
- Content analysis on Tweets text
 - Word frequency
 - Topic Modeling
- Regression analysis
 - Unit of analysis: individual governor account
 - DV: Crisis communication outcomes
 - IV: Social media input



Andrew Cuomo
@NYGovCuomo

We have learned of the 1st positive case of COVID-19 in NY. The patient contracted the virus while in Iran & is isolated

There is no reason for undue anxiety—the general risk remains low in NY. We are diligently managing this situation & will provide info as it becomes available.

GOVERNOR CUOMO ISSUES STATEMENT REGARDING NOVEL CORONAVIRUS IN NEW YORK

"This evening we learned of the first positive case of novel coronavirus — or COVID-19 — in New York State. The patient, a woman in her late thirties, contracted the virus while traveling abroad in Iran, and is currently isolated in her home. The patient has respiratory symptoms, but is not in serious condition and has been in a controlled situation since arriving to New York.

"The positive test was confirmed by New York's Wadsworth Lab in Albany, underscoring the importance of the ability for our state to ensure efficient and rapid turnaround, and is exactly why I advocated for the approval from Vice President Pence that New York was granted just yesterday.

"There is no cause for surprise -- this was expected. As I said from the beginning, it was a matter of when, not if there would be a positive case of novel coronavirus in New York.

"Last week I called for the Legislature to pass a \$40 million emergency management authorization to confront this evolving situation -- I look forward to its swift passage.

"There is no reason for undue anxiety -- the general risk remains low in New York. We are diligently managing this situation and will continue to provide information as it becomes available."

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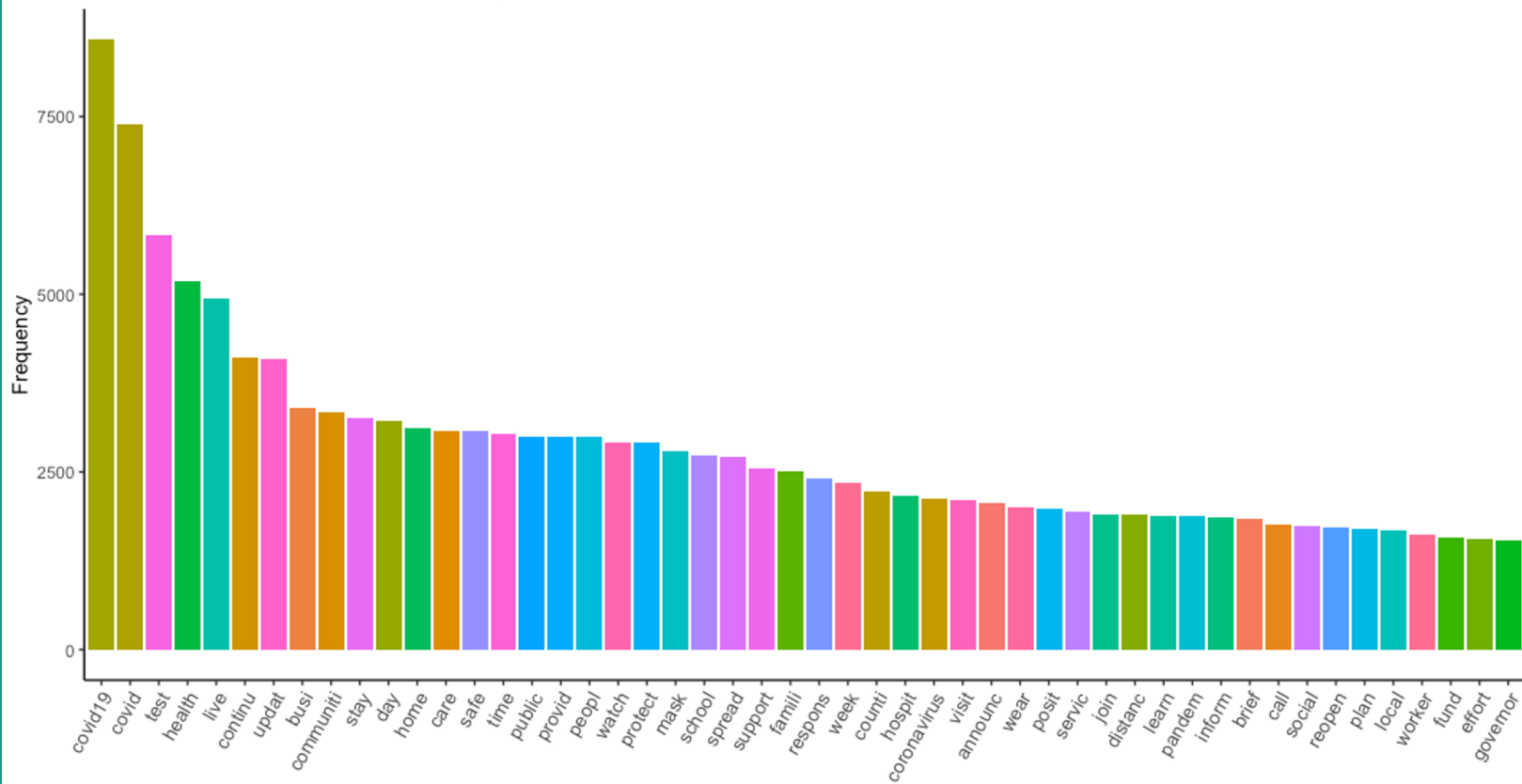
7:51 PM · Mar 1, 2020 · Twitter Web App

5,020 Retweets

1,982 Quote Tweets

7,346 Likes

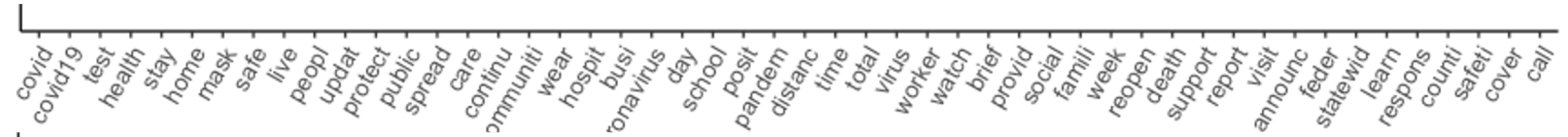
Most Frequent Words in All Governors' Tweets Mar. to Aug.



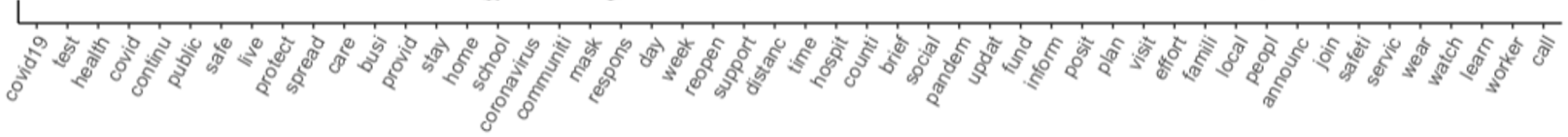


Most Frequency Words in COVID-related Tweets by Partisanship

Democratic



Republican

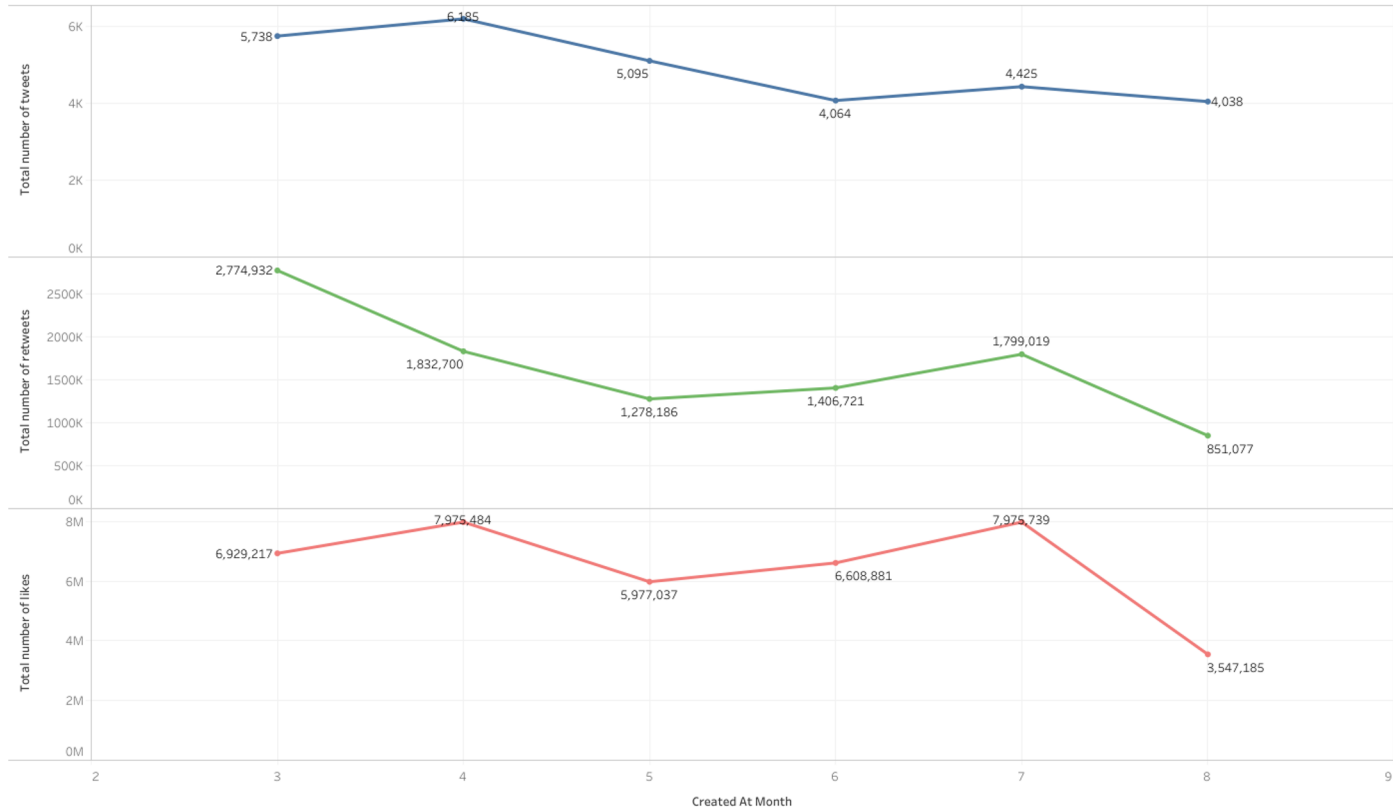


Different emphases (word frequency rank distance >5)

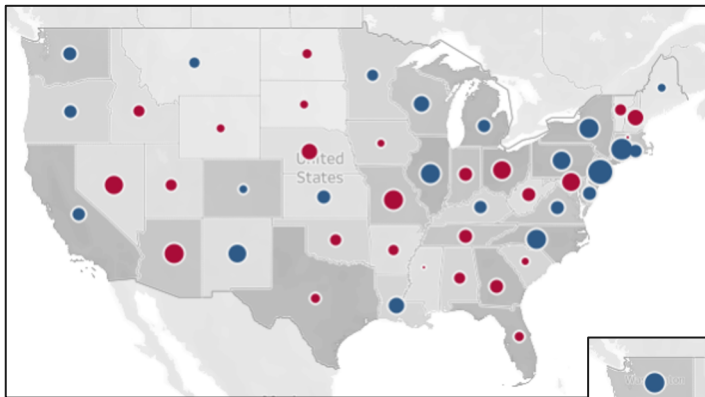
- Democratic words: stay; home; mask; people; update; wear; hospital; posit; pandemic; worker; watch
- Republican words: continue; public; business; provide; school; respond; week; reopen; support; county

Descriptive Analysis

COVID-Related Tweets Overtime

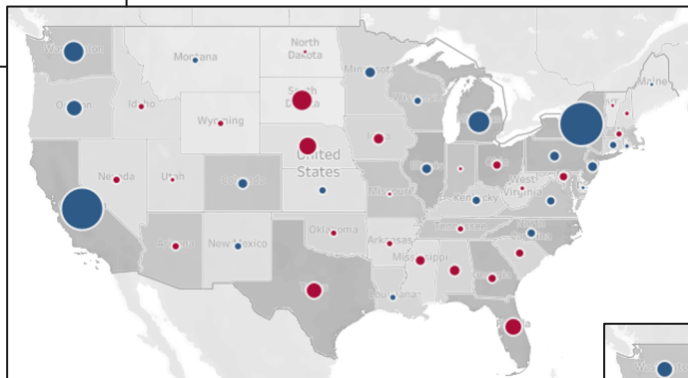


COVID-related Tweets Overtime



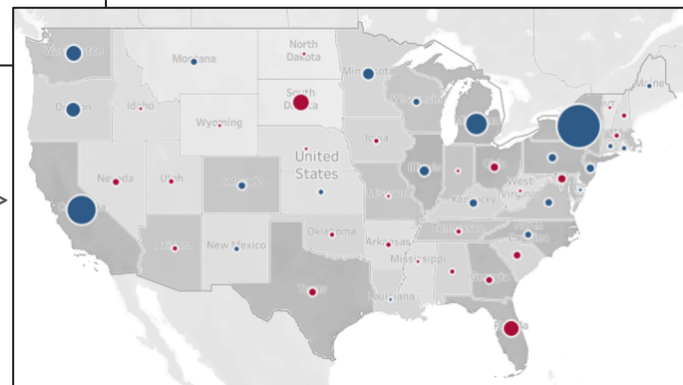
<- Total Number of Tweets

Average Number of Retweets ->



Average Number of Likes ->

COVID-related Tweets by State



Regression

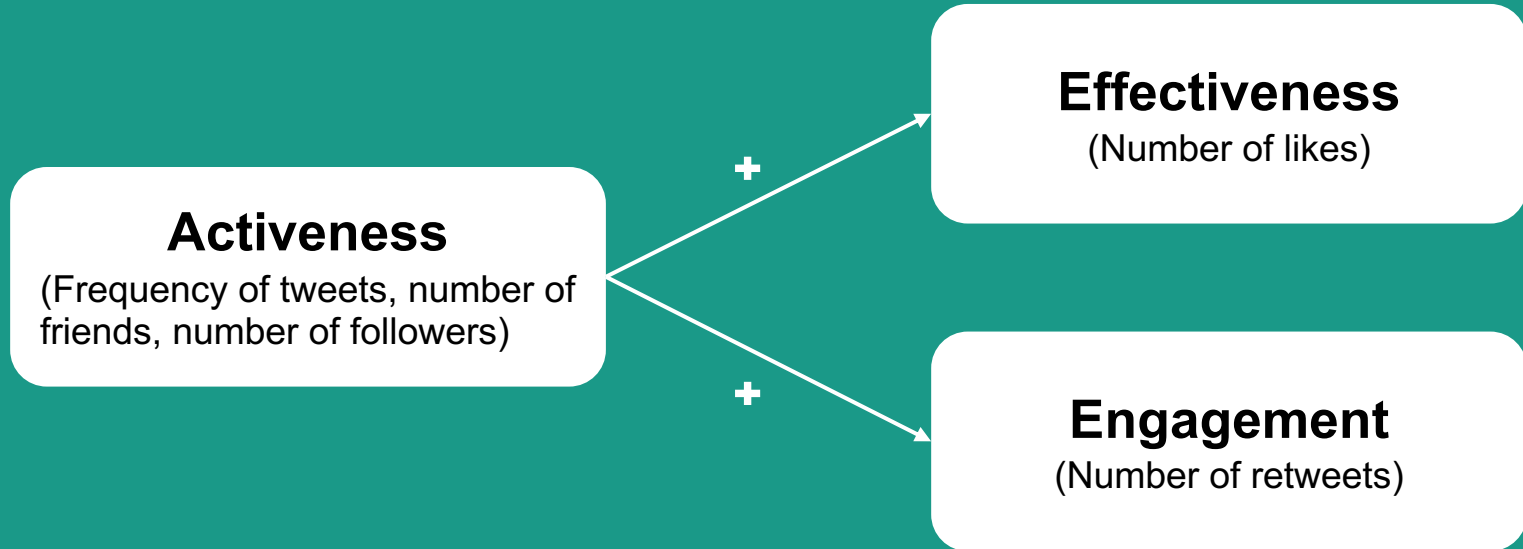


Table: Regression Models using Normalized Values

	<i>All States</i>		<i>Republican States</i>		<i>Democratic States</i>	
	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>	<i>Model 5</i>	<i>Model 6</i>
	<i>DV: No. of Retweets (Normalized)</i>	<i>DV: No. of Favorites (Normalized)</i>	<i>DV: No. of Retweets (Normalized)</i>	<i>DV: No. of Favorites (Normalized)</i>	<i>DV: No. of Retweets (Normalized)</i>	<i>DV: No. of Favorites (Normalized)</i>
(Intercept)	-0.23(0.92)	-0.56(0.76)	-0.35(0.76)	-0.36(0.18)	0.98(1.41)	-0.43(1.48)
No. of Tweets	-0.07(0.02)**	-0.07(0.01)***	0.00(0.02)	-0.00(0.00)	-0.11(0.03)**	-0.09(0.03)**
No. of Followers	1.01(0.03)***	-1.01(0.02)***	-0.02(0.17)	0.28(0.04)***	1.04(0.03)***	1.03(0.03)***
No. of Friends	0.04(0.03)	-0.11(0.02)***	0.23(0.10)*	-0.04(0.02)	0.04(0.03)	-0.11(0.03)**
Partisanship	0.00(0.00)	0.00(0.00)				
State Population	-0.01(0.01)	-0.01(0.01)	-0.03(0.01)*	-0.00(0.00)	-0.01(0.02)	-0.02(0.02)
Governor's Age	-0.25(0.92)	0.58(0.77)	0.38(0.77)	0.37(0.18)*	-0.96(1.43)	0.47(1.49)
R2	0.97	0.97	0.4	0.77	0.99	0.98
N	50	50	27	27	23	23
*** 0	**0.001	*0.01	.05	0.1''	1	



Conclusion

- Regression analysis results point to a clear variation in the governor's tweets' efficacy based on partisanship
- The crisis communication framework and the public's use of social media clearly show the different types and nature of information disseminated, frequency of the said information, and its particular usage based on the pandemic context
- The results call for further study of information governance
- The social media information medium could also have a potential implication on “information polity” - how information profoundly impact all forms of politics
- This shift in “information governance” and “information polity” clearly shows a new paradigm shift: from new public management consumerism to a new public service paradigm focused on effectiveness and value creation.