MOTIVATION AND ENGAGEMENT INITIATIVES OF THE PHILIPPINE GOVERNMENT'S MESSAGE DURING A HEALTH CRISIS

Jyväskylä University School of Business and Economics

Master's Thesis

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ABSTRACT

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Abstract

This master's thesis reviews and analyses the different motivations and engagement initiatives of the government through the Department of Health official Facebook page. Due to the COVID-19 pandemic, different countries had their own protocols to follow as advised by the World Health Communication. The Philippines was not spared from this. On March 16, 2020, the president placed the nation into a "public health emergency". With CrowdTangle, a social media monitoring application, this study was able to gather Facebook posts from March 1 to 31, 2020. Each post was reviewed and had corresponding keywords and codes and were plotted on the Motivation Continuum to identify the reasons of behavior. 64.3% posts were found to be usefulness-driven and only 0.9% posts were interest-driven. It was apparent that posts which are useful had more engagement than the ones motivated by external and internal threats. Moreso, the engagement type that resonated more was sharing versus the others (like and care). With the review and analysis, this study offers a valuable information on how to find the message motivation and what kinds of messaging resonates to the online engagement of the public.

Key words

Health communication, COVID-19, Motivation Continuum, Self-Determination Theory

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1 INTRODUCTION

1.1 Research Background

The COVID-19 pandemic prompted people to rely on online communication through social media sites (Azer et al., 2021). Facebook is the top social media platform globally (Statista, n.d.-a) used by Filipinos with 95.7 percent of the internet users accessing the Meta brand (Statista, n.d.-b). Moreover, it has been an accepted communication channel for various governmental agencies, specifically public health organizations (Kite et al., 2016).

With the need to continuously advocate for effective risk and crisis communication (Coombs, 2019, p. 7), we must be able to harness *intrinsic motivation* (Ryan & Deci, 2017) to prevent dis- and misinformation from our audience to ensure the longevity of the effects of the message (Martela et al., 2021). Moreover, the theories of persuasion and behaviour change are considered as a process rather than as an event (Glanz & Bishop, 2010 in Barua, 2022).

Amit et al. (2021) said that there is a lack of preparation for risk and crisis communication. With this, different avenues for digital communication such as Facebook, Instagram and Viber, the Philippine government's Department of Health started posting in February 2020 about the Novel Corona-Virus which was eventually called COVID-19 by the World Health Organization. It was first observed in Wuhan, China, before it became a worldwide pandemic (Amit et al., 2021).

Governments must effectively communicate and enforce crucial health practices as part of a pandemic response. However, for these practices to be sustainable, the public must adopt them as part of their lifestyle. This ranges from mildly inconvenient measures like proper handwashing and mask-wearing to more significant changes such as social distancing and adhering to lockdowns. Many of these behaviors cannot be closely monitored, making it essential for governments to deliver compelling messages that motivate people to voluntarily change and sustain these behaviors over time (Martela et al, 2021).

The Philippines was placed under the "public health state of emergency" on March 16, 2020, and eventually, several community quarantines were implemented to halt the spread of the virus (IATF, 2020). It was a turbulent time for most of the people as it continued to spread across the country.

This master's thesis will look at the Philippine government's online health communication through the official Department of Health's Facebook page.

Based on my data set, the page had 1,240,298 likes and 1,2464,495 followers at the start of the date range and it had 2,425,765 likes and 2,577,999 by the end of March 31, 2020. I am interested in examining the first month because this is the time when the pandemic started and there were changes in communication channels within the same month. By examining posts that garner significant engagement through Motivation Continuum, we can identify the motivations that these messages indicate. This informs us on what motivations are important to think about when creating communication strategies. This understanding is crucial for crafting messages that inspire sustained behavioral change, which is the goal to in effective public health crisis management.

This study aims to explore the engagement initiatives and motivations of the government. Also, it aims to see the similarities of customer engagement marketing theory and the motivation continuum as applied to health communication.

With that, here are the research questions posed by the researcher:

RQ. What different types of motivations attempts exist in governmental communication on Facebook during the early phase of a pandemic?

1.2 Research Structure

This research will have the following structure:

Section 1: Introduction. This section provides an overview of my research, its objectives, and research questions.

Section 2: Conceptual Framework. This section states the context revolving around the COVID-19 situation in the Philippines happened since it will be the period of the health communication and engagement of this research. Furthermore, it will discuss the definitions and relationships of Health Communication, Engagement Marketing, and Self-Determination Theory by Ryan & Deci (2000).

Section 3: Data and Methodology. This section discusses the data collection and methodology. This master's thesis uses netnography (Kozinets, 2018) to collect data from the official Facebook page of the subject, Department of Health (DOH, n.d.) and the data will be analysed thematically. The ethical considerations are noted here.

Section 4: Results and Analysis. After employing the thematic analysis, results will be presented in tables and figures. Also, the results will be plotted in the Motivation Continuum to provide a better understanding of the government's messaging in the time of start of the health crisis.

Section 5: Discussion. This section answers the research question along with the limitations of this study and recommendations for future research work.

1.3 Use of AI

During the preparation of this manuscript, the built-in grammar and spelling checker of Microsoft Word were used. Also, when the data set was translated from Filipino/Cebuano to English, Google Translate was used in some of the words but were eventually checked by native speakers to ensure the accuracy of the translation. Other than those mentioned, no AI applications were used.

2 THEORETICAL FRAMEWORK

2.1 Health Communication

Health communication is a process of promoting health information between health professionals and the public, such as through public health campaigns that improve the masses' health literacy (Berger, 2010). At its very core, health communication focuses on the emphasis of understanding health. This includes disseminating information that increases the audience's knowledge or awareness of a health issue (Gwyn, Richard 2002), demonstrating health hygiene practices, debunking health myths and misconceptions (Freimuth, Quinn, 2004), amongst others.

As such, health communication is as broad as it is interdisciplinary because of its scope and implications. It interweaves medical science, public health, and communication studies. It can spark change among individuals and also in organizations, communities, and society as a whole (National Cancer Institute, 2004).

The purpose of this body of knowledge is to create sustainable change that encourages an individual to adopt and maintain better health behavior (National Cancer Institute, 2004), which is where meaningful change takes place in the society. In addition, communicators must consider the capability of the audience, the perfect opportunity, and the motivation for them to be able to apply the recommended practices (Peters et al., 2018).

Such as in the case of the Department of Health's WASH o'clock campaign in the Philippines in 2022, where the installation of signages and easily accessible public handwashing stations nudge people to wash their hands during critical moments. This showed an increase of 17.3% points in handwashing habits of students in Zamboanga del Norte schools, based on a study by the Philippines' Department of Education. The initiative impressed upon the public the importance of individual health habits that contribute to a culture of handwashing in their communities (UNICEF Philippines, 2023).

When executed well, communication strategies can promote public trust, confidence, and create a sense of community where people are encouraged to become a part of the solution (Hunt, 2021).

2.1.1 Health Communication and Crisis Communication

Crisis communication is an essential element in managing public health emergencies, where effective spread of information can significantly influence public behavior and mitigate the impact of the crisis. Public health crises are "sudden and unexpected events caused by health problems which led to inevitable physical, emotional and financial harms to a wide range of stakeholders, publics and organizations (Coombs, 2007; Sellnow & Seeger, 2013, in Lu and Jin, 2010, p. 264).

In the context of health communication, crisis communication plays a vital role in ensuring that accurate and timely information reaches the public. For instance, during the COVID-19 pandemic, effective crisis communication by governments was essential in communicating health guidelines, updates on the number of cases and virus's spread, and measures for protection and prevention.

Health communication during a public health crisis also deals with the fact that there is a shared stress among the stakeholders (Perry, 2007) and the ability to navigate this is worth preparing for as it affects an organization's long-term goals. Effective crisis communication improves compliance by fostering public trust, which is crucial to the overall success of a crisis response (Reynolds & Seeger, 2005).

2.1.2 Health Communication and the COVID-19 Pandemic

The global pandemic COVID-19 demonstrated how health communication is an essential and crucial element in saving people's lives (Zu et al., 2020). It showed how the rate of being able to control the widespread of the pandemic was, in part, dependent on the government interventions, but more importantly, on how people understood and adhered to the communicated guidelines and regulations (Hyland-Wood et al., 2021). Such was the case for Australia's successful crisis management during the pandemic where health communication was not limited to the process of informing the public and public being passive receivers, but rather, it was an exchange of information and an ongoing engagement (Hyland-Wood et al., 2021). After all, a government's role in a public health crisis includes utilizing public trust and cooperation to reach a shared vision (Effron, 2020).

Similarly, New Zealand's pandemic response involved an effective health communication strategy. Since the beginning, identifying the end goal of enlisting the public to "do the right thing" directed the actions and campaigns that brought the country success and prestige for being able to eliminate COVID-19 earlier than other nations. New Zealand's health communication strategies deliberately chose not to center on the virus itself. The "Unite Against COVID-19"

called for active participation, triggering a team spirit because people had something common to fight against (Hunt, 2021).

2.1.3 Health Communication on Government Social Media

In the Philippines, social media platforms are not only widely used and adopted by the general public, but also by government and public offices, including local government units or LGUs (Alampay et al, 2018). This makes it beneficial during a public health crisis, because the government needs to reach as many people as fast as possible.

Social media consists of websites and applications that allow for the distribution of health information in real time to millions of people. Because of how the platform is used for instant communication, social media such as Facebook was the primary channel by which people sought health information during the COVID-19 pandemic (Flores & Asuncion, 2020).

However, Kite et al. (2016) found in their study that simply being seen is not enough and that organizations should only be using Facebook where they are willing and able to invest sufficient resources to engage users. Their study on identifying the features of Facebook posts that are associated with higher user engagement on Australian public health organizations' Facebook pages revealed that not all posts had the same impact on engagement. Facebook defines engagement as actions people take on content shared across Meta technologies—likes, shares, comments, video views or follows—and can help increase organic reach (Facebook, n.d.). Engagement is important to measure and aim for because it directly influences the reach of content, which matters in using social media for health communication (Kite et al., 2016; Moorhead et al., 2013).

While social media was basically an effective platform for widespread information, especially that a high percentage of Filipinos spent their time online during the pandemic (Statista, n.d.), it was also an unregulated space where there was no way to moderate or fully control misinformation and fake news (Flores & Asuncion, 2020).

Health professionals and political leaders were not only expected to provide transparent information and implement guidelines (Finset et al., 2020), but also had to deal with public anxieties and unrest.

2.2 Social Media Use in Government Communication

In times of public emergency, governments have to take action rapidly to convey crisis information to the public in a timely and effective way; if this cannot be done, people will naturally start to feel scared, anxious and concerned about the situation (Chen et al., 2020).

Historically, social media has long been used by government agencies to disseminate information, monitor public attitudes and behavior, manage and suppress rumors, encourage collaboration and crowdsourcing, promote social cohesion, mobilize resource flows, and advance academic research during times of crisis (Alexander, 2014; Tang et al., 2015; Zhang, Fan, Yao, Hu, & Mostafavi, 2019).

In recent years social media use by governments has undergone a significant change. The focus has shifted towards transparency and open communication with the public. However, research has mainly concentrated on how governments can effectively engage with citizens during normal times (Chen et al., 2020).

According to Panagiotopoulos et al. (2016), social media has transformed how governments and citizens deal with crises. It allows for a constant flow of information, with governments keeping people informed and citizens offering input and even aiding in the response. This reflects the growing role of social interaction in managing crises in today's digital age (Chatfield & Reddick, 2018).

Researchers have often used simple social media counts such as likes, shares, comments, and retweets to judge how well governments involve citizens online (Bonson & Ratkai, 2013; Brubaker & Wilson, 2018; Kim & Yang, 2017; Jiang & Beaudoin, 2016). One popular method is the Social Media Engagement Index which combines these counts into a single score (Bonson & Ratkai, 2013). This approach, and similar ones based on likes, comments, and shares, have become widely used in studies on citizen engagement (Bonson et al., 2015).

Further, the public's enthusiasm for engagement is demonstrated by their willingness to go above and beyond the call of responsibility in order to actively share and reply to content that organizations post (Men, Tsai, Chen, & Ji, 2018).

Through citizen engagement on Government Social Media, the public can learn more about the crisis, comprehend their responsibilities, carry out self-organized help activities, and become aware of how to collaborate with others (del Mar Galvez-Rodríguez, et al., 2019; Graham et al., 2015; Zhang et al., 2019). As a result, their social capital and crisis reaction self-resilience both rise (Jurgens & Helsloot, 2018). The author further provided details on how social media promotes citizen self-resilience. First, people may look for and exchange trustworthy

information via social media platforms. Second, because social media has such a strong interconnectivity, it may help citizens better grasp current events and work together to solve problems (Chen et al., 2020) like the health crisis.

In fact, people spend an average of 144 minutes a day on them (Statista, 2020-b) and brands have been informed that people use social media to interact with their posts in addition to creating original content. Hence, consumers of search engines frequently use them to locate relevant internet reviews (Kumar et al., 2005). With that, social media platforms are seen as essential outlets (Muntinga et al., 2011; Piehler et al., 2019) as people look to their leaders in times of crisis and expect governments to deliver timely and reliable information (Bakker et al, 2019).

According to Ji et al. (2016) and So et al., (2016), when people come into contact with emotional posts on social media, people are more prone to express their feelings, which further encourages their interaction patterns, such as liking, commenting, and sharing.

The shift towards more interactive and emotionally engaging content on social media (Zavattaro et al., 2015) underscores the importance of understanding the underlying motivations that drive public engagement.

2.3 Self-Determination Theory

The role of governments as health communicators during the early stages of the COVID-19 pandemic was vital in saving lives. Rapid life-saving decisions were necessary, often involving the rapid imposition of strict measures that initially limited civic engagement (Hyland-Wood et al., 2021).

Such was the case in the Philippines, wherein the Department of Health's Facebook posts after the first confirmed COVID-19 death in the Philippines on March 11, 2020 (Department of Health, 2020) focused on informing the public on the gravity of the situation. This was done through publishing COVID case counts (Department of Health, 2020), confirmed deaths (Department of Health, 2020), guidelines for identifying close contacts (Department of Health, 2020), and instructions for managing COVID-19 confirmed cases (Department of Health, 2020).

However, it is equally important for the government to communicate effectively with the public during a health crisis, in such a way that encourages community involvement (Hyland-Wood et al., 2021). Successful crisis response hinges on public cooperation with governmental rules and guidelines. The World Health Organization highlighted that effective outbreak response strategies for

prevention, control, and mitigation are largely dependent on the engagement, participation, and ownership of the community (World Health Organization, 2012).

According to Ryan & Deci (2000), a motivated person is always compelled to do something. Motivation, as Self-Determination Theory suggests, can be distinguished based on the reasons and goals that moved a person to action. Self-Determination Theory (SDT) is a comprehensive framework for understanding human motivation, particularly the factors that promote autonomous motivation and well-being. SDT posits that people have three innate psychological needs that are essential for their growth, integrity, and well-being: autonomy, competence, and relatedness. Autonomy refers to the need to feel in control of one's own behavior and goals. Competence involves the need to gain mastery of tasks and learn different skills. Relatedness is the need to feel a sense of belonging and attachment to others.

When these needs are met, individuals are more likely to experience high-quality motivation, characterised by volition, a sense of choice, and a feeling of personal endorsement of one's actions. SDT distinguishes between different types of motivation based on the degree to which they are autonomous versus controlled. Intrinsic motivation arises from genuine interest and enjoyment in the activity itself. Extrinsic motivation involves performing an activity to achieve a separable outcome, which can be further divided into various forms based on the degree of autonomy, from external regulation (least autonomous) to integrated regulation (most autonomous).

SDT emphasises that the social environment can either support or prevent the fulfilment of these psychological needs. Environments that nurture these needs foster greater intrinsic motivation and internalisation of extrinsic motivations, leading to more sustained and effective behavioural engagement.

By applying SDT to public health communication, governments can craft messages that not only inform but also resonate with the intrinsic motivations of the public, thereby encouraging voluntary and sustained adherence to health guidelines during crises.

2.3.1 Autonomous versus Controlled Motivation

Based on the source of motivation, which is the external versus internal, Self-Determination Theory distinguishes between autonomous motivation or acting out of a sense of choice and volition, and controlled motivation or acting due to external pressures or rewards (Deci & Ryan, 1985).

Autonomous motivation is where an individual fully "stands behinds" their actions and decisions, which are congruent with one's authentic interests and values (Ryan & Deci, 2017). An example could be an individual who chooses to consistently wear a mask and practice social distancing because they personally believe it is the right thing to do to protect themselves and others. They feel a sense of responsibility and ownership over their actions, rather than feeling compelled by external rules or pressures. It is voluntary compliance because it is something they want to do.

On the other hand, controlled motivation refers to the engagement in a behavior under the influence of external pressures, where individuals feel compelled to act in accordance with external rules, regulations, or expectations, rather than driven by intrinsic interest or personal choice (Ryan & Deci, 2017). An example of controlled motivation in the context of health protocols during the COVID-19 pandemic could be an individual who adheres to mask-wearing and social distancing guidelines primarily because they are afraid of being fined or punished for non-compliance, rather than because they personally believe in the effectiveness of these measures or wish to protect themselves and others.

2.3.2 Intrinsic versus Extrinsic Motivation

On the other hand, motivation can also be classified based on the nature of the activity's rewards which can be inherent vs. separable from the activity. Motivation can be classified as intrinsic motivation or engaging in an activity for its inherent enjoyment or satisfaction, or extrinsic motivation or engaging in an activity to attain some separable outcome or reward (Deci & Ryan, 1985).

An example of intrinsic motivation in the context of hobbies adopted during the pandemic is an individual who began gardening. This person derives pleasure and satisfaction from planting and nurturing plants, finding the process inherently rewarding. Their motivation to garden is driven by the enjoyment and sense of accomplishment derived from the activity itself, rather than external factors such as recognition or praise. This intrinsic motivation sustains their engagement in gardening, demonstrating the principle of self-determination in pursuing activities that are personally fulfilling and meaningful (Deci & Ryan, 1985; Ryan & Deci, 2000).

An example of extrinsic motivation can be observed in a student who studies diligently to earn high grades. In this scenario, the student's motivation for studying is not derived from an inherent interest in the subject matter or a personal desire for knowledge, but rather from the external reward of achieving ac-

ademic success. This exemplifies the concept of extrinsic motivation, where behavior is driven by external incentives rather than intrinsic satisfaction (Ryan & Deci, 2000).

Ultimately, effective communication in the lens of Self-Determination Theory entails striking a balance between offering guidance and structure while demonstrating care and support for autonomy (Martela et al., 2021).

Using the Self-Determination Theory and the Motivation Continuum as a framework, this study looked into the kinds of motivation initiatives that surfaced in governmental communication through Facebook during the early phase of the COVID-19 pandemic.

The Motivation Continuum Context Extent to which basic psychological needs (of autonomy, competence, and relatedness are satisfied **AUTONOMOUS MOTIVATION CONTROLLED MOTIVATION** "wantivation" "mustivation" AMOTIVA-Type of motivation **TION** Feeling unable and unwilling, finding nothing **EXTRINSIC MOTIVATION** interesting or **INTRINSIC** important **MOTIVA-TION** INTERNALIZED MOTIVATION Reason of behavior **EXTERNAL USEFULNESS-INTERNAL** VALUE-**INTEREST-INACTIVITY PRESSURE PRESSURE DRIVEN** DRIVEN DRIVEN Doing some-Doing some-Doing some-Doing some-Doing some-Passivity, thing because thing because thing because thing because it thing because it avoidance, opof external experienced, fits with one's positional beof internal interesting or pressure (pun-"musts" and usefulness, relown deeply enjoyable ishment, reheld values evance wards, threats)

Figure 1. Visser, C.F. (2017). The motivation continuum: self-determination theory in one picture.

3 METHODOLOGY

3.1 Data collection

The gathered data was downloaded from CrowdTangle (n.d.), an online web-based tool that gathers data from Meta accounts. The file was in the form of CSV and the data set was sorted and analysed in Microsoft Excel and Google Sheets. No machine intelligence was used hence natural language processing was not practiced in this study.

3.1.1 Sampling technique

As mentioned above, CrowdTangle will be the sole tool to for data gathering. This will enables the researcher to get the selected data easily by using the following filters as shown in Figure 2 below.

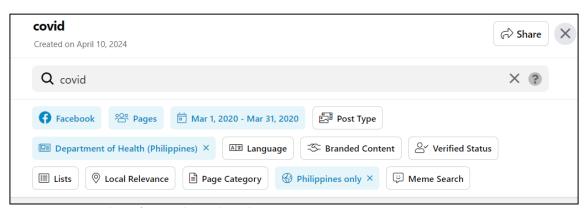


Figure 2. Screenshot of CrowdTangle web-app - parameters

First, I selected "Facebook" as the platform, clicked "Pages" so it would only show the posts that were posted by a Page on Facebook. I also included the date range which is from "March 1-31, 2020". On the next selection, I typed "Department of Health (Philippines)" to narrow down which page CrowdTangle should be looking at. Lastly, I selected "Philippines only" to geographically limit the origin of the post. On the search bar, I used the search term "covid". After pressing "enter" there was a search return of 332 posts containing the "covid" search term.

Since this study will only focus on the caption of the post, all posts that do not have any caption were removed from the sample. There was a total of 21

posts that was only re-shared from "Healthy Pilipinas" which is another page by DOH Philippines. Only 311 posts were found to have a caption or message.

In summary, there were 142 posts which had English caption. No changes were made with those, as opposed to the Filipino ones that totalled to 167. I translated the Filipino ones while the remaining 2 posts written in Cebuano were translated using Google Translate and were later on verified by a native speaker. As part of the limitation of this study, only posts which has captions or messages were coded and not the content format, video or photo, of the post.

3.1.2 Ethical considerations

The publicly available posts which was gathered through CrowdTangle will be used in this study. Since this is observational netnography (Kozinets, 2018), my participation is limited, and no private data will be collected. Also, this is going to be governed by the *Internet Research: Ethical Guidelines 3.0* of the Association of Internet Researchers (franzke et al., 2019), Also, this research will be publicly available as required by GDPR.

After ensuring that all messages were in English, I identified the keywords and sorted them into broader concepts as codes. Furthermore, by employing the reasons for the behaviour as a guide, I categorized and plotted them in the Motivation Continuum. Some keywords were repeated and were categorized differently as phrases. This is due to the combination of words in a certain post.

4 RESULTS

Using the Motivation Continuum, I have grouped the keywords according to the reasons of behavior that they satisfy. It is important to note that there can be similar keywords in different reasons of behavior. This is due to my analysis on how the words were used in specific posts. For example, the phrase "Fight COVID-19" appeared in messages with *external pressure* but, also, in the *interest-driven* mainly because of how the phrase was used in the post.

Under the *external pressure*, the following keywords were used: Advisory; Alert System; Algorithm For Triage of Patients; COVID-19 Threat; Fight COVID-19; Fight COVID-19; Virtual Presser, Alert System; Warns the public.

For *internal pressure*, the following keywords were found: Adhere to existing guidelines; Announcement; Confirmed Case; Confirmed Cases; Confirmed Cases, Contract Tracing; Confirmed Cases,; Patient Tested Positive; COVID-19 testing; Daily Commodity Distribution Report; Deaths; Delivery of Kits; Dispatch of Personal Protective Equipment; Distribution Efforts; Donating PPEs and face masks; Efficient; Ways to Respond; Emergency Hotline; Fact Check; Fight COVID-19, commodities distributed; Go home safely; Official List of Test Kits; Press Conference; Press Statement; Public Briefing; Reports; Respond to COVID-19 Health Threat; Send health commodities and Personal Protective Equipment; Stop the Spread; Thank You; Transparent and Timely Reporting; Virtual Presser.

Under the usefulness-driven, these were the keywords associated with it: Accurate and Timely Information; Additional perks; Advisory; Algorithm For Triage of Patients; Announcement; Approved Resolution; Avoid; COVID-19; Be informed; Briefing; Case Bulletin; Case Tracker; Close Contact; COVID-19 patients; COVID-19 Spread; COVID-19 test; COVID-19 testing; COVID-19 Update; Decision Flowchart; Different Tests to Identify, FAQs; Enhanced Community Quarantine; Fact Check; Fake Content Alert; FAQs; Fight against COVID-19; Fight COVID-19; Giving care, Health professional; Government strategy; Guide, Manage Suspected and Confirmed Cases; Health Advisory; Home Quarantine; Home Quarantine and Isolation; Important Information on COVID-19; Improving the information and delivery; Informs Public; Interim Guidelines; Join the community; Model Employees; Person Under Monitoring; Person Under Monitoring, Face Mask; Person Under Monitoring, Mask; Person Under Monitoring, Wear Mask; Personal Protective Equipment; Press Briefing; Press Conference; Prevent COVID-19; Prevent the Spread; Prevent threats of COVID-19; Prevention; Protect Yourself; Protocols, Enhanced Community Quarantine; Relevant Health Tips; Responsible use of social media; Social distancing; Social Distancing, Prevent the Spread; Stay at home, Stop the Spread; Stay Home; Suspected and Confirmed Cases; Take care of a family member; Tiktok, Protective Measure; ; Universal Preventive Measures; Virtual Presser.

Meanwhile, these are the keywords filed under *value-driven*: Salute and Thanks; Thank You; Gratitude; Government's continuous efforts; Fact Check; Fight COVID-19; Frontliner; Thank You, Donation; Enhanced Community Quarantine; Avoid going out, need for unity; Love; Gratitude to Healthworkers and Frontliners; Eliminating the Threat of COVID-19; Thanks, talk to health professional; Thanks.

Lastly, these are the keywords of the posts that were associated with *interest-driven*: Conquer COVID-19, Cooperation; Fight against COVID-19; Fight COVID-19.

By analysing the posts and using the definition of each behaviour type in Motivation Continuum, I was able to account for the following: no posts under inactivity, 15 posts under external pressure, 65 under internal pressure, 200 posts under usefulness-driven, 23 posts under value-driven, and 3 posts under interest-driven.

Following this identification, there is a total of 308 messages which is extrinsically motivated, with 228 of those which has internalized motivation. Only 3 messages can be said that are intrinsically motivated. Lastly, 80 posts are considered as *controlled motivation* or "mustivation" while 231 posts are *autonomous motivation* or "wantivation".

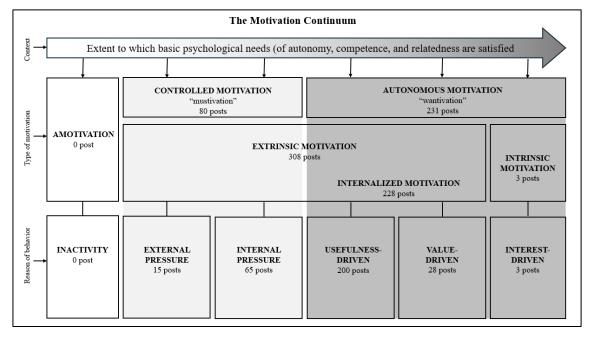


Figure 3. Based on Visser's The motivation continuum (2017) - summary of posts

Alert System, Public Briefing, and Virtual Pressers were the top keywords for *controlled motivation* as shown in Tables 2 and 3. This is due to the posts that aimed as a response to inform the public about the early developments during the pandemic.

Table 1. External Pressure

Keywords	Frequency of Appearance (how many posts)
Alert System	6
Fight COVID-19	2
Fight against COVID-19	2
Virtual Presser, Alert System	2
Advisory	1
Algorithm For Triage of Patients	1
COVID-19 Threat	1
Warns the public	1

Table 2. Internal Pressure

Keywords	Frequency of Appearance (how many posts)
Virtual Presser	16
Public Briefing	10
Confirmed Cases	7
Daily Commodity Distribution Report	4
COVID-19 testing	2
Deaths	2
Press Conference	2
Adhere to existing guidelines	1
Announcement	1
Confirmed Case	1
Confirmed Cases, Contract Tracing	1
Confirmed Cases, Patient Tested Positive	1
Delivery of Kits	1
Dispatch of Personal Protective Equipment	1
Distribution Efforts	1
Donating PPEs and face masks	1
Efficient Ways to Respond	1
Emergency Hotline	1
Fact Check	1
Fight COVID-19, commodities distributed	1
Go home safely	1
Official List of Test Kits	1
Press Statement	1
Reports	1
Respond to COVID-19 Health Threat	1
Send health commodities and Personal Protective	
Equipment	1
Stop the Spread	1
Thank You	1

Transparent and Timely Reporting	1

For the *autonomous motivation*, keywords such as Case Bulletin and Fact Check were dominant because of its usefulness. Furthermore, the phrase Thank You reflects the gratitude posts of DOH to the help that the country has been receiving from donors and healthcare workers. This can be attributed to the value-driven posts. Tables 3, 4, and 5 summarizes these keywords and its frequency.

Table 3. Usefulness-driven

Keywords	Frequency of Appearance (how many posts)
Case Bulletin	17
Fact Check	15
Stay at home, Stop the Spread	15
Fight COVID-19	14
Health Advisory	12
Close Contact	10
Enhanced Community Quarantine	10
Announcement	6
Government strategy	6
Social distancing	6
Virtual Presser	6
Algorithm For Triage of Patients	5
Case Tracker	4
Personal Protective Equipment	4
Press Briefing	4
Prevent COVID-19	4
Join the community	3
Prevent the Spread	3
Protect Yourself	3
Advisory	2
Avoid COVID-19	2
Be informed	2
COVID-19 patients	2
COVID-19 Update	2
Fake Content Alert	2
FAQs	2
Fight against COVID-19	2
Person Under Monitoring	2
Prevention	2
Universal Preventive Measures	2
Accurate and Timely Information	1
Additional perks	1
Approved Resolution	1
Briefing	1
COVID-19 Spread	1
COVID-19 test	1
COVID-19 testing	1
Decision Flowchart	1

Different Tests to Identify, FAQs	1
Giving care, Health professional	1
Guide, Manage Suspected and Confirmed Cases	1
Home Quarantine	1
Home Quarantine and Isolation	1
Important Information on COVID-19	1
Improving the information and delivery	1
Informs Public	1
Interim Guidelines	1
Model Employees	1
Person Under Monitoring, Face Mask	1
Person Under Monitoring, Mask	1
Person Under Monitoring, Wear Mask	1
Press Conference	1
Prevent threats of COVID-19	1
Protocols, Enhanced Community Quarantine	1
Relevant Health Tips	1
Responsible use of social media	1
Social Distancing, Prevent the Spread	1
Stay Home	1
Suspected and Confirmed Cases	1
Take care of a family member	1
Tiktok, Protective Measure	1

Table 4. Value-driven

Keywords	Frequency of Appearance (how many posts)
Thank You	14
Salute and Thanks	1
Gratitude	1
Government's continuous efforts	1
Fact Check	1
Fight COVID-19	1
Frontliner	1
Thank You, Donation	1
Enhanced Community Quarantine	1
Avoid going out, need for unity	1
Love	1
Gratitude to Healthworkers and Frontliners	1
Eliminating the Threat of COVID-19	1
Thanks, talk to health professional	1
Thanks	1

Table 5. Interest-driven

Keywords	Frequency of Appearance (how many posts)
Conquer COVID-19, Cooperation	1
Fight against COVID-19	1
Fight COVID-19	1

Moving on to the *interactions*, it is the collective term for the total number of *likes*, *comments*, *shares*, *love*, *wow*, *sad*, *angry*, and *care* according to CrowdTangle's data set as illustrated in Table 6.

Table 6. Top interactions count per reason of behavior

Reason of Behavior	Post Count	Percentage	Total Interactions per Reason of Behavior	Total Interactions of the Top Post	Keywords of the Top Post
Inactivity	0	0	0	0	-
External Pressure	15	4.8	113,902	32,060	Alert Sys- tem
Internal Pressure	65	20.9	363,660	92,731	Virtual Presser
Usefulness-driven	200	64.3	2,275,050	83,751	Case Bulle- tin
Value-driven	28	9	346,428	47,607	Thank You
Interest-driven	3	0.1	14,855	5,968	Fight COVID-19
TOTAL	311	100	3,277,005		

Out of the 311 posts, 64.3% were found to be *usefulness-driven* which holds the majority while the *interest-driven* posts only comprise 0.1% of the share. Figure 4 shows the share of each reason of behavior.

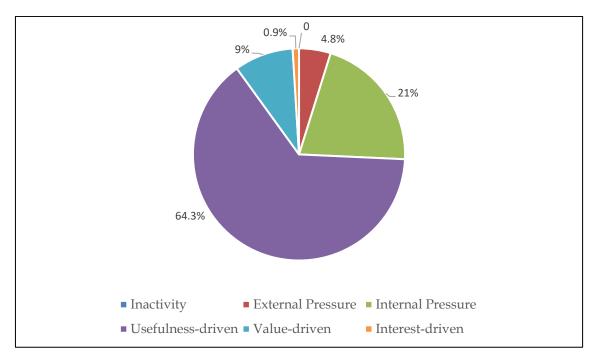


Figure 4. Reasons of Behavior

I was able to identify the codes based on the keywords. Majority of the messages in the beginning of the pandemic were informative while the messages regarding virtual pressers or online press conferences and case bulletins come in second. Also, there were messages that are geared towards influencing the public to "fight/prevent COVID-19" and embody gratitude for donations and "heroic deeds".

Of all the posts in March 2020, "virtual pressers" and "Fight COVID-19" had the highest frequency in posts. It can be attributed to the need to inform the public about the developments on guidelines and quarantine protocols. Table 7 shows the top keywords used.

Table 7. Top keywords used

Keywords	Frequency
Virtual Presser	22
Fight COVID-19	19
Case Bulletin	17
Fact Check	17
Stay at home, Stop the Spread	15
Thank You	15

Virtual Pressers are like press conferences but done online. There was a total of 22 posts which had it and it mainly talks about the announcement of the event and that the public should watch out for it. Below is the top virtual presser post with 6,471 interactions which talked about the imposition of a quarantine protocol for the whole of Luzon Island:

The Inter-Agency Task Force for the Management of Emerging Infectious Diseases (IATF-EID) gives updates on the Coronavirus Disease 2019 (COVID-19) through a 'Virtual Presser' at the New Executive Building (NEB) in Malacañang on March 20, 2020. Following the Proclamation Nos. 929 and 922 (series 2020) placing the Philippines under a 'State of Calamity' and 'Public Health Emergency', as well as imposing a Luzon-wide 'Enhanced Community Quarantine', President Rodrigo Roa Duterte instructed all local government units (LGUs) to strictly abide by the guidelines provided by the IATF-EID to successfully combat the spread of COVID-19 on March 19, 2020. The "Enhanced Community Quarantine" throughout Luzon will run until April 12, 2020.

Fight COVID-19, as a phrase, appeared 19 times and it was also apparent that this phrase was used largely along with other keywords since this is the subject of this study. The top post had 75,920 interactions

"Learn about the testing process for COVID-19 at the Research Institute for Tropical Medicine (RITM) and meet the heroes behind it. We salute the heroes who continue to fight the COVID-19 sickness!"

Case Bulletin and Fact Check came in third with a frequency of 17 each. The former can be found in reports of number of deaths and positive cases while the latter debunks myths and aimed to fight mis/disinformation.

As summarized in Table 8, I was also able to group the keywords into codes. Codes such as *for information, protocols, fight/prevent COVID-19*, and *personal protective equipment* were associated with *task-based engagement* while *gratitude* posts are *experiential* engagement, which allows the receiver of the message to receive it with interest and will be motivated to be thankful as well. Below is a sample of a *gratitude* post that had 6,448 interactions. It was written in Filipino and was translated like this:

"THANK YOU VERY MUCH! The Villar Group of Companies donated disinfecting apparatus, face masks, and drinking water for the hospitals and frontline workers who are sincerely helping the fight against COVID-19. Live long!"

Table 8. Summary of identified codes based on the keywords

Codes	Frequency
For information	177
Protocols	81
Fight/Prevent COVID-19	25
Gratitude	23
Personal Protective Equipment	4
Others	1

It's interesting to note that, although there were similar keywords in some posts, the message may have different motivations as I interpret them.

As reflected in Figure 4, the top post with the highest number of interactions was an informative post about the protocols, highlighting the importance of social distancing as a protocol. It was posted on March 23, 2020, one week after the state of emergency was announced. It has 167,966 interactions, with 56,624 likes and 99,193 shares. It was written in Filipino and was translated as found below:

"HOW DO WE FIGHT COVID-19? Why do we need community quarantine? And what will happen if we don't follow/observe this? For what are all these? Watch this video and find out the importance of the social distancing measures of our government!"

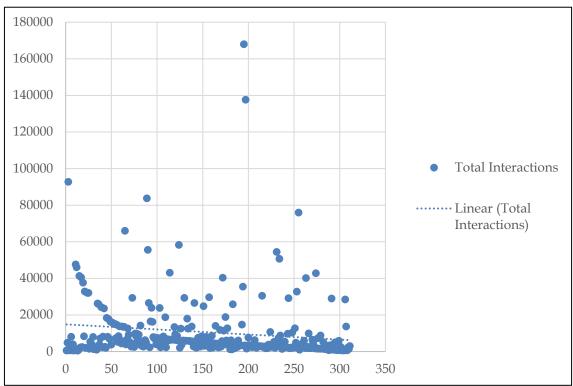


Figure 5. XY Scatter of Total Interactions

The post with the second highest number of interactions was calling for unity in fighting against COVID-19. It was also posted on March 23, 2020. It garnered a total of 132,574 interactions, with 121,157 likes and 9,234 shares. It was written in Filipino and was translated as found below:

"Let's all work together to fight COVID-19. Join the DOH PH COVID-19 Community on Viber to receive accurate information about this pandemic. Sign up here: <Viber Link>"

Both posts were the outliers in the XY scatter graph mainly because of the total number of likes per post. Also, during March 23, 2020, it was the height of the implementation of the community quarantine and most people rely on social media as the source of their information. Another observation was the time of posting. Both posts were posted on in the evening and based on the activity of social media users, this time that they are most active. Moreover, these two posts fall under the reason of *usefulness-driven*, *autonomous* motivation. Although "case bulletin" was the most frequent *usefulness-driven* keyword, these two "fight COVID-19" posts were more popular than the rest.

In Figure 5, I have broken down the interactions in an XY scatter graph. It can be observed that most of the reactions lie below the 20,000 mark and the most common reactions were *like* and *share*. The top post mentioned above had the greatest number of likes. It can be attributed to its motivation, thus, the public

found it useful and reacted with the *like* button. Meanwhile, the second top post had the most shares because of its *usefulness*, too. Leading the people to another platform such as Viber, for the latest news and updates, was found beneficial by the public but eventually led to decrease in interactions because of the divergence.

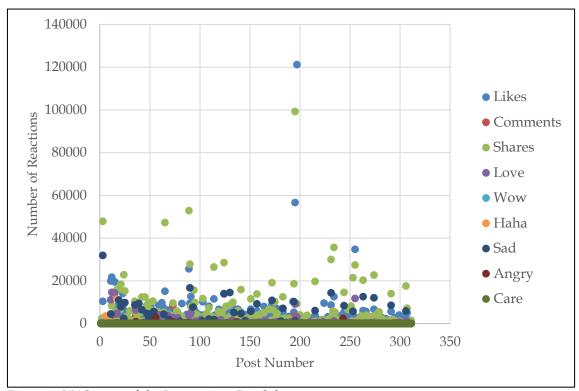


Figure 6. XY Scatter of the Interactions Breakdown

The majority of the posts did not go beyond 20,000 total interactions. This trend can be attributed to the schedule of posting and the interest of the public was not that much for such posts.

5 DISCUSSION

To answer the research question:

"What different types of motivations exist in governmental communication on Facebook during the early phase of a pandemic?"

This master's thesis found out that, in the early phase of the pandemic in the Philippines, majority of the messages were extrinsically motivated and were usefulness-driven. This was apparent with the informative posts. Based on the literature, New Zealand's campaign was successful because of the call for unity from the very beginning. As opposed to the Philippines' varied messaging and the introduction to a new communication channel, like Viber and "Healthy Pilipinas", and lack of singular campaign led the public into different interpretations and varied directions.

The discussion above aims to provide an overview and analysis of how different messaging can be motivated and be interpreted by the public. With this study, I would like to encourage the government to craft a single campaign and more interest-driven posts. Instead of a reactive campaign, it would be best to focus on risk mitigation and communication.

According to the research results, effective government health and crisis communication can be achieved through self-motivation, leading to increased public engagement. I recognize that there are cultural variations among countries and believe that success can only be achieved through a singular and targeted communication strategy. Efficient communication of risks and crises is crucial in pandemics. The aim for this analysis to provide a roadmap for policymakers and communicators to use an interdisciplinary approach. By comprehending the mindset of the public and customizing the campaign accordingly, we will achieve the desired engagement and reach our communication objectives swiftly.

5.1 Limitations and Future Research

This study only focused on the Facebook posts which were posted from March 1 to 31, 2020 Philippine Standard Time. This was the month when the state of emergency was announced and the start of the rise of cases in the Philippines. Furthermore, only the posts with captions or messages, as referred by CrowdTangle, were used. This study does not analyse the content or format (i.e. photo or video) of the media posted, if any.

No collaborations or cross-posting between several accounts were studied as well. Community behaviour change was not measured since this study specifically looked at the messages crafted by the Philippine government through the Department of Health.

With the data set, the specific reactions can still be investigated and if, indeed, the messaging has direct impact to such. Furthermore, the content (photo or video) or media that go along with the caption can be analysed. Another suggestion could be a content analysis of the comment section to further understand the engagement on health communication. Lastly, a longer date range can be studied to see the trends that may evolve in the crisis communication aspect of this research.

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