12-7-2022

# Political Leaders' Communication Style and Public Perceptions: Case of the COVID-19 Crisis

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## Recommended Citation

# Political Leaders' Communication Style and Public Perceptions: Case of the COVID-19 Crisis

**Full research paper**

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## Abstract

In this study, we examine the political leaders' communication style and its influence on the public behaviour about the COVID-19 crisis in terms of public movement and activities. We attempt to achieve our research objective by investigating the cases of Lee Hsien Loong in Singapore and Donald Trump in the United States (US). Using an inductive theory-building approach, nested multi-case study research design, we explore the relationship between political leaders' communication style and public behaviour about COVID-19 crisis from a communication-centred perspective. We collect both social media data from political leaders and individual check-in data from Singapore and US from January to June 2020. By adopting two-stage analysis, we find that Lee Hsien Loong's use of "engaging" communication style in preventing the spread of COVID-19 led to a more significant decrease of the public movement in comparison to Donald Trump's use of "champion of the people" communication style.

**Keywords**: Political leaders' communication style, Public perception, COVID-19 crisis, Twitter posts, Foursquare check-ins.

# 1   Introduction

The COVID-19 pandemic is a global health crisis (WHO 2020). Within the first seven months of its emergence in December 2019, COVID-19 had caused more than 570,000 deaths in more than 188 countries around the world (WHO 2020). In the midst of managing efforts to develop pharmaceutical interventions for the COVID-19, political leaders around world attempted to provide valuable insights to the public about the necessary collective efforts, such as continually adhering to the government advice, to effectively manage this pandemic crisis (Van Bavel et al. 2020).

Political leadership is essential when managing complex global problems that have high stakes and its solutions may be hindered by a collective action (Parker et al. 2015). It has the potential not only to unite, but also to divide public opinion over a pressing issue (Kousser and Tranter 2018). Political leaders often disseminate information to their supporters, including the general public, about themselves and about the current issues they are dealing with. Lewis-Beck et al. (2008) showed that political leaders can influence their supporters' perceptions and decision-making. The politicians who are successful at using social media use more than one-way communication with supporters. For example, by replying to and reposting followers' posts in social media, political leaders engage followers to interact with them and attracts more followers (Sternberg 2003).

Political leaders played an important role in persuading the public to voluntarily comply with costly preventive measures during the COVID-19 pandemic (Grossman et al. 2020). Public health experts around the world have pleaded with officials to quickly reinforce social distancing to flatten the curve of the COVID-19 infections (Adolph et al. 2020). Following such advice, political leaders in Singapore introduced new laws governing social distancing measures during the COVID-19 outbreak, which could see offenders serve up to six months in jail (Guy and Griffiths 2020). However, the greatest barrier to the reinforcement of the social distancing measures originated from political motives. Countering the rhetoric of public health experts, the White House in the United States of America (US) downplayed on the potential risk of COVID-19. On 4 March 2020, President Trump asserted that COVID-19 was like the flu; two days later, he falsely claimed the situation in Italy was improving and that the US was handling the pandemic crisis much better than other developed countries. As late as 15 March 2020, with reported cases rising rapidly, Trump still maintained that the crisis within the US was under control (Grossman et al. 2020).

Considering the growing medialization on the political landscape, the communication style of political leaders becomes an important conceptual tool for exploring the political realm (Moffitt and Tormey 2014). Based on the communication-centred perspective, Bracciale and Martella (2017) identified four different political communication styles:(1) engaging, (2) intimate, (3) champion of the people and (4) man of the street. *Engaging* refers to a positive and non-aggressive communication style that aims at engaging supporters on political issues, promoting oneself and one's party, and calling supporters to action or requesting interaction. *Intimate* is a positive and personalized communication style that focuses on building non-political discussion around sharing emotions and private life aspects. This communication style is based on the political leader's storytelling ability to build a personal political narrative (Bracciale and Martella 2017). *Champion of the people* describes a negative and aggressive communication style aiming to build political narrative around simplification, position-taking, and taboo breaking. *Man on the streets* refers to a negative and aggressive communication style aiming to legitimize a political leader as a "man in front of the people" through the use of vulgar language and exploitation of fear and news (Bracciale and Martella 2017).

No matter what types of political leaders are being followed, Tweeter posts wield a lot of political power with followers. Social media messages can influence followers, and even the general public, to look at a certain issue from a leader's perspective (Van Bavel et al. 2020). Thus, leaders have the potential to influence followers' behaviour (Bracciale and Martella 2017). The nature of this political leader-follower relationship in social media has not been extensively investigated in the context of the COVID-19 crisis. Hence, in this study, we focus on the influence of political leaders of the COVID-19 crisis. More specifically, we explore how do different political communication styles influence public perception about the COVID-19 crisis self-management in terms of public movement and activities. We address our research objective by investigating the cases of Lee Hsien Loong in Singapore and Donald Trump in the US, as this setting offers a unique opportunity to empirically compare the influence of different political leaders' communication styles on the public perception.

By collecting both social media data (i.e., Twitter posts) from political leaders and individual check-in data (i.e., Foursquare) from Singapore and the US, we capture (1) political leaders' communication style and (2) public movement and activities during COVID-19 from January 2020 to June 2020. Our findings show that the use of pragmatic and instructional Twitter posts yields more influence of political leaders

on the public perception for the COVID-19 crisis relative to the use of argumentative Twitter posts. Particularly, Lee Hsien Loong's use of *engaging* communication style to prompt Singapore residents to understand their collective effort in preventing the spread of COVID-19 led to a more significant decrease of the public movement in comparison to Donald Trump's use of *champion of the people* communication style to emphasize the government's outcomes manage the pandemic crisis.

The reminder of this paper is structured as follows. First, we review research on social influence to lay down the theoretical underpinnings of our study. We then describe the methodology of this study and present the results of our data analysis. Last, we conclude with a discussion on the propositions emerging from our analysis, as well as the limitations of our work.

# 2   Theoretical Background

## 2.1   Social Influence

Our study builds on the social influence framework by Qiu et al. (2018) (see Figure 1). The *casual social influence* (i.e., one's decision being affected by the observation of friends' choices) consists of non-informational (i.e., normative conformity) and informational (i.e., observational learning) causal mechanisms (Qiu et al. 2018). Thus, individuals on social media sites can learn from opinion leaders (e.g., political leaders) and can be influenced by the information causal mechanisms.

Social learning theory posits that individuals learn by observing the behaviours of others (Davis and Luthans 1980). According to the information cascade theory, observational learning information contains the discrete signals expressed by the actions of other consumers but not the reasons behind their actions (Duan et al. 2009). For example, when individuals observe the others' actions or beliefs, this publicly observed information outweighs their own private information in shaping their beliefs. As a result, individuals follow their predecessors' actions and become engaged in a type of herd behaviour (Banerjee 1992).

*Social conformity* refers to the influence to conform with certain expectations held by others in order to acquire social benefits (Baumeister and Leary 1995). Individuals tend to conform with others to facilitate social affiliation (Hong et al. 2016) and to avoid being dislike, rejected or even unwanted (Wyer Jr 1966). On one hand, for example, individuals who have been socially excluded are tempted to seek similarity and conformity with others to reduce the chance of rejection and ostracism (Brewer 1991; Griskevicius et al. 2006). On the other hand, individuals who possess social power do not need to be affiliated with others and thus demonstrating lower preference for conformity (Galinsky et al. 2008). Importantly, social conformity occur only when individuals believe their performance will be visible or observed to others (Burnkrant and Cousineau 1975). That is, individuals who have a social motive would conform to prior evaluations of others only when their evaluation is visible to others who are perceived as the mediators of social rewards or punishments.

In this study, we focus on the social influence that operates through signals from observations of political leaders' social media posts related to the COVID-19 crisis. We investigate the social influence of political leaders' communication style on individuals' perceptions about the COVID-19 crisis management in terms of public movement and activities from a communication-centred perspective.
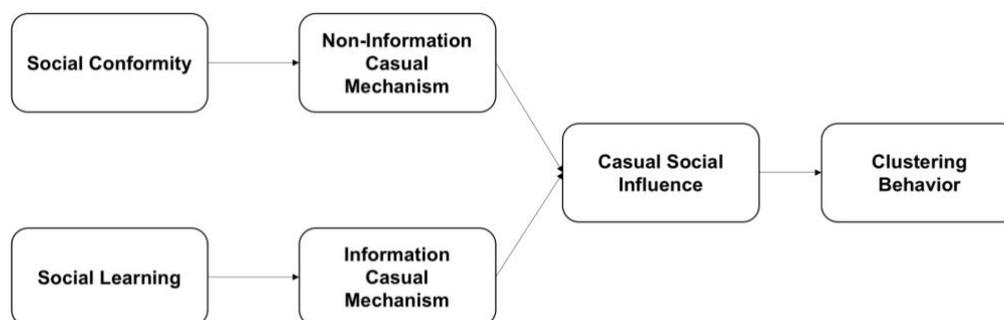


*Figure 1. Social influence theory by Qiu et al. (2018)*

# 3   Methodology

We adopted an inductive theory-building approach and employed a nested multi-case study research design (Eisenhardt 1989) (i.e., multiple cases within the same research context) to investigate the

relationship between the political communication style and public perception. Inductive theory-building is a particularly suitable method of inquiry when limited knowledge about the focal phenomenon exists (Eisenhardt 1989). The main units of analysis are the political leaders from Singapore (Lee Hsien Loong) and US (Donald Trump) that are embedded in within- and cross-case analysis.

## 3.1   Data Collection

In this study, we collected both social media posts (i.e., Twitter) from political leaders and check-in data (i.e., Foursquare) from individuals in Singapore and the US. Twitter is one of the most popular social media platforms with 126 million daily active users (Shaban 2019). Prior research (Bracciale and Martella 2017; Rufai and Bunce 2020) has shown that Twitter is frequently used by political leaders as communication channel for the general public. We collected the tweets posted by political leaders using a data extraction software, which we developed based on Twitter's application programming interface (API).[1] Twitter API provides a function called Search User Timeline that allows developers to directly query Twitter server and retrieve tweets posted on the timeline of specific users. We have collected 144 and 3,275 Tweeter posts for Lee Hsien Loong and Donald Trump, respectively.

The data used for capturing public movement and activities was sourced from Foursquare, a popular social media platform, which allows users to share their location in form of venue check-ins.[2] Foursquare was chosen due to its comprehensive database of venues worldwide and reliability in capturing individuals' activities in urban areas (Vu et al. 2020). When a user checks-in on Foursquare using a mobile application named Swarm (swarmapp.com), the check-in record appears on Twitter's timeline of the corresponding user as an ordinary tweet with some specific information about the check-in, including a link to the original check-in record on Swarm.

We first identified Foursquare users via Twitter platform by using a Standard Search function provided in Twitter API. Users can specify locations to be searched by providing location parameters in the format of latitude, longitude and radius. For instance, the location parameters to collect check-in tweets in Singapore were with latitude = 1.3371, longitude = 103.8110 and radius = 35km. Such parameters were used to cover the entire geographical location of Singapore. We used the Search User Timeline function in Twitter API to extract all tweets generated by each of the identified users. We then extracted relevant metadata of check-ins following the link to the original check-in record on Swarm. This data includes venue name, venue category, GPS location, exact local date and time that are beneficial for capturing resident activities. After data extraction and cleaning, we arrived with 149,756 check-ins made by 3,507 US residents and 6,382 check-ins made by 119 Singapore residents. The collected data varied due the difference in the scale of the two countries. Nevertheless, they were sufficient to capture activity patterns of general public (Vu et al. 2020).

## 3.2   Data Analysis

Before the analysis, data was manually cleaned, only to include Tweeter posts which are directly and indirectly related to the COVID-19 crisis. After filtering the data, we ended up with 128 posts for Lee Hsien Loong and 886 for Donald Trump. We have then categorized the Tweeter posts into the five phases for the COVID-19 (Norwegian Institute of Public Health 2020) for each case based on the total of active and new cases (see Table 1). In the Phase 1 *(Sporadic Cases)*, most of the COVID-19 cases were imported into a country and there was very little local transmission of the virus. In the Phase 2 (*Clusters),* most of the COVID-19 cases were composed of imported cases and local clusters in a country. In the Phase 3 (*Main Wave)*, most of the COVID-19 cases were outcome of a local widespread transmission in a country. In the Phase 4 (*Full Epidemic)*, the COVID-19 cases reached the peak and the maximum capacity of a country's healthcare system. In the Phase 5 (*Last Epidemic)*, the COVID-19 cases were beyond the peak and started to decline in a country (Norwegian Institute of Public Health 2020).

After the data preparation, we adopted the template analysis technique (King et al. 2004) for a thematic analysis of the Tweeter posts from the political leaders. We conducted the analysis in two stages (Miles and Huberman 1994). In the within-case analysis, we focused on the salient characteristics of the two individual cases. In the cross-case analysis, we subsequently identified similarities and differences across the two cases by highlighting any emerging patterns. We allowed codes to naturally emerge from the data (i.e., grounded theory coding) and constantly modified codes throughout the analysis based on their usefulness and suitability, which resulted in the modification of several themes. We also automatically coded the data for sentiments, including neutral, positive (very positive and moderately positive), negative (very negative and moderately negative), and mixed using sentiment analysis

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[1] https://developer.twitter.com/en/docs
[2] https://foursquare.com/

function of qualitative data analysis software. Two of the authors coded the posts independently and shared coding lists thereafter. Posts data was then re-coded until an agreement of 80% was reached for the final coding template. The Tweeter posts were coded, analysed, and visualized using the qualitative data analysis package NVivo 11.

| Cases/ Phases | P1 | P2 | P3 | P4 | P5 |
|---|---|---|---|---|---|
| **SG** | 23 Jan (1 new) – 15 Feb (72 active; 2 new) | 16 Feb (72 active; 3 new) – 24 Mar (558 active; 49 new) | 25 Mar (631 active; 73 new) – 16 Apr (4,427 active; 728 new) | 17 Apr (5,050 active; 623 new) – 20 Apr (8,014 active; 1,426 new) | 21 Apr (9,125 active; 1,111 new) – 30 May (34,366 active, 506 new) |
| **US** | 20 Jan (1 active; 1 new) – 1 Mar (75 active; 7 new) | 2 Mar (100 active; 25 new) – 8 Mar (541 active; 106 new) | 9 Mar (704 active; new) – 4 Apr (317,994 active; 34,685 new) | 5 Apr (343,747 active; 25,109 new) – 24 Apr (925,232 active; 39,123 new) | 25 Apr (960,651 active; 35,523 new) – 30 May (1,816,820 active; 23,763 new) |

*Table 1. Phases for each country*

## 4 Within-Case Analysis

### 4.1 Case 1: Singapore

*Phase 1 (Sporadic Cases)* started with 23 January 2020 with 1 active case and ended on 15 February 2020 with 72 active cases. In this period, Lee Hsien Loong tweeted 33 posts in total, out of which 31 posts (94%) are related to COVID-19. Most of the Lee Hsien Loong's Tweeter posts in this period had a neutral sentiment, followed by very positive and moderately positive sentiments. The key themes emerging from the Tweeter posts of Lee Hsien Loong were associated with wearing protective masks (9.98%), collective hope (5.47%), Singapore government press conference (5.31%), healthcare workers' efforts (5.22%), and government's supply of protective mask (5.01%). In this period, Lee Hsien Loong constantly urged Singapore's residents to wear protective masks in public spaces, only if they were not feeling well to prevent the spread of the diseases. He also made numerous announcements about official government press conferences on which residents were informed about the "one-time mask distribution collection points". As well, he acknowledged the effort of "medical teams and staffers", who were the most crucial for treating patients, and gave assurance to residents "that the government is standing with them" in these challenging times.

*Phase 2 (Clusters)* began from 16 February 2020 with 72 active cases and ended on 24 March 2020 with 558 active cases. During this period, Lee Hsien Loong tweeted 38 posts, out of which 32 posts (84%) were related to COVID-19. The majority of Lee Hsien Long's Tweeter posts in this period were associated with moderately positive sentiment. The major themes emerging from his Tweeter posts were related to healthcare workers' efforts (6.82%), international diplomacy efforts (4.51%), government's local financial support (3.53%), Singapore government press conference (3.13%), social workers' efforts (2.36%), and police officers' efforts (2.09%). Lee Hsien Loong constantly expressed collective gratitude for the efforts of healthcare and frontline workers who are important role in treating patience and "keeping the city running". He also stressed government's efforts to share information about the management of the pandemic crisis with other political leaders and governments (e.g., Scott Morrison and Australian Government) and revive the economy in Singapore though significant financial support of local small businesses (e.g., $100 billions of support measures) and employees (e.g., special bonus of up to 1 months for healthcare officers). As well, he made frequent announcements about official press conferences of the government on which updates about new cases and reminders about social distancing and self-isolating measures are communicated.

*Phase 3 (Main Wave)* started on 25 March 2020 with 631 active cases and ended on 16 April with 4,427 active cases. In this period, Lee Hsien Loong tweeted 32 posts in total, out of which 30 posts (94%) were related to COVID-19. Most of the Tweeter posts from Lee Hsien Loong in this phase were associated with a neutral sentiment, followed by moderately positive and moderately negative sentiments. The main themes his tweets were related to Singapore government press conference (10.39%), government actions for preventing transmission (6.59%), government's local financial support (6.40%), healthcare workers' efforts (4.98%), and collective efforts (4.76%). In this phase, Lee Hsien Loong often made announcements about official government press conference and stressed that the government was working hard to prevent the transmission in local clusters, such as implementation of "3-pronged strategy to [...] stop the spread the spread of the disease in the dorms". As well, he prompted residents

that "tracking COVID-19 needs everyone to be on the same page". He also acknowledged the "dedicated healthcare workers" and their "commitment to save lives" and government's continued efforts to "provide further [financial] support to for business, workers, and households affected by the month-long COVID-19 circuit breaker".

*Phase 4 (Full Epidemic)* started on 17 April 2020 with 5,050 total cases and ended on 20 April 2020 with 8,014 active cases. During this period, Lee Hsien Loong tweeted 4 posts in total, all of which were COVID-19 related (100%). The sentiment of Lee Hsien Loong's Tweeter posts in this period was neutral and very positive. The key themes from his tweets were associated with international diplomacy (22.09%), recovered COVID-19 cases (16.53%), informative COVID-19 articles (11.26%), collective effort (5.96%), and healthcare workers' efforts (5.20%). In this period, Lee Hsien Loong described the long recovery journey of a Bangladeshi workers and gave credit to the "good hands of [the] healthcare team". As well, he reminded residents "to do "their part, in order to defeat COVID-19" and shared informative articles that "explains the rationale of the circuit breaker and [its] outcomes".

*Phase 5 (Late Epidemic)* started on 21 April 2020 with 9,125 active cases and lasted till 30 May with 34,366 cases. In this period, Lee Hsien Loong tweeted 37 posts in total, out of which 31 posts (84%) were COVID-19 related. Most of the Tweeter posts in this phase were associated with neutral sentiment, followed by very positive and moderately positive sentiments. The key themes emerging from his Tweets in this phase were related to international diplomacy (11.94%), global governments' efforts (8.14%), collective efforts (6.30%), healthcare workers' efforts (6.23%) and working from home (4.89%) (see Figure 2). Lee Hsien Loong often pointed out the efforts of the Singapore government to collaborate with other governments, including Vietnamese, Colombian, Austrian, and Swiss, to "keep markets open, supply chains connected, [and] battle the diseases together". He also prompted residents to "take gatherings online", shares "ideas for stay-home activities every day" and encouraged "everyone to adjust to living in a COVID-19 world". In addition, he expressed collective gratitude to the healthcare works who are helping fight the disease.

Figure 2 summarizes the key themes associated with Lee Hsien Loong tweets throughout the five phases of the COVID-19 crisis. Table 2 provides details of the sentiment analysis for Lee Hsien Loong throughout all the five phases.
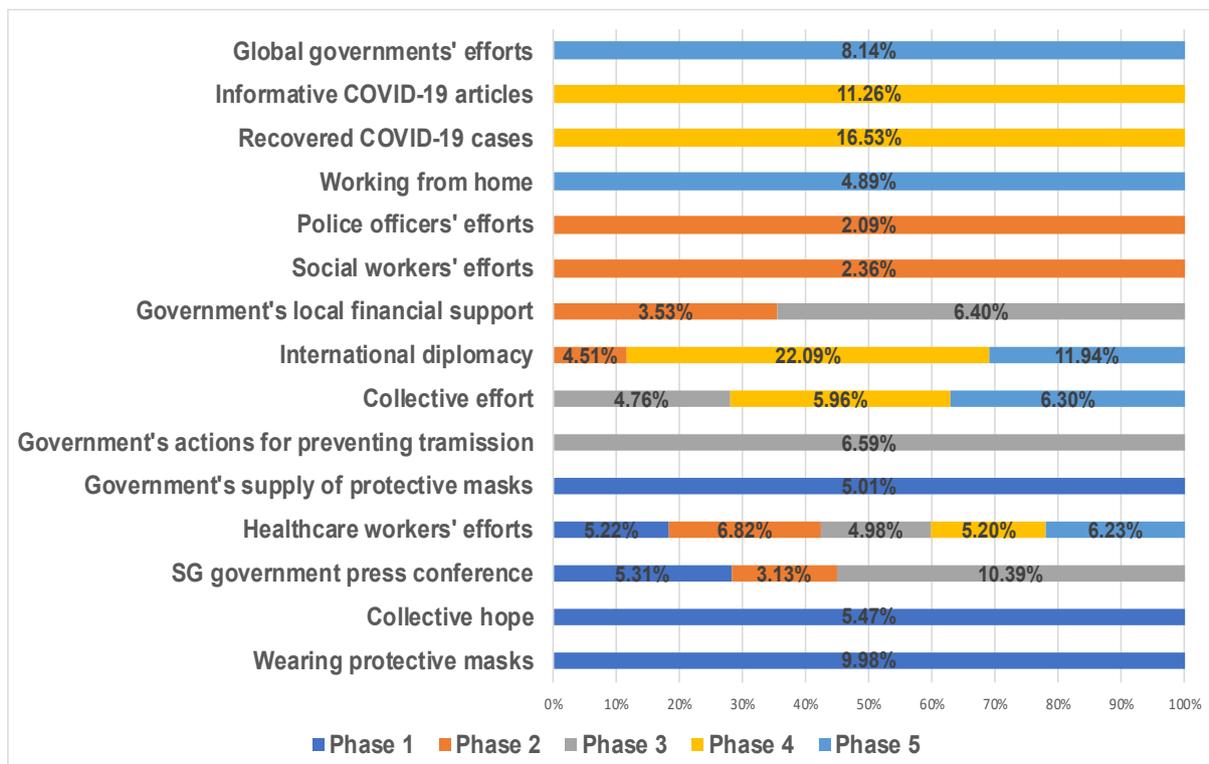


*Figure 2. Key coding nodes for Lee Hsien Loong*

| Codes/Phases | P1 | P2 | P3 | P4 | P5 |
|---|---|---|---|---|---|
| Neutral | 16 | 8 | 11 | 2 | 16 |

| | | | | | |
|---|---|---|---|---|---|
| Negative | 3 | 9 | 8 | 0 | 3 |
| Positive | 11 | 10 | 8 | 2 | 11 |
| Mixed | 1 | 5 | 3 | 0 | 1 |
| **Coding References** | **31** | **32** | **30** | **4** | **31** |

*Table 2. Sentiment analysis for Lee Hsien Loong*

## 4.2   Case 2: the US

*Phase 1 (Sporadic Cases)* lasted from 20 January 2020 with 1 active case untill 1 March 2020 with 75 active cases. In this period, Donald Trump tweeted 859 posts in total, out of which 31 posts (3.6%) were related to COVID-19. Most of the Tweeter posts were associated with a mix sentiment: moderately negative and very positive. The key themes that emerged from the Tweeter posts in this period were related to healthcare workers' efforts (27.37%), democrats' poor performance and policy (25.83%), Trump administration's efforts (22.72%), US government press conference (13.94%) and unfair perceptions about Trump administration (11.18%). In this period, Donald Trump regularly recognized the efforts of healthcare workers in "handling the coronavirus" and "putting America step ahead of the outbreak", as well as the efforts of its administration to implement "a historically aggressive measures to control the coronavirus in the US". He also condemned the spread of fake news by the mainstream media and democratic party's counterproductive actions to oppose the "$2.5 billion to prepare for coronavirus".

*Phase 2 (Clusters)* began on 2 March 2020 with 100 active cases and ended on 8 March 2020 with 541 active cases. In this period, Donald Trump tweeted 204 posts in total, out of which 25 posts (12.25%) were related to COVID-19. Most of the Tweeter posts in this period had a mixed sentiment: neutral, moderately negative and very negative (see Table 3). The key themes linked to this period were Trump administration's effort (35.56%), President's effort (23.57%) and government's efforts (16.00%). In this period, Donald Trump repeatedly mentioned his administration's effort in developing "a perfectly coordinated and fine-tuned plan at the White House for our attack on coronavirus". Similarly, he announced his donation of "his quarterly salary to heap fight coronavirus [and] find vaccine" and acknowledged the government's efforts to "provide $8 billion to fight coronavirus".

*Phase 3 (Main Wave)* started on 9 March 2020 with 704 active cases and finishes on 4 April 2020 with 317,994 active cases. In this period, Donald Trump tweets 802 posts in total, out of which 343 posts (42.77%) were related to COVID-19. Most of the Tweeter posts in this period had mixed sentiment: neutral, moderately positive and moderately negative. The major themes emerging from the Tweeter posts in this period were associated with collective hope (4.37%), Trump administration's efforts (4.08%), collective efforts (2.56%), government's efforts (2.33%) and US government press conference (1.75%). Donald Trump repeated, "we have the greatest healthcare system, experts, scientist, and doctors anywhere in the world [...] together we will PREVAIL" to boost the collective hope and acknowledge the collective effort in dealing with the disease. He also recognized that "our VERY early decision to stop travel to and from certain parts of the world [...] saved many lives" and gave credit to the state governments, which will provide "resources and tools at its disposals to safeguard the lives and health of our people".

*Phase 4 (Full Epidemic)* began on 5 April 2020 with 343,747 active cases and ended on 24 April 2020 with 925,232 active cases. In this period, Donald Trump tweeted 543 posts in total, out of which 249 posts (45.86%) were related to COVID-19. Most of the Twitter posts in this period were associated with a mixed sentiment: neutral, moderately positive and moderately negative. The major themes associated with the Donald Trump's Tweeter posts were democrats' poor performance and policy (7.63%), demand Congress to pass supportive bills or programs (6.39%), government's efforts (5.22%), collective hope (4.37%) and Trump administration's efforts (3.17%). Donald Trump repeatedly complained about the counterproductive performance and policy for boosting the economy recovery (e.g., "blocking passing more money to Americans in pay checks and small businesses"). In a similar manner, he urged the Senate to pass supportive bills or programs, such as PayCheck Protection Program and Health Enactment Act, which would have helped with the economic recovery and saving jobs in the US. He also mentioned that the Trump administration and state governments had delivered "523 million gloves, 69 million surgical masks, 55 million N95 respirators" and "emergency relief for small businesses, more resources for hospitals, and investments for expanded testing" to emphasize the efforts in fighting the pandemic crisis. As well, he attempted to encourage the public about the future in fighting the crisis by making statements such as "light at the end of the tunnel".

*Phase 5 (Late Epidemic)* started on 25 April 2020 with 960,651 active cases and ended on 30 May 2020 with 1,816,820 active cases. In this period, Donald Trump tweeted 867 posts in total, out of which 243 posts (28.02%) were related to COVID-19. Many of the Tweeter posts were associated with a mixed sentiment: neutral, moderately positive and very positive. The key themes emerging from the Tweeter post are related to government's efforts (7.41%), collective hope (6.17%), Trump administration's efforts (4.94%), reopening the economy (4.12%) and democrats' poor performance and policy (2.47%). During this period, Donald Trump constantly mentioned the funds that state governments provide to businesses to "keep workers on the jobs and help the economic recovery". Similarly, he pointed out that Trump administration helped in supplying "ventilators, tests, medical supplies" to individual states to help "a lot of great people". He also repeatedly encouraged to hope for better future by emphasizing that the US was "reopening for business". As well, Donald Trump pointed out that certain members of the democratic party, such as Nancy Pelosi and Dana Nessel, took intentional actions which were negative for the economic recovery of the US.

Figure 3 summarizes the key themes associated with Donald Trump tweets throughout the five phases of the COVID-19 crisis. Table 3 provides details of the sentiment analysis for Donald Trump throughout all the five phases.
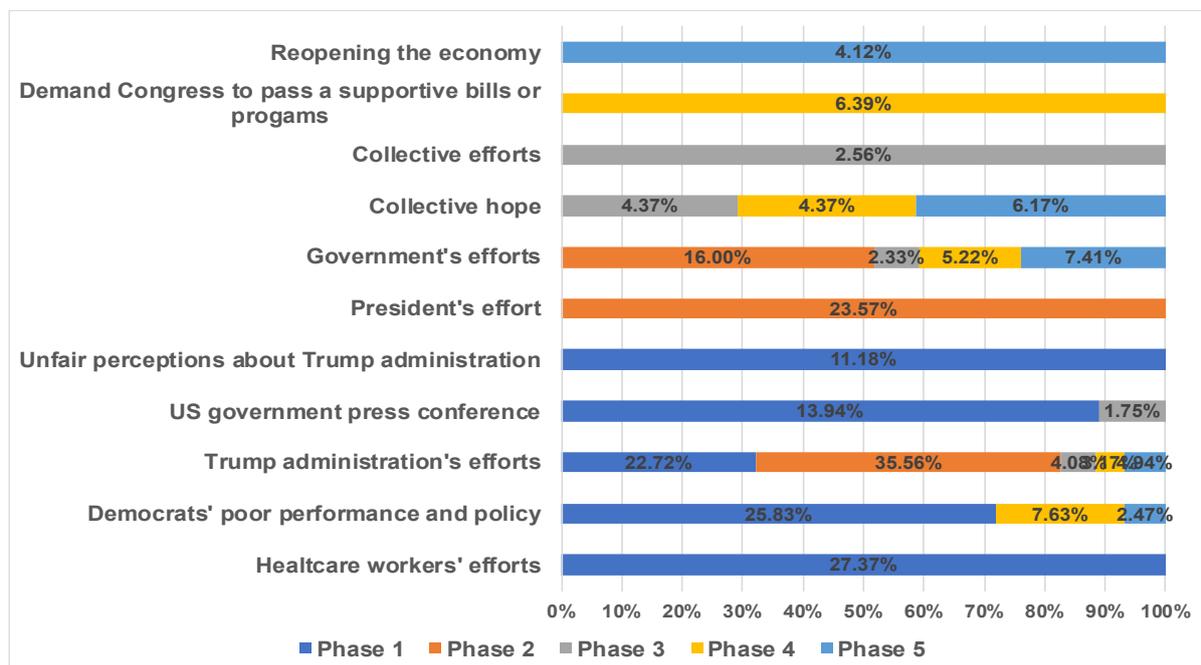


*Figure 3. Key coding nodes for Donald Trump*

| Codes/Phases | P1 | P2 | P3 | P4 | P5 |
|---|---|---|---|---|---|
| **Neutral** | 2 | 7 | 154 | 99 | 88 |
| **Negative** | 8 | 6 | 89 | 56 | 45 |
| **Positive** | 10 | 7 | 64 | 57 | 73 |
| **Mixed** | 6 | 5 | 36 | 37 | 37 |
| **Coding References** | **26** | **25** | **343** | **249** | **243** |

*Table 3. Sentiment analysis for Donald Trump*

## 5  Cross-Case Analysis

In the five phases, Lee Hsien Loong aimed to inform Singapore residents about the key developments in relation to the management of the pandemic crisis. These include number of new, recovered, and death cases, current measures in place to lower the COVID-19 transmission, risks associated with COVID-19 transmission, collection spots for government-supplied protective masks, ways to apply for government's financial support and so on. His posting frequency for COVID-19 related Tweets throughout the phases was high with an average of 25 posts per phase (91%). Relative to Donald Trump,

Lee Hsien Loong posts less Tweets in total; however, the percentage coverage of COVID-19 posts was higher than one of US's political leader. On the other hand, Donald Trump concentrated on highlighting his own efforts, the efforts his administration and the efforts of the federal government in managing the pandemic crisis in the five phases. His posting frequency for COVID-19 related Tweeter posts steadily increased throughout the phases, starting with 31 posts (4%) in Phase 1 to 25 posts (12%) in Phase 2, ending with 343 posts (43%) in Phase 3. In contrast to Lee Hsien Loong, Donald Trump's posting frequency decreased in Phases 4 and 5.

Approximately one-third (33%) of Lee Hsien Loong's Tweeter posts for COVID-19 were associated with positive sentiment. Lee Hsien Loong's posts during these five phases were *pragmatic* (e.g., "We should take our own temperature twice daily", "We are posting ideas for stay-home activities every day", "This article explains clearly the rationale for the circuit breaker and what outcome we hope to see") and *instructional* (e.g., "Please #stayathomeforSG", "We are holding an AMA [Ask Me Anything] tonight at 8 pm of our Facebook Page, so do log on if you have questions", "Do continue to take the necessary precautions even while you are having fun outside"). He also repeatedly expressed hope about the short- and long-term prospects of the city. His posts included broad statements without pointing to any specific reasons to stay hopeful, such as "Together keep Singapore strong", "Reassured that it is still business as usual in Singapore", "Glad that the coronavirus situation has not dampened the festive spirit" and so on. As well, he frequently (1) prompted Singapore residents "to do our part" and "remain united" to highlight the collective efforts in preventing the transmission of COVID-19 and (2) pointed out the importance of healthcare workers' efforts in treating patients, using general statements such as "It is vital but laborious and time-consuming work" and "My deepest respect to all healthcare workers".

In contract to Singapore's political leader, Donald Trump's posts throughout the five phases had mixed sentiment: 350 (40%) neutral, 204 (23%) negative, 211 (23%) positive and 121 (14%) mixed. Unlike Lee Hsien Loong, most of his Tweeter posts were *argumentative,* in which he explicitly outlined the outcomes associated with (1) his own efforts (e.g., "President @realDonaldTrump DELIVERED: 523 million gloves, 69 million surgical masks, 55 million N95 respirators, 10.5 million surgical gowns, 5.9 million face shields, 10,998 ventilators, and 8,450 federal medical station beds"), (2) the efforts of his administration (e.g., "CDC and my Administration are doing a GREAT job of handling Coronavirus, including the very early closing of our borders to certain areas of the world") and (3) the efforts of the government (e.g., "The bill passed in the Senate today will provide an additional $310 billion for the Paycheck Protection Program"). He also used argumentative Twitter posts to criticize the Democrats' poor performance and policy (e.g., "Speaker Pelosi and Senator Scumer are holding [the funding] hostage, trying to get other priorities").

Figure 4 shows a word cloud of the most frequent words used in Lee Hsien Long and Donald Trump's Twitter datasets. Table 4 provides a summary of the sentiments for Lee Hsien Long and Donald Trump throughout the five phases.



*Figure 4. Word cloud for Lee Hsien Long (left) and Donald Trump (right)*

| Leaders /Phases | P1 | P2 | P3 | P4 | P5 |
|---|---|---|---|---|---|
| Lee H. Loong | 31 (94%) | 32 (84%) | 30 (94%) | 4 (100%) | 31 (84%) |
| Donald Trump | 31 (4%) | 25 (12%) | 343 (43%) | 249 (46%) | 243 (28%) |

*Table 4. COVID-19-related Tweeter posts (%)*

## 6 Discussion

Venue check-in data were used to analyse the activity level of residents in the two cases, by computing the proportion of active users (Figure 5). Based on our cross-cases analysis, we observe that throughout the five phases in the Singapore case, the number of venue check-ins progressively reduced. That is, the number of check-ins is the highest in Phase 1 and the lowest in Phase 4 in all categories. The latter decrease can be contributed to Lee Hsien Loong's persistent calls for Singapore residents to comprehend their collective effort in preventing the spread of COVID-19 via with pragmatic and instructional Tweeter posts, which resembles the engaging political communication style (Bracciale and Martella 2017). Hence, we propose:

*Proposition 1: Use of "engaging" political communication style has a positive influence on the public perception about the COVID-19 crisis.*

Similarly, through the five phases in the US case, the number of Tweeter check-ins gradually decreased. The number of check-ins is the highest in Phase 1 and the lowest in Phase 4 in all categories. Nevertheless, the latter decrease was not as significant as in the Singapore case, especially in Phase 3, 4 and 5. This can be contributed to Donald Trump's use of argumentative Tweeter posts to emphasize the government's efforts in fighting the COVID-19 pandemic, which mirrors the champion of the people political communication style (Bracciale and Martella 2017). Therefore, we posit:

*Proposition 2: Use of "champion of the people" political communication style has less positive influence on the public perception about the COVID-19 crisis relative to the "engaging" communication style.*
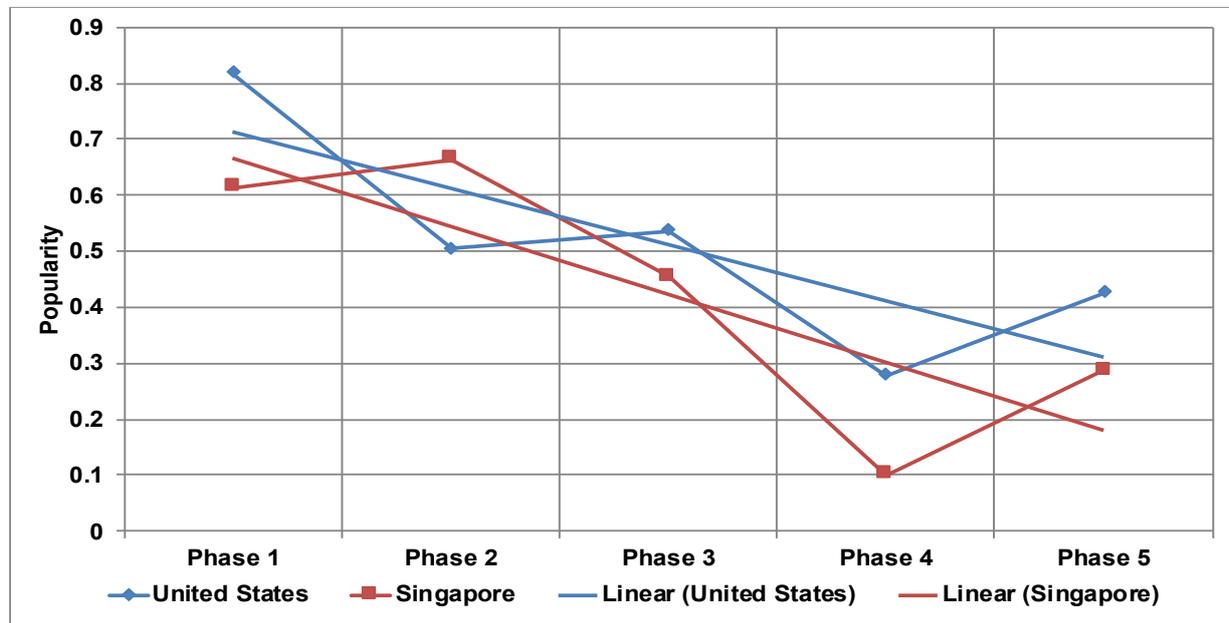


*Figure 5. Venue check-in data per country*

## 7 Limitation and Future Study

There are several limitations in our study. First, the generalizability of our results may be limited because we examined only two countries in this study. Future studies should examine other countries that exhibit similar political dynamics and compare the impact of political leaders on the public perception. Second, for the check-in data in our study, we use random sample rather than the whole popularity of Foursquare

users as the data were collected via Twitter API for users who linked their Foursquare account to Twitter. Future study could use mobile data to investigate the movement of public. Third, this study does not take into consideration some contextual factors such as political organisation (e.g., federal government + state governments in USA vs central government in Singapore), which should be further investigated for influence on the on the public perception about the COVID-19 crisis.

## 8   Conclusion

We investigate the influence of different communication style of political leaders on public perception about the COVID-19 crisis through a communication-centred perspective. We adopt an inductive theory-building approach, nested multi-case study research design, using two-staged analysis: within case and cross-case analyses. Our findings show that Lee Hsien Loong uses engaging communication style to communicate with public, while Donald Trump uses champion of the people communication style. Moreover, Lee Hsien Loong's use of pragmatic and instructional Twitter posts to prompt Singapore residents to understand their collective effort in preventing the spread of COVID-19 led to a more significant decrease of the public movement in comparison to Donald Trump's use of argumentative Twitter posts to emphasize the government's outcomes manage the pandemic crisis.

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