

UNIVERSITY OF THE PHILIPPINES
OPEN UNIVERSITY

DOCTOR OF COMMUNICATION

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THE SCIENCE JOURNALISM PRAXIS OF FILIPINO ONLINE REPORTERS DURING THE COVID-19 PANDEMIC (2020-2022)

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April 12, 2024

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She was also the project director for UPCMC's Lopez Jaena Community Journalism Workshops on science reporting from 2016 to 2018, also funded through the COST-UP EIDR project.

She has published an international peer-reviewed paper on science journalism entitled "Foundations for a responsive and relevant science journalism course" in Media Asia, an international journal published by the Asian Media Information and Communication Centre and published online on 23 February 2017 by Routledge - Taylor & Francis Group.

She earned her B.A. Communication - Journalism degree (cum laude, 1992) from the University of the Philippines Diliman and her Master of Development Communication degree (Dean's Lister, 2015) from the University of the Philippines Open University.

Acknowledgement

The completion of this dissertation would not have been possible without the help and support of my family, friends in the journalism industry, and colleagues in the academe, as well as the guidance of my dissertation advisory panel. To all of you, thank you!

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Abstract

The COVID-19 pandemic was an unprecedented public health emergency which journalists have had to report on amid scientific uncertainties and public confusion, political bickering and disinformation, and socio-economic disruption and privation. It was also the first in which digital media platforms, such as the Philippines's leading online news outlets, played a key role in the dissemination of science and health information.

The COVID-19 pandemic challenged the preparedness, resilience, and resoluteness of news outlets as an institution and forced them to suddenly adapt to ta new and somehow upended reporting environment.

To understand the science journalism praxis of the Philippines's online news outlets during the COVID-19 pandemic, a grounded theory on their science journalism practice was generated through a triangulation research process that examined their newsroom culture, science news reportage, and role performance during the COVID-19 pandemic, an episodic science news event from 2020-2022.

Keywords: *Science Journalism. Science Reporting, COVID-19 Pandemic, Journalistic Cultures, Newsroom Culture, Science News Reportage, Journalistic Role Orientation, and Journalistic Role Performance.*

Chapter I

INTRODUCTION

Background of the Study

The COVID-19 pandemic is an unprecedented global event, which journalists in the Philippines have had to cover and report on amid scientific uncertainties and public confusion, local political bickering and disinformation, and socio-economic disruptions and public despair.

Bernadas & Ilagan (2020), in their essay entitled, '*Journalism, public health, and COVID-19: some preliminary insights from the Philippines,* noted that journalists struggled with the shrinking space for press freedom and limited access to information as they also grappled with threats to their physical and mental well-being. Digital media enabled journalists to report even in quarantine, but new challenges such as the wide circulation of health mis-/disinformation and private information emerged.

The COVID-19 pandemic, officially declared by the World Health Organization on March 11, 2020, was an extraordinary news story, both in intensity and reach, that caused a substantial increase in news consumption (Newman, 2020). It was an unprecedented global news theme that shook and changed the news industry.

The first results of a COVID-19 impact mapping conducted by the International Center for Journalists (ICFJ) and the Tow Center for Digital Journalism at Columbia University in the first year of the pandemic with 1,400 English-speaking journalist respondents from 125 countries had found that:

- 70% of the respondents rated the psychological and emotional impacts of dealing with the COVID-19 crisis as the most difficult aspect of their work during the period;

- 30% said that their news organizations had not supplied field reporters with a single piece of protective equipment during the first wave of the pandemic;
- 17% with knowledge of their organizations' financial losses reported that revenue was down over 75% since the pandemic began;
- 43% indicated that revenues were down by over half;
- 81% said they encounter disinformation at least weekly, with more than one-quarter (28%) identifying false information many times a day;
- 20% said their experience of online harassment was "much worse" during the pandemic; and
- 48% said their sources had expressed fear of retaliation for speaking to journalists during the pandemic (International Center for Journalists, 2020).

The COVID-19 pandemic is the first global health crisis news event that the media have had to face; it is the first in which digital media platforms and social media played a significant role in the dissemination of health information; and consequently, the first to have ushered in a global infodemic, the proliferation of too much information, including false or misleading information that causes confusion and risk-taking behaviors (WHO, 2020).

Filipino science journalists, who in their entire life had never performed their duties during a pandemic, suddenly found themselves as frontliners for the dissemination of fact-based COVID-19 information and as science journalists reporting on a science matter where the risks are high, but information is mostly uncertain.

Statement of the Problem

Science is an important area of coverage for journalists because of its relevance and its impact on the lives of people. Science-related matters, such as the COVID-19 pandemic, are concerns that must be reported clearly and adequately to empower the public with information they need to get involved and make correct choices and decisions.

The COVID-19 pandemic was an unprecedented global news theme that shook and changed the news industry. It challenged the preparedness, capabilities, and resoluteness of newsrooms as the public's chief sense-makers, and caused them to change and adapt to new means and processes.

Essentially, it is important to ask: *How have the reporters from the country's leading online news outlets reported the COVID-19 pandemic as an episodic science news event?*

Objectives of the Study

The COVID-19 pandemic is the most challenging science news event today's journalists have had to cover. It tested their reporting skills and capability to live up to their perceived journalistic role amid health risks and uncertainties.

This study seeks to ascertain the science journalism praxis of reporters from the country's leading Philippine online news outlets that covered the COVID-19 pandemic, an episodic science news event, from 2020-2022, and relate this to existing science journalism framework. Specifically, this study will:

1. Describe the newsroom culture of Filipino online reporters that covered the COVID-19 pandemic as an episodic science news event;
2. Analyze their COVID-19 science news reportage during the pandemic;

3. Determine their journalistic role performance during the pandemic;
4. Explicate their science reporting praxis during the pandemic; and
5. Relate their science reporting praxis to other science reporting frameworks.

Significance of the Study

Science journalism is a specialized form of journalism that covers science, its processes, and fields. This includes science processes such as research, dissemination, development, and utilization; its related fields such as energy, technology, medicine and health, the environment and climate change, risk, and resilience; and emerging fields, i.e., the frontier sciences of biotechnology including genetic modification and cloning, artificial intelligence, disruptive technologies and innovations, information and communication, geoengineering, and space colonization.

The field of science as a formal area of coverage for journalists is relatively young compared to the more established police, economic and political beats. Despite being an “essential process of human society”, science journalism as an academic area of study and a body of knowledge remains underdeveloped.

To help address the problems, the University of the Philippines, through the initiative of the Journalism Department of the College of Mass Communication, instituted in 2018 a new elective course, J133 Science Reporting (reporting and writing science news), to help develop the field of science reporting in the country.

Science journalism is also included in the 2021-2023 research and extension agenda of the Journalism Department, which states:

Science Journalism and the Public. This research theme covers investigations on journalism practices and standards related to the media coverage of science -- including technology, medicine and health, universal health care, and public health

policies including global efforts to prevent pandemics, reporting on natural and man-made disasters, environmental concerns such as climate change, animal welfare, and related processes (i.e., research, dissemination, and development), and emerging fields (i.e., the frontier science, e.g., biotechnology including genetic modification and cloning, and artificial intelligence, disruptive technology and innovations in geoengineering, space colonization, etc.). Research may also include studies on media and science culture, framing of science stories, infodemic, science news literacy, and media influence or impact of media on the public's science agenda (e.g., public health agenda).

This study contributes to the enhancement of UP's J133 Science Reporting course; provides other journalism schools a learning resource with a Philippine perspective; offers science journalists and newsrooms some research-based insights about their practice to help them improve their craft; and provides both the science communicators and the media and information literacy educators a local resource or reference material which they can use in promoting science news literacy.

Ultimately, this study, in general, contributes to the body of knowledge in science journalism, a specialized form of journalism which can help the public understand science, can help check on irregularities and encourage best practices, and can also promote science narratives that could lead to the creation of shared experiences and promotion of science culture (Congjuico, 2017).

Scope and Limitation of the Study

This study is limited to examining the science journalism praxis of Filipino online reporters that covered the COVID-19 pandemic, an episodic science news event, from 2020-2022.

Using grounded theory method, this study is not an attempt to seek universal knowledge claims; it is merely an attempt to understand and explain the journalism practice of a specific group if Filipino journalists that covered the COVID-19 pandemic, a public health emergency that shook and changed the news industry.

Data were collected only from Filipino science journalists affiliated with or stringing for legitimate Filipino news outlets and from their COVID-19 news reports published within the first three-year period of the pandemic.

This study does not cover other COVID-19 pandemic communicators, e.g., scientists, science communicators, and social media influencers and as well as their published reports, commentaries, and opinions.

Chapter II

REVIEW OF RELATED LITERATURE

The field of science as a formal area of coverage for journalists is relatively young compared to the more established police, economic and political beats. Science became a regular beat in the Philippines only in 1976, when the Philippine Press Institute's now defunct Depthnews, a news service established in 1968, created its science news service (Congjuico, 2017).

Science reporting was then "deemed developmental in nature (Congjuico, 2017, p. 2), primarily consistent with popularization reporting framework that took roots from the grounds of science communication, where science reporters and science communicators both served as "bridge between the scientists in their laboratories and the people who will use their scientific discoveries (Maslog & Villadolid, 1992, preface).

This kind of relationship between science and journalism began to turn sour also in the early seventies when the public – whose interests journalists exist to serve – started to doubt science due to some unfortunate but nevertheless catastrophic failures (Carrada, 2006). The decline of science as an authoritative knowledge and news source also marked the separation of science communication and science journalism.

Journalists today no longer see themselves as promoters of science. They recognize their role as storytellers of science news stories that matter to the public. Science journalists tell news stories the public needs to know to make informed decisions; they also tell news stories the public wants to know (Congjuico, 2017). They chronicle science events and milestones, make criticisms in the name of public

interest, and make commentaries to help the public better understand science (Fjaestad, 2007).

The following literature review, a non-committal literature review (Urquhart, 2013) to allow room for improvement in relevance once an emerging theory is generated, explores relevant scholarly essays and studies on newsroom culture, science news reporting as an organized discourse, and science reporting frameworks relevant to this study.

Newsroom Culture

Newsroom culture refers to the norms, practices, and routines of a workplace that create the conditions for excellent or sub-standard work (Clark, 2014). In discussing what defines a healthy newsroom culture, he lists the following newsroom attributes: craft is tied to mission and purpose, workers are learning, status is never an impediment, risk is rewarded, coaching reporters is more important than fixing stories, workers communicate, informal authority complements formal authority.

Newsroom culture is a reflection of what Mark Deuze referred to as “occupational ideology of journalism”, which is generally made up of five central values: provide public service; should be fair, impartial, and objective; must be autonomous an independent in their work; must have a sense of immediacy and the ability to be expedient in their reporting; and must have a strong sense of ethics that is consistent with broader professional codes of ethics (Zamith (2022).

Newsroom culture, typically consisting of unwritten organizational rules, enables certain types of workers to thrive but drives away those who do not (Perry, 2021). With research and intentionality, however, he argues that newsroom leaders

can create a healthy workplace culture which results in the retention of talented, motivated, and happy reporters who produce high quality coverage.

This notion that newsroom culture can be changed to improve the quality of reporting is the subject of Gade and Perry's (2003) longitudinal case study research entitled, "Changing the Newsroom Culture: A Four-Year Case Study of Organizational Development at the St. Louis Post-Dispatch. Among the changes introduced was the move from beat system to team system in news reporting. Gade and Perry found out that initial optimism about the news organization's "cultural transformation" goal quickly faded within a year, and the respondents did not see a connection between change initiatives and better coverage.

Xiaoming, George & Cong (2013), in their study entitled, "Job Satisfaction of Journalists: Professional Aspirations, Newsroom Culture and Social Context" found that for Singapore journalists, newsroom culture is not the most crucial factor in determining job satisfaction. What matters most to them is how they see their institution perform in informing the public. Moreover, their study found that journalists who feel greater autonomy and believe in the adversarial role of the press are more satisfied with their job.

Higgins-Dobney (2018), in her study entitled, "News Work: The Impact of Corporate Newsroom Culture in News Workers & Community Reporting", which used a critical political economy framework to focus on the labor aspect of working in a commercially-run local television in the US, found that a corporate, thus for profit, newsroom culture results in outcomes that are not in the public's interest.

In response to workplace issues raised by its employees, the top management of the New York Times engaged the services of researchers to determine the paper's newsroom culture. After months of interviews, the researchers concluded that the 150-

year-old media institution had become a difficult environment for many of its workforce. Its current culture and systems are not enabling its work force to thrive and do their best work, and that the issues cut across many types of differences: race, gender identity, sexual orientation, ability, socioeconomic background, ideological viewpoints and more (Flood, 2021).

To improve its reporting and coverage, the New York Times announced in 2021 its detailed plan to transform its newsroom culture which include the following: to create an environment where its workforce can do their best work; to elevate how management lead and manage people; to strengthen systems and practices for developing people and for supporting work to make the news organization more diverse, equitable and inclusive; and to ensure that its coverage or reporting benefits from the judgement of a more diverse and inclusive newsroom (New York Time, n.d.).

Schudson (2002), in his essay entitled, *The News Media as Political Institutions (2002)*, argued that news media organizations are cultural actors capable of "establishing a web of meanings and therefore a web of presuppositions to which, to some degree, people live their lives" (Schudson, 2002, p. 266).

This potential to influence public opinion and to hold those in power to account are some reasons news outlets have been touted as the Fourth Estate. With such power at its disposal, news outlets are expected to perform ethical and accountable journalism. Their broader societal function is to help public life go well, to be a fair-minded participant in public life, and to regard the public as potential actors in arriving at democratic solutions to societal problems (Merritt, 1998).

Good journalism has the following principles: its first obligation is to the truth, its first loyalty is to citizens, it is independent from those they cover, and practitioners must be able to exercise their personal conscience. As a practice, good journalism is

a discipline of verification, it keeps the significant interesting and relevant and it keeps the news comprehensive and proportional. For its intention, good journalism must serve as an independent monitor of power and should provide a forum for public criticism and compromise (Kovach & Rosenstiel, 2001).

The Society of Professional Journalists, which believes that public enlightenment is the forerunner of justice and the foundation of democracy, suggests four principles as the foundation for ethical journalism: seek truth and report it, minimize harm, act independently, and be accountable and transparent. It encourages journalists to act with integrity and to strive to ensure free exchange of information that is accurate, fair, and thorough (Society of Professional Journalists, 2014).

As the public's chief sense-makers, journalists can help the public understand the world of public affairs without having to experience these directly. And as influential knowledge professionals, journalists can help protect the public's sense of reality, which unfortunately in these days are constantly under assault though manufactured consent, clever fabrications, and pumped-up claims (Patterson, 2013).

Science journalism provides the public with information they need to make rational decisions about how to live their lives or how to make the best possible decisions about their lives, their communities, their societies, and their governments. It enables the public to act and react and make informed choices on science and technology issues and, in the process, become better persons and more effective citizens (Congjuico, 2017).

The COVID-19 pandemic was an unprecedented global emergency that challenged newsrooms' reporting norms, practices, and intentions.

Recognizing the important role of journalists in disseminating information about COVID-19 vaccines, London-based health research funding institution Wellcome

offered 10 communication principles or reporting caveats for journalists writing about the COVID-19 vaccines. Journalists are reminded to manage expectations, always remember that vaccination is a social norm, understand people's genuine concerns, beware of the implications of 'false balance', avoid triggering fear or shame, make the science accessible and relatable, be sensitive to vested interests, verify with experts and report data, be clear about what is not known, and consider imagery or the use of visuals (Wellcome, n.d).

In the Philippines, journalists relied on the decade-old guidelines prescribed by the Philippine Press institute (PPI), which deemed that disasters and emergencies are personal tragedies; are sources of community concerns and grief; and are trauma-filled experiences for reporters.

The PPI suggests the following principles for news coverage in times of disasters and emergencies: (1) reports must be accurate and uses details to describe or explain victims, situations, and environment; (2) reports must provide context through research and parallel interviews outside of the disaster scene, and (3) reporters must be cognizant of possible harm that their news stories may bring to the community. In the said disaster and emergency coverage guideline, the PPI also discussed suggested practices pertaining to reporter welfare, safety, and sensitivity to victims' privacy and safety. The PPI explicitly expressed the purpose of disaster reporting for the public: "Write to raise public awareness and mobilize public support" (Philippine Press Institute, 2008).

To continue covering the COVID-19, some newsrooms adapted a mixture of remote and office-based work mode. Cherubini, et. al. (November 2021), in their report entitled *Changing Newsrooms 2021* which was published by the Reuters Institute for the Study of Journalism at the University of Oxford, reported that 89% of

the 132 senior industry leaders from 42 countries that they interviewed are now committed to a mixture of remote and office-based working and that only 9% plan to return to the same working model as before the pandemic. The Cherubini, et. al. (November 2021) study also found that because of remote or hybrid working, efficiency and employee wellbeing both improved but collaboration, creativity and communication appear to have suffered.

Mahon (2021), a pioneering smartphone mobile journalists and author of *Mobile Journalism: A Revolution or an Evolution (2019)*, noted that some of the smartphone journalistic trends that were gaining momentum before COVID were accelerated during the pandemic. This trend gave mobile journalists greater autonomy, but also more pressure and responsibility, more ways to broadcast live using social media and greater audience involvement in the news cycle (Mahon, 2021).

Edmond (2021), who interviewed journalists that covered the COVID-19 from different countries, listed the following observations: quality journalism became a key tool in tackling fake news and misinformation which has spread rapidly throughout the pandemic; journalism had become more of a public service than ever; many issues had become highly sensitive or politicized, and journalists had to make sure they communicate transparently, provide context, and are not alarmist; and lastly, journalists also played a crucial role in holding authorities accountable.

Science News Reportage

News is a material cultural artifact, the corporeal, tangible, or observable object constructed by humans (O'Toole & Were, 2008) that mirrors journalists' articulation or representation of reality at a given time such as the COVID-19 pandemic, an example of what Carey (2009) described as a historical period.

News offers a glimpse of the structures of discourse, the set of inherent rules that determine the form and substance of discursive practice of cultural groups within a given historical period (Foucault, 1980 in Littlejohn & Foss, 2011).

Rules are forms of control that apply across the culture in a variety of types of discourse, function on a deep and powerful level, determine the very nature of knowledge, ethics, and power. The rules control what topics can be discussed, who may talk about them, and whose talk is to be taken seriously (Littlejohn & Foss, 2011). In other words, such rules influence the news themes and news provenance.

News is what Walter Lippmann described as a "reconstructed simpler model" of actual events in the environment (Littlejohn & Foss, 2011). Collectively, these simpler models of the complex and fleeting environment we live in make up the media agenda, the topics prioritized or given prominence by the media.

The structured messages in the news that send out cues about how to understand the news text are called news frames. These are the persistent patterns of cognition, interpretation, and presentation of selection, emphasis, and exclusion by which symbol-handlers routinely organize discourse (Gitlin, 1980 in De Vreese, 2005).

Frame-building, according to De Vreese (2005), is influenced by internal cultural factors such as the newsroom's editorial policies and news values and external factors such as the influential elites and social movements. These are concepts that connect individual cognition and culture (Van Gorp, 2009 in Littlejohn and Foss, 2011).

Iyengar (1991) identified two types of frames in the news with opposing effect on the perception of individuals. These are episodic framing – which focuses less on analysis and context than on sensational dramas of individual perpetrators and victims – and thematic framing which focuses on the issue and offers a richer context.

Episodic framing leads viewers to focus blame on individuals rather than on political parties, politicians, policies, or societal factors.

News framing shapes the way news events are told to the public. Spratt (2001), in her study entitled, Science, Journalism, and the Construction of News: How the Print Media Frames the 1918 Influenza Pandemic, found that news framing that put emphasis on facticity empirical data at the height of the pandemic does not only relay medical 'truths' but may also construct a reality that maintain the dominance of existing power structures, give science and government authorities certain status in society while muting the voices of average citizens.

Gollust, et. al. (2019) in their study entitled, *Television News Coverage of Public Health issues and Implications for Public Health Policy and Practice*, found that news coverage tend to emphasize political strategy and competition, i.e., game framing or strategy framing, over substantive discussion of policy issues, i.e., policy framing or issue framing. They noted today's increase of politicized contents in news TV coverage.

Mutua and Ong'ong'a (2020) analyzed the news frames in BBC, Al-Jazeera, People's Daily, and CNN using content analysis and consecutive sampling during the first two months of the COVID-19 pandemic.

Initial themes were based on a selection news frames suggested by Neuman, et. al. (1992) and Valkenburg, et. al. (1999). These are economic consequence, human interest and impact, attribution of responsibility, and health severity.

Al-Jazeera had the most stories using economic consequence and health severity frames, while CNN and People's Daily had the most in human interest and impact frame and attribution of responsibility frame, respectively. Emergent news

frames coded about the pandemic include Sinophobia, crime, geopolitics, international relations, misinformation, and fake news.

Nisbet (2017) noted that nowadays, journalists too often give equal weight to accurate representations and faulty facts and flawed opinions thereby creating a false balance; they focus on conflict and strategy over substance; and favor personalities, dramatic events and infotainment over big picture analysis and context.

Witsen & Takahashi (2021) noted that the use of statistics in the news are worth investigating because journalists not only tend to mishandle them but that they illuminate larger questions about what the media routinely treat as unchangeable fact and therefore not worth checking. Lugo-Ocando and Lawson (2017) raised the concern that journalists' use of statistics in their stories often "obscure" rather than "enlighten". Their tendency to defer to official definitions of good measurement also causes them to pass along embedded ideas and perspectives as unarguable truth (Witsen & Takahashi, 2021).

The foremost value of news, although it may be interesting or even entertaining, is to empower the informed (American Press Institute, n.d.). Journalism's obligation to the truth, to serve as a monitor of power, and to provide a forum for public criticism and compromise by giving voice or provenance to the various publics was compromised during the COVID-19 pandemic.

Journalism as Role Performance

News, "a result of social and professional routines of journalists and institutional settings" (Van Dijk, 1985. P.70), is a contextual discourse, the structural forms and overall meanings of which are not arbitrary but are determined by a systemic relationship between news text and context.

Journalists' articulation or representation of reality in their news reports relates to their journalistic role orientation, or how they think about their social purpose as journalists within a given context.

Journalist's role orientation, according to Zamith (2022, p. 71), may not entirely reflect the reality of their role performance because they are limited or constrained by structural factors, but they nevertheless "play a major role in determining how journalism and journalists are legitimized within that context".

In their paper entitled, *Between Rhetoric and Practice: Explaining the Gap between Role Conception and Performance in Journalism*, Mellado & Van Halen (2014) explored this "inevitable gap" between role conceptions (ideals) and role performance (practice) by comparing the role conception of journalist with the news stories they produced. They found a significant gap, and this gap was found to relate to journalists perceived autonomy, economic and political influences, and belonging to a beat, where an increased gap was observed.

In her essay entitled, *Journalistic Role Performance and the News*, Mellado (2021), argued that journalistic roles, i.e., interventionist, watchdog, facilitator, service, civic, and infotainment, are by no means static nor mutually exclusive in life and in journalism.

Journalism as an institution is continuously being created and re-created by journalists (Hanitzsch, 2019) whose role orientations and performance are also fluid, dynamic, and situational (Mellado (2021), prompting scholars to abandon a homogenous concept or model for journalism as a practice.

In their study entitled, *Journalism Role Performance in the Spanish National Press,* which used Mellado's role orientation typology, Humanes and Roses (2018)

found differences in journalism role performance across newspapers in Spain, “indicating that a homogenous model of journalism does not exist”.

Koeth (2020) noted that with all the nuances of the then still new COVID-19 disease which were difficult to grasp, complicated by unclear information from news sources and lack of enough data to support “weight of evidence reporting”, reporting COVID-19 became challenging for science journalists.

Perreault, M. F., & Perreault, G. P. (2021), who studied the discursive construction of journalism during the COVID-19 pandemic through the lens of disaster communication ecology, found that journalists discursively placed themselves in a “responsible but vulnerable position” within the disaster communication ecology. They found reporting difficult as they struggled to “mitigate the forces”, e.g., misinofrmation, challenging their work.

The COVID-19 pandemic, a historical news episode, was a ‘stress test for science journalism worldwide’ (Litvinenko, Borissova & Smoliarova, 2022, p. 687). They noted that reporting science during the pandemic became a politicized matter that gave rise to three types of restrictive regulations: a) editorial guidelines, b) accessibility and self-censorship of news sources, and c) self-censorship.

Agoramoorthy, Hsu, & Shieh, (2021) in their paper entitled, *Transparent Scientific Reporting is Imperative During the Pandemic*, discussed how scientific integrity had been undermined during the pandemic because governments like China and India interfered with a critical process of science -- the truthful reporting of data and information so that the science community, science communicators and science journalists may be able to vet and/or popularize the said data and/or scientific information.

Papadopoulou & Maniou (2021), in their published research paper entitled, '*Lockdown" on Digital Journalism: Mapping Threats to Press Freedom during the COVID-19 Pandemic Crisis*, reported that the COVID-19 pandemic had exacerbated existing threats to press freedom (e.g., political, legal, economic, technological, physical, and psychological threats) not only in authoritarian states, but also in western democracies.

The first results of a COVID-19 impact mapping survey conducted by the Center for Journalists (ICFJ) and the Tow Center for Digital Journalism at Columbia University with 1,400 English-speaking journalist respondents in 125 countries found that the top sources of disinformation reported by nearly half of the respondents are politicians and elected officials. Despite this finding, nearly one-third said they were relying more heavily on government sources and official statements to report on the pandemic. Facebook was identified as the most prolific spreader of disinformation by respondents (66%). Yet 32% said they were more reliant on social media platforms to connect with audiences (ICFJ, 2020).

Mellado (2021), in her essay entitled, "Journalistic Role Performance and the News" noted that the COVID-19 pandemic gave journalism and the media valuable opportunity to cover many angles and approaches to the global health crisis. Various journalistic roles (e.g., interventionist, watchdog, loyal-facilitator, civic, infotainment, and service) were performed by news organizations around the world, and the roles they performed were not mutually exclusive.

Science Reporting Frameworks

In the years following the publication of Dorothy Nelkin's (1995) book, "Selling Science: How the Press Covers Science and Technology" -- where she discussed her

vision of what science journalism should be thereby setting some standards and expectations -- science journalism received scholarly criticisms pointing to its deemed shortcomings, despite the lack of clear consensus on theoretically grounded criteria as to what constitutes good science journalism (Secko, et. al., 2013).

In this era of "pluralistic knowledge societies" (Heinrichs, 2005) marked with the decreasing authority of the so-called "sacrosanct science" (Peters, 2018), scientists could no longer remain in their "ivory tower" (Carrada, 2006) to secretly conduct science until such time that the knowledge they produce had become established scientific facts, a "school science" (Painter, 2013) or text-book science, and thus ready for "popularization" or dissemination to the non-specialist publics.

While today's scientists still maintain that public communication should follow scholarly publication (Peters, et. al., 2009 in Peters, 2018), some have become more open to sharing their research endeavors with the public. Many scientists now openly engaged with diverse audiences, including peers, students, journalists, and the interested non-specialist publics on social media (Lo, 2016). They have become more prepared to share scientific uncertainties and controversies with the public (Peters et. al., 2009 in Peters, 2018) even as journalism today increasingly reports on science in the making especially on emerging technologies and knowledge relevant to public policy (Peters, 2018, p. 2).

As noted by Fleerackers, et. al., (2022) in their study entitled, *Communicating Scientific Uncertainty in an Age of COVID-19: An Investigation into the Use of Preprints by Digital Media Outlets,* Fleerackers, et. al., (2022), COVID-19 preprints (still to be published in reputable peer-reviewed journals, i.e., unreviewed, preliminary, and/or in need of verification) were already available and widely disseminated on

online media but science journalists were reluctant to pick up from these because of the associated scientific uncertainty.

Fleerackers, et. al., (2022) found that in the early days of the pandemic preprints were nonetheless used in medical news outlets, traditional news media outlets, and aggregators which mainly used hyperlinks as citations. Only about half contained framing devices emphasizing uncertainty, but these stories were less likely to identify the research they mentioned as preprint research and/or to mention that the study was a preprint, unreviewed, preliminary, and/or in need of verification.

The observed lack of clear consensus on what constitutes good science journalism could be attributed to the fact that newsrooms and journalists practice different journalistic cultures, adopt varying newsroom production approaches, and journalistic role orientations with corresponding theoretical groundings.

The following are select normative frameworks scholars over the years have theorized for science journalism as a praxis.

Secko, et. al., (2013), after conducting a systematic literature review of science communication models and journalistic criteria, proposed in their paper entitled, *Four Models of Science Journalism: A Synthesis of Practical Assessment*, four science journalism models which they further divided into two types: traditional (information processing and transmission) and non-traditional (information exchange and participation).

The traditional/transmission models are 1) science literacy which seeks to translate scientific information and 2) contextual which seeks to tie science to specific audiences; the non-traditional/participatory models are 3) lay expertise which values knowledge outside of science, and 4) public participation which seeks to democratize

scientific processes. The authors offered six criteria for assessing “good” science journalism; these are purpose, focus, style, sourcing, audience, and science.

For the purposes of this study, the above frameworks will be referred to collectively as science popularization framework, where the science journalists function as a “bridge between the scientists in their laboratories and the people who will use their scientific discoveries” (Maslog, 1992, preface).

One science journalism that emerged in today’s digital information and communication ecology is the knowledge-based science journalism model, which sprung from the seminal ideas of journalism scholar Thomas E. Patterson (2013) who first discussed it in his book, *Informing the News: The Need for Knowledge-based Journalism*.

The underlying theme of Patterson’s book, according to Dimitrova (2017, p.136) is the lack of knowledge about the subjects that news reporters cover, leaving them vulnerable to manipulation by news sources and likely to misinterpret relevant facts and story background information.

The knowledge-based model views journalism as a communicative practice that requires content and communication process competence, where journalists being influential knowledge professionals are not only expert storytellers but subject matter experts, too. Patterson (2013) argues that knowledge is a key to strengthening story context and that journalists cannot be counted upon to construct a comprehensive and intelligent account” unless they are knowledgeable of the underlying factors.

Nisbet and Fahy (2015), in their paper entitled, *The Need for Knowledge-based Journalism in Politicized Science Debates*, suggested three complementary approaches to knowledge-based journalism. Journalism as 1) as knowledge brokers

where journalists and their news organizations contextualize and critically evaluate expert knowledge; 2) as dialogue brokers where journalists facilitate discussion that bridges entrenched ideological divisions; and 3) as policy brokers where journalists promote consideration of a broader menu of policy options and technologies. Knowledge-based journalism combine the habits of mind of a scholar with the skills of a master storyteller, providing the context and explaining the ideas that enable citizens to make sense of complex science controversies and trends (Nisbet, 2017).

Donsbach (2014 in Witsen & Takahashi, 2018, p. 719) listed five competencies science journalists as knowledge professionals need to develop: 1) knowledge of history and the intellectual context in which news occurs that would allow journalists to triangulate and understand contemporary events and issues; 2) a deep enough education in the subjects they cover to let them identify experts, ask critical questions, and sort the answers for relevance to their audience; 3) process competence: understanding how ideas and information propagate through societies and how audiences are affected by new information, giving journalists some self-awareness about the effects of their choices; 4) the technical skills, editorial judgment, and flexibility to convey a message across multiple platforms; and 5) an understanding of professional roles and responsibilities and where their professional loyalties should.

While not discounting the value of knowledge-based journalism model, Witsen & Takahashi (2018), in their paper entitled, *Knowledge-based Journalism in Science and Environmental Reporting: Opportunities and Obstacles*, proposed a modified version of the model specific to science journalism, the interactional expertise journalism model where science journalists need not be science content experts. Interactional expertise (Collins, 2004 in Witsen & Takahashi, 2018) refers to a knowledge of scientific concepts and thought processes without the deep knowledge

of scientific literature and direct experiences of scientific processes. It enables science journalists to negotiate their way across different scientific topics, put opposing claims in proper context, and play a role in brokering knowledge among scientists, the policymakers, and the public (Witsen & Takahashi, 2018, p. 725).

Another journalism model that puts emphasis on specialized expertise is environment journalism, wherein a new definition of objectivity is the guiding concept for the practice. In his essay that problematized the concept of objectivity in environment journalism, Fahy (2018) suggested that objectivity can be viewed as the pluralistic search for truth, the implementation of transparent method, and the application of "trained judgment" or expert interpretation. Science journalists develop expertise which enables them to sort through competing claims, identity and explain the underlying assumptions of those claims, and make judgement about what the public needs to know to understand what is happening (Cunningham, 2003, p. 31, in Fahy 2018, p. 858).

In explaining what environment journalism is not, Fahy (2018) also discussed another journalism model that also puts emphasis on specialized expertise but less on objectivity -- advocacy journalism. This model -- which views journalism as a form of social activism -- presents news from a distinct point of view; does not separate facts from values; and is motivated often by a political or social agenda (Waisbord, 2009 in Fahy, 2018, p. 856). In this model, independent journalists and news media outlets overtly or covertly support or "advocate" for public agenda such as the protection of the environment or the promotion of health or of science in general.

Environment journalism and advocacy journalism emerged in the 1960s when the public began to question the role of science in social development as well as its authority as the ultimate knowledge source (Fahy, 2018; Waisbord, 2009). At about

the same time, observers also began to see the flaws of objective reporting -- the practice of fact-based and unbiased but detached, amoral, and incognizant reporting -- which at that time defined professional journalism.

The above developments paved the way for emergence of new science journalism frameworks that view the profession as an advocacy or one with a mission and purpose. These are Peace Journalism and Constructive or Solutions Journalism.

Peace Journalism (Galtung, 2003) is an approach that focuses on conflict transformation. Large social issues, including climate and environment issues (Hacket 2017 in Ersoy & Dambo, 2021) and health crisis such as the COVID-19 pandemic (Ersoy & Dambo, 2021), are investigated, diagnosed, and suggestions are proposed to resolve issues (Galtung, 1996 in Ersoy & Dambo, 2021).

Galtung's Peace Journalism model separates journalism into war/violence and peace/conflict and suggests four different orientations, i.e., focus on the conflict, on truth, on the people, and on solutions. On the other hand, he compared war/violence reporting to health reporting which focuses only on the ravages of diseases and excludes the medical practices to combat them (Galtung, 2003).

Galtung (2015) likened the concept of peace – positive and negative related to violence -- to how health researchers regard the concept of health related to diseases, which can either be positive or negative of diseases. The tools to address peace-related problems are similar: diagnosis, prognosis, and therapy (Galtung, 2015, p. 322).

The persistence of sensationalism and negativity bias in todays' news and the perception that journalism might be part of the problem in the meltdown of trust in democracies as well as the perceived need to change these global news culture led to the birth of another solutions-oriented journalism, the Constructive or Solutions

Journalism framework. Introduced in 2014, the framework represents an additional and final step to the present news cycle: from breaking, to investigative and lastly, to finding solutions (Constructive Journalism Project, n.d.)

Solutions Journalism is a rigorous and compelling reporting about responses to social problems, which includes these key elements: 1) Response, which focuses on a response to a social problem — and on how that response has worked, or why it hasn't; 2) Insight, which shows what can be learned from a response and why it matters to a newsroom's audience; 3) Evidence, which provides data or qualitative results that indicate effectiveness (or lack thereof); and 4) Limitations, which places responses in context; doesn't shy away from revealing shortcomings (Solutions Journalism Network, n.d.).

Advocacy, peace, and solutions journalism adhere to a frame building process that is consistent with Entman's (1993) framing construct, where cognizant communicators conscientiously bring certain societal issues to the public sphere, to be discussed and debated upon so that the public may be informed. Peace and solutions journalism consciously go as far as suggesting solutions or constructive ways the societal issues may be addressed.

Literature Review Synthesis

This literature review looked at relevant scholarly essays and studies on newsroom culture, news reportage, role performance, and science reporting frameworks relevant to this study.

The first part focused on newsroom culture (i.e., the shared journalistic norms, practices, and role intentions), a journalism construct that relates to the journalism of news outlets. Reviewed are studies and essays focused cultural transformation, job

satisfaction, corporate newsroom culture, newsrooms as diverse, equitable and inclusive work environment, the principles of good journalism, and introduced news coverage practices such as from beat system to team system and from office-based to remote, hybrid, and mobile journalism.

The reviewed essay and studies provided context and more ways to understand newsroom culture as a research construct, including its related concepts which are relevant to this study, e.g., professional norms or journalism principles, coverage practices, and journalism intentions. The literature reviewed showed how newsroom culture relates to journalism practice. None of the studies reviewed used GTM for their research framework.

Unlike the studies reviewed which are organizational culture studies that looked at the impact of newsroom culture on journalism, this proposed study focused on generating data-grounded descriptions of the newsroom culture (i.e., professional norms, coverage practices, and journalism intentions) of Philippine news outlets that covered the COVID-19 pandemic from 2020-2022 to understand their science journalism role performance or science journalism praxis during the COVID-19 pandemic.

The second part of the literature review focused on news reportage and discussed news as a contextual discourse (Van Dijk, 1985), a material cultural artifact (O'Toole & Were, 2008), a product of a discursive practice that follows prescribed sets of inherent rules that determine its form and substance (Foucault, 1980 in Littlejohn & Foss, 2011).

Reviewed are studies and essays focused on the concept of normative journalism principles, news framing and the perception of individuals, the fringe effects of news framing such as the maintenance of dominant power structures, the tendency

to emphasize political strategy over policy, the emerging COVID-19 news frames, framing statistics in the news, and the idea that journalism function was compromised during the COVID-19 pandemic.

The reviewed essays and studies provided context and more ways to understand the construct of news as discourse and material culture, including its related concepts, e.g., news values, news frames, and privileged voices or provenance. None of the literature reviewed focused on determining the reporting framework used by journalists in covering an episodic science news event.

Unlike the literature reviewed, this study did not look at news framing effects nor at news environments, social context, or media ecology during the time of the COVID-19 pandemic. Instead, it analyzed the local news coverage of the COVID-19 pandemic to determine how COVID-19 as an episodic science news event was reported in the Philippines by Filipino science journalists, and in the process understand their science journalism praxis during the COVID-19 pandemic.

The third part of the literature review focused on the construct of news as a contextual discourse of journalists performing a journalistic role orientation which may be limited or constrained by structural factors.

The reviewed essays and studies provided context and more ways to understand journalism as a discursive practice or performance, i.e. journalism as performance of perceived journalistic role orientation.

Unlike the literature reviewed, this study did not look at the gap between role orientation and performance of journalists nor focused only on determining the journalism role orientation of journalists. Instead, it examined the journalistic role performance of participants as science journalists to understand their science journalism praxis during the COVID-19 pandemic.

The fourth and last part of this literature review focused on the task of theoretical integration, which Strauss (1987 in Urquhart, 2013) views as an obligation of researchers to accomplice once the emergent theory has been generated.

To accomplish theoretical integration, this study reviewed available science journalism frameworks practiced by journalists or suggested and described by journalism scholars. These frameworks include science popularization reporting, knowledge-based reporting, interactional expertise reporting, environment reporting, advocacy journalism, peace journalism, and constructive or solutions journalism.

The procedures of GTM are “often more commonly used (by researchers) to analyze data than generate theories” (Urguhart, 2013, p. 5). This study, however, will use GTM to generate an emerging theory on the science news reporting of Filipino science journalists during the COVID-19 pandemic and relate this to the reviewed science reporting frameworks, i.e., how it contradicts, confirms, or extends them.

Chapter III

FRAMEWORK OF THE STUDY

This section introduces the framework for this study, which takes off from the interpretivist view that reality is a social construct, and that meanings and behaviors are context-specific and time-specific (Carey, 2009).

Using Grounded Theory for its research framework, this qualitative study -- situated within the sociocultural tradition of communication research -- heavily borrows interpretivist constructs from Carey's view of communication as culture as well as from the assumptions of journalistic role orientations approach, which conceptualizes the practice of journalism as a context-based role performance (Mellado, 2021), a journalistic culture-specific professional experience (Hanitzsch, et. al., 2019), and that social systems leave an imprint on how journalists perform their role (Zamith, 2022).

Grounded Theory is used by constructivist grounded theorists to study groups that are experiencing identity transformations, changing organizational goals, and establishing public policies, with emphasis on what people are doing and the meaning of their actions, such as the intentions; their own-stated explanations; and their implicit taken for granted assumptions (Charmaz, 2003 & 2006 in Thornberg & Charmaz, 2012, p. 42-43).

The objective of Grounded Theory is to generate a new theory based on data, rather than verify a grand theory or force data into existing theories (Glaser & Strauss 1967, Urquhart, 2013). A theory, as explained by Thornberg & Charmaz (2012, p 41), states plausible relationships between abstract concepts and may aim for either explanation or understanding of a phenomenon.

Carey's view of communication as culture describes communication as ritualistic and a transmission, and a symbolic process where reality is produced, maintained, repaired, and transformed (Carey, 1989, 2009). It is an open discourse that is essential to the construction of genuine understanding and community (Mumby, 1997), that may contribute both to the maintenance of society and to the possibility of social change (Craig, 2016).

Journalism as a form of communication is understood as a performance (Pacanowsky & O'Donnell-Trujillo, 1983), an interaction or a dialogue; it is contextual or embedded in a larger frame of activity that both reflects and produces its own context; it is episodic or an event that has a beginning and an end; and it is improvised or there is flexibility in how a communication episode is played out (Littlejohn & Foss, 2011, p. 314).

Journalism as an institution is created and recreated by journalists who perform their profession in quite diverse ways depending on their context and perceived journalistic role orientations, even as they retain a commitment to some basic widely shared professional norms and practices (Hanitzsch, 2019).

Journalistic role orientation conceptualizes journalism as a social performance produced in different cultural settings. Journalistic performance is situational, dynamic, and fluid, and cannot be fully understood outside of a meaningful context. Constant tension between norms, ideals, and the practices of journalists is assumed to be at play as journalists perform their journalistic roles (Mellado, 2021, p 13.).

Journalistic role performance is limited by a range of structural factors (Zamith, 2022), including journalistic cultures. Newsroom culture, a theoretical construct, is a shared reality that allows journalists to see and understand events, e.g., episodic news events, in distinctive ways (Littlejohn & Foss, 2011, p. 313). It refers to their

professional norms or codes or principles, their journalism practices, and journalism intentions or goals.

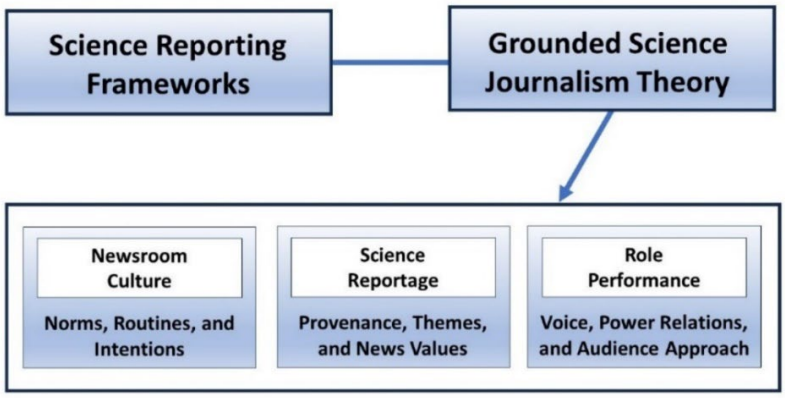
The COVID-19 pandemic is a historical and episodic news event and experience that science journalists have had to make sense of, recount, and make an account of in their coverage. Their newsroom culture, coverage, and journalistic role performance during the COVID-19 pandemic relate to their experience during the said period, thus making their journalism praxis context-specific and time-specific.

News is material culture (O'Toole & Were, 2008), contextual discourse (Dijk, 1985), a textual representation of reality (Carey, 2009), and cultural artifact in which certain journalistic culture manifests itself (Hanitzsch, 2007, p.369 in Humanes & Roses, 2018). Journalists' role performance is a "faithful reflection" of their perceived roles that are determined by internal and external influences that ultimately shape the news they produce (Mellado, et. at., 2017b in Humanes & Roses, 2018).

Conceptual Framework

The conceptual framework of this study is shown below (see Figure 1. Conceptual Framework).

Figure 1. Conceptual Framework



The diagram shows the research constructs of this study -- newsroom culture, science reportage, and role performance -- as the three core categories, the corresponding concepts of which were determined using GTM process.

The diagram also shows that ultimately, the data grounded science journalism theory generated was discussed in reference to or "grappled with" (1987 in Urquhart, 2013, p. 194) reviewed science reporting frameworks.

The newsroom culture, news coverage, and role performance of participants was investigated and examined to generate data-grounded science journalism theory. The concepts, the building blocks for the categories of the core categories, emerged from collected qualitative data employing GTM coding process.

Newsroom culture is a research construct for this study. It refers to the norms, practices, and intentions of a workplace that create the conditions for excellent or sub-standard work. The research categories for newsroom culture, a core category for this study, are norms, practices, and intentions, and other categories that will emerge from collected data.

Science journalists' newsroom culture relates to their journalism or news coverage. In other words, a healthy newsroom culture creates the conditions for good journalism (Clark, 26 December 2014; Perry, 28 July 2021).

Journalism norms or principles are the codes and ideals of the journalism profession. Organizations and associations express them differently, but the basic assumption is that a principled journalism is factual, ethical, and independent from its news sources. Emerging concepts related to this category will be consciously coded.

Newsroom practices are the routines and established processes related to the practice of journalism, e.g., verification process for factual reporting, beat system or

team system in covering the news, and ways of disclosure in case of conflict of interests. Emerging concepts related to this category will be consciously coded.

Journalism intentions are the goals or the purpose of journalism, e.g., to serve as an independent monitor of power, to provide a forum for public criticism and compromise, to serve as the public's chief sense-makers, and to provide the public with information they need. Emerging concepts related to this category will be consciously coded.

Science reportage, another research construct for this study, is a theoretical construct that describes how an episodic news event or news topic such as COVID-19 was reported in science news stories. The research categories for this core category are provenance, news themes, news values.

News values refer to qualities that make reports good news stories, e.g., relevance, human interest, strong central character, context, connects to deeper themes, explores tensions, captures emotions, and empowers readers. Emerging concepts related to this category will be consciously coded.

News frames are the emphasized aspect of a news topic or the structured messages that send out cues about how to understand the news. Emerging concepts related to this category will be consciously coded.

News Provenance refers to the news sources or voices privileged by the news reports, e.g., influential elites, social movements, scientists, and patients. Emerging concepts related to this category will be consciously coded.

The third core category of this study is role performance, which refers to how journalists perform their role based on their role orientations. Journalists' conception and perception of their roles and responsibility in society relate to their journalism performance. Their journalistic role orientations relate to, manifest in, or resonate on

their journalistic role performance (Mellado & Van Dalen, 2014; Mellado, 2015 & 2021, & Zamith, 2022).

Mellado (2015) identified three approaches or perspectives for journalistic role orientation, namely, journalistic voice, power relations, and audience approach, which can be operationalized into six dimensions or types, namely: interventionist role under journalists' voice; watchdog and loyal-facilitator roles under power relations; and civic, service, and infotainment roles under the audience approach.

Journalists' interventionist role "is transversal to, and interacts with" other journalistic roles (e.g., watchdog, loyal facilitator, civic, service, and infotainment), "becoming a sort of meta role that activates journalistic functions generating changes in these same roles" (Mellado, 2021, p. 38).

The fourth specific objective of this study, which is to relate the substantive theory on the science news reporting praxis of Filipino science journalists during the COVID-19 pandemic to current science reporting frameworks, will discuss how the generated grounded theory contradicts, confirms, or extends the following science news reporting frameworks or journalism models:

Science Popularization – A science reporting framework where journalists join science communicators in promoting public understanding of science.

Knowledge-based Reporting - A science reporting framework where journalists as influential knowledge professionals are expert storytellers and subject matter experts.

Interactional Expertise Reporting - A science reporting framework where journalists are not necessarily content experts but with enough knowledge of scientific concepts and thought processes that enables them to negotiate their way across different science topics and report about them.

Environment Reporting - A science reporting framework where journalists who are transparent in their methods are able to apply trained judgment and expert interpretation that enables them to sort through competing claims.

Advocacy Reporting - A reporting framework applicable in science reporting where journalists -- motivated by political or social agenda -- do not separate facts from values and present news from a distinct point of view.

Peace Journalism - A reporting framework applicable in science reporting where journalists focus on conflict transformation by investigating, diagnosing, and proposing suggestions to resolve issues.

Solutions Journalism - A science reporting framework applicable in science reporting where journalists, through rigorous and compelling reporting, focus on finding solutions to social problems.

Chapter IV

METHODS AND PROCEDURES

This section discusses the research methods and procedures adopted for this study which sought to generate data-grounded, low-level, and substantive theory on the science journalism practice of Filipino science journalists that covered the COVID-19 pandemic from 2020-2022.

Research Design

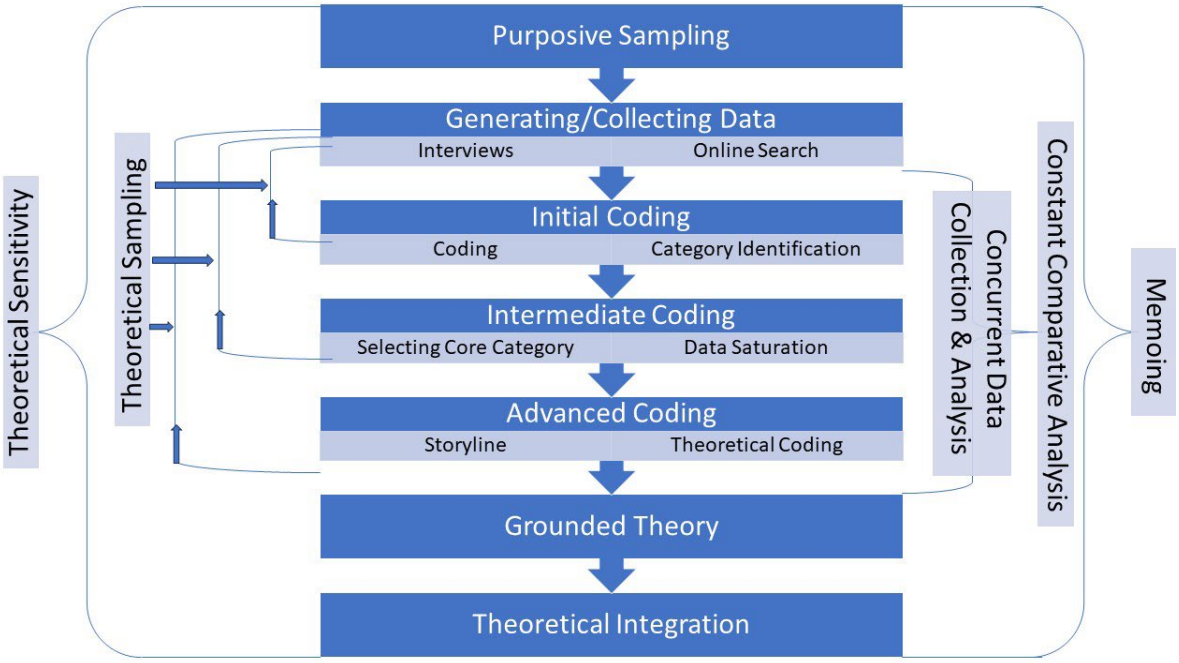
Grounded Theory Method (GTM), an inductive, iterative, interactive, and comparative research method geared toward theory construction (Charmaz, 2006 in Thornberg & Charmaz, 2012), was used in collecting and analyzing qualitative data from texts, specifically interviews and science news reports.

GTM, first discussed by Glaser & Strauss (1967) in their seminal book, *The Discovery of Grounded Theory* (Urquhart, 2013), is particularly helpful for studying individual, social, and organizational processes as well as research participants' actions and meanings (Thornberg & Charmaz, 2012).

GTM views both data and analysis as social constructions and considers the condition of their production (Thornberg & Charmaz, 2012). Although GTM is primarily a theory-building method (Byant, 2002 in Urquhart, 2013), but it is also a systematic way of analyzing qualitative data.

The research design framework for this sturdy, a slightly revised version of the "contemporary research framework" for GTM proposed by Tie, Birks & Francis (2019), is shown below:

Figure 2. Research Design



General Procedures

Iterative and overlapping collection and analysis of qualitative data on the participants' newsroom culture, news reportage, and role performance as science journalists during the COVID-19 pandemic was conducted.

The research process involved the following GTM steps: purposive selection of participants, generating/collecting data, initial coding, intermediate coding, and advanced coding to generate the grounded theory for this study, which was further scaled up through integration with other science reporting frameworks reviewed in this study, i.e., how the new low level grounded theory confirms, contradicts, or extends other science reporting frameworks.

Participant Recruitment and Selection

Science reporters, the resident reporters and contributing writers of the country's leading news outlets, namely the Inquirer.net, PhilStar.com, GMA News Online, Rappler.com, and ABS-CBN News, were purposively selected and invited as participants for this study.

The leading news outlets in the country, based on monthly average visits as of December 2022, were the following: 1) inquirer.net with 29.4 million monthly visits, 2) philstar.com with 13 million monthly visits, 3) gmanetwork.com with 12.8 million monthly visits, 4) Rappler.com with 10.8 million monthly visits, and 5) abs-cbn.com with 6.9 million monthly visits (SimilarWeb, 2023).

The participants were interviewed to collect qualitative data on their newsroom culture (i.e., their norms, practices, and intentions) during the COVID-19 pandemic from 2020-2022. Their news coverage on COVID-19 pandemic from 2020-2022 was examined to collect qualitative data on their news reportage (i.e., the news values they prioritized, the news themes or frames emphasized, and the voices privileged) as well as on their role performance (i.e., journalist voice, relations to power, and audience approach) as science journalists.

Generating and Collecting Data

Data collection began with interviews with the science reporters using an interview script designed to collect qualitative data on their 1) *newsroom culture*: 1.a) routine and practices, 1.b) principles and norms, and 1.c) purpose and intentions); followed by content and textual analyses of their pandemic related news reports from 2020 to 2022 to determine their 2) *news reportage*: 2.a) news characteristics, 2.b) news provenance, 2.c) news themes, and 2.d) news values; and 3) *role performance*: 3.a) journalists voice, 3.b) power relations, and 3.c) audience approach.

As soon as the interview with the first participant was completed and analyzed, the online search for his/her pandemic related news reports from 2020 to 2022 was immediately conducted and the content analysis codebook -- focused on gathering general information about the published stories, their themes, and provenance -- was then prepared. This instrument was used to generate the participant's body of COVID-19 science news reports.

When the content analysis was completed and the participant's list of COVID-19 science news reports was already finalized, the textual analysis code book for news values of COVID-19 science news stories was then prepared and used to determine the news values highlighted by the participant in his/her news reports.

After the textual analysis for news values was completed, the textual analysis for role performance was then conducted using a codebook patterned after Mellado's (2015, p. 602; 2021, pp. 38-39) journalistic role performance dimensions framework. The textual analysis code book for journalistic role performance was used to determine the role performance of the participants as science journalists.

The whole process -- from interview, content analysis of the participant's pandemic related news stories, to textual analysis of the participant's science news reports -- was repeated until all five news outlets were covered and/or sufficient data from participants were already collected.

Coding, Category Identification, and Data Saturation

Constant comparative coding of the participants' interviews to identify concepts and categories for the core categories of their news culture (their norms, routines and intentions) and of their COVID-19 science news reports to identify what (i.e., the news themes) were reported on and how (i.e., story characteristics, provenance, news

values and role performance) were they reported was conducted to determine how the participants from the five news outlets covered the COVID-19 pandemic as an episodic science news event from 2020 to 2022.

Specifically, content and textual analysis methods applying GTM's analytical processes of initial coding, focused or intermediate coding, and theoretical or advanced coding were used to identify concepts and categories, which gradually emerged after a constant "toing and froing," or constant revisiting and constant comparison of data collected from one data set to the next set.

Focused coding -- to decide on analytic grounds where to sample from next to scale up the generated categories -- began after the dataset on the first participant was initially coded and analyzed, and ended when the last participant from the fifth online news outlet was interviewed, and his/her interview and pandemic related news reports were analyzed. Data saturation was reached after the dataset of the last participant from the fifth news outlet was processed.

Theoretical Coding and Analytic Storyline

Theoretical coding -- a reflexive process of discovering how the core categories generated relate to each other (Urquhart, 2013, pp. 23-26), or how they may relate to each other as hypothesis to be integrated into a theory (Glaser, 1978, in Thornberg & Charmaz, 2012) -- began as soon as data saturation was reached or the low-level micro-theories or theoretical codes were then starting to emerge and ready to be presented as storylines. The process involved theoretical sensitivity and "memoing" or writing of memos" or hypothesis about observed relationships of categories.

The theoretical codes that emerged from this study were presented as analytic stories in the discussion of results section. These theoretical codes were generated

using inductive analysis (Charmaz, 2006 in Tie, Birks & Francis, 2019) and Birks & Mills (2014) and storyline technique, ‘a strategy for facilitating integration, construction, formulation, and presentation of research findings through the production of a coherent grounded theory (Birks & Mills, 2014, p. 180 in Tie, Birks & Francis, 2019).

Theoretical Integration of Emerging Grounded Theory

Theoretical integration -- “the task of relating the emergent theory to other theories in the same or similar field” (Urquhart, 2013, p.194) – began after the grounded theory which emerged from data has been finalized. This last stage was conducted in adherence to Strauss’ (1987 in Urquhart, 2013, p. 194) position that researchers should ‘grapple’ with literature once the theory has been generated.

Seven reporting frameworks applicable to science reporting, namely: science popularization, knowledge-based, interactional expertise, environment reporting, advocacy journalism, peace journalism, and constructive or solutions journalism were reviewed.

Theoretical integration discussed how the emerging data-grounded theory on the science news reporting of Filipino science journalists during the COVID-19 pandemic related to the reviewed science reporting frameworks, i.e., how it contradicts, confirms, or extends the reviewed science reporting frameworks.

Ethical Considerations

The researcher, who conducted this qualitative research all by herself, observed the following ethical principles: maintaining privacy of participants, analyzing and reporting data honestly, and taking responsibility for the findings.

Informed consent was sought from all participants prior to data collection. The participants are anonymized in the final write-up.

Reflexivity issues, i.e., personal biases, pre-conceptions, and predispositions, when interacting with data sources, in dialogical reasoning and in multiple interpretations (Klein & Myers, 1999 in Urquhart, 2013, p.71), was addressed through by the researcher constant critical self-reflection.

Chapter V

RESULTS AND DISCUSSION

This chapter presents an analytical discussion of relevant information collected about the newsroom culture, science reportage, and role performance of the selected reporters that covered the COVID-19 pandemic in the Philippines from 2020-2022.

In discussing the results of this study, the analytical codes -- the bigger ideas or logical explanations that "give integrative scope, broad pictures and new perspectives" (Glaser, 1978, p. 72 in Thornberg & Charmaz, 2012, p.51) – are explicated as analytic storylines (Tie, Birks & Chun, 2019) as part of the process of "specify(ing) possible relationships" (Charmaz, 2006, p.63 in Thornberg & Charmaz, 2012, p.51) between and among data-grounded codes as well as the conceptualization process of theoretical codes.

Ultimately, this chapter discusses the generated grounded theory that describes the science journalism praxis of selected participants during the pandemic as an episodic science news event and integrates (compare/contrast) this emerging theory to the science reporting theories or frameworks discussed in the literature review of this study.

Participants' Newsroom Culture

This first section discusses the first core category of this study, the newsroom culture of the selected participants, the reporters from the Philippine's leading online news outlets -- the Inquirer.net, PhilStar.com, GMA News Online, Rappler.com, and ABS-CBN News Online, who covered the COVID-19 pandemic in the Philippines, at any period from 2020-2022.

The selected participants, 60% were female and 40% male, are viewed as rational cultural actors that played a key role in the day-to-day production of news stories about the COVID-19 in their respective news outlets. Their newsroom culture created the condition for their COVID-19 science news coverage during the pandemic.

For this part of the study, the selected participants were interviewed to collect data-grounded information related to their newsroom culture (i.e., their reporting practices and routines, reporting principles and norms, and journalistic role orientation) during the COVID-19 pandemic from 2020-2022.

Reporting Practices and Routines During the Pandemic

This first subsection discusses the newsroom practices and routines of selected participants for this study, the reporters from the Philippine's leading online news outlets -- the Inquirer.net, PhilStar.com, GMA News Online, Rappler.com, and ABS-CBN News Online, who covered the COVID-19 pandemic in the Philippines, at any period from 2020-2022 *(see Excerpts from Interviews with Participants -Reporting Practices and Routines During the Pandemic in Appendix O, p.191).* Newsroom practices are the routines and established procedures and processes of newsrooms and journalists related to the practice of journalism.

Beats, Assignments, and Deadlines

The participants of this study are Filipino journalists whose stories on COVID-19 were published in the news outlets of the Philippine's leading traditional paper-based newspapers (Inquirer.net and Philistar.com) and television networks (GMA News Online and ABS CBN), and Rappler.com which has neither a paper-based nor a broadcast network legacy.

The least experienced participants of this study have been working as journalists, either freelancing or employed, for over five years while the more experienced have been reporters for over a decade. The most experienced participant has been a reporter for over two decades.

All participants, assigned to various beats or areas of coverage, e.g., political and government beats, general assignments, and science and technology beats, were at some point from year 2020 to year 2022, assigned to cover COVID-19 health stories. They were either the science reporters of the news outlet prior to the pandemic, reporters who were reassigned to a new beat that included DOH during the pandemic, or reporters assigned as substitute DOH reporters for a considerable length of time during the pandemic.

The participants were assigned to three or more beats to cover, except for one who covers general assignments, i.e., all newsworthy stories “under the sun” including science and human-interest stories. One participant disclosed that s/he was able to cover the Palace or Malacañang beat because their newsroom rotated reporters covering then President Rodrigo R. Duterte, who held press conferences that lasted beyond their working hours.

During the pandemic, one participant was required to turn in at least one story per day while others were required to submit two or more stories per day. One participant disclosed that s/he was submitting more than five per day, and the highest number of outputs s/he submitted during the pandemic was 12 stories.

Some were given a newsroom-imposed deadline of around 5:00 in the afternoon, which is the same as prior to the pandemic, while others were not, especially if the story they were working on was meant to be published only in online

news outlets. In such case, “you turn it in as soon as it is done,” shared one participant who added that it takes “around an hour or two at the most” for him/her to write a story.

One participant, whose online news outlet exists alongside its traditional news outlet, opined that deadline policies did not change during the pandemic, except when “something big” came from the Office of then President Duterte who held media briefings that lasted late at night, well beyond newsroom deadlines.

In such instances, reporters were allowed or asked by editors to submit late stories because the digital issue for the next day will be revised. The newsroom will “do a remat” (rematerialize, i.e., change or rearrange the content and redesign the layout of the newspaper) to include important stories from Malacañang.

All reporters were trusted by their superiors to look for their own stories within the bounds of their assigned beats but occasionally would receive instructions from editors on what and where to cover. Sometimes editors even send them links to social media posts of news sources or posts that contain potential news leads.

The participants were allowed to pitch and pursue exclusive stories and received pieces of advice on how to develop their pitched or assigned stories.

The participants said their editors always kept communication lines open during the pandemic and even listened to their individual concerns and “grievances” like a “boyfriend or girlfriend” or a “parent” would do.

Some participants disclosed their editors encouraged them to share problems encountered in the field and also explained to them why their articles were edited in a particular way or why a new angle which belongs to a more senior reporter was used in their merged stories.

When it comes to understanding COVID-19 as a science news topic however, the participants disclosed that they learned about the news topic on the job, from

expert news sources. One participant, who admitted to having worked as substitute for other beat reporters in the science beat, said that when s/he "was confused about something" despite having talked to news sources, s/he backreads reports published on the subject to gain clarity and understanding of the news topic at hand.

Another participant said she "reach(ed) out to experts" for help in understanding contents of scientific papers on the news topic, on interpreting what those studies mean to the public. S/he added that during the pandemic, s/he started to read foreign publications that published science stories written by reputable science journalists.

When it comes to uncertain and tentative information during the pandemic, one participant disclosed that such cases always called for "constant dialogue" between the reporter and the editor. Answers are immediately sought to address many newsroom concerns, e.g., what is the nature of the information (i.e., sensitive, or not), how should it be reported, does the newsroom feel compelled to report about it, should the newsroom wait for more information, and is it sufficient for the newsroom to state a caveat that the information is uncertain or tentative.

One participant shared that their newsroom required them to use a "constantly evolving COVID-19 style guide" or stylebook. A stylebook is a newsroom guide to grammar, spelling, usage, and tone which reporters and editor refer to when writing or editing news contents.

All participants were assigned to cover the Philippine Government's *Laging Handa* (Always Ready or Always Prepared) press briefings organized by the Inter-Agency Task Force for the Management of Infectious Diseases (IATF-EID) chaired by the Department of Health.

IATF-EID, with members including the Departments of Interior and Local Government, Foreign Affairs, Justice, Labor and Employment, Transportation,

Information and Communication, and Tourism -- was activated on 28 January 2020 to establish preparedness and ensure efficient government response; to assess, monitor, contain, control, and prevent the spread of any potential epidemic in the Philippines" (DOH, 24 October 2023, available at iatf.doh.gov.ph).

Through IATF Resolution No. 12, Series of 2020, the membership of the Task Force was expanded to include offices and more line agencies under the Office of the President of the Philippines such those tasked to manage the economy, the country's education system, national defense and security and peace and order (DOH, 24 October 2023 - available at iatf.doh.gov.ph).

The *Laging Handa* briefings led to the blurring of reporters' areas of coverage, both in terms of geographic space and content. It should be noted that journalists, out of respect for their fellow reporters, are always careful of beat encroachment. One participant noted, "*lahat dun na nagpupunta*" (everyone is already at the same event) and another remarked, "*iisa na lang ang pinagkukunan namin ng balita*" (we were getting our news from the same event).

Because many reporters from different beats were attending the *Laging Handa* press briefings, their stories often overlapped and had to be combined or merged by editors into a single story with usually too many names in the credit line, which the reporters fondly referred to as "barangay byline".

The newsroom policy on giving bylines, the credit line below the title, differs from one newsroom to another. Byline credit is given to a reporter whose article is the main story. Other reporters who contributed to the same story are often given a tagline, a credit line at the end of the story. Some newsrooms deny reporters their byline if the article they submitted required heavy desk work. On a good day, they may be given

simply a tagline. At GMA News Online, a senior desk who edited an article also sees his/her initials in the tagline.

Except for one participant, who recalled working with another reporter on a story that required numerous interviews with Filipino frontliners and with another on a long form journalism report on the country's pandemic responses, the participants were never assigned to collaborate with another reporter on the same topic starting from news gathering to the writing of the news story. Their stories with "barangay byline" were merged by their editors during the editing process.

News Gathering Methods and ICT Tools

Journalists are truthtellers, their news reports are factual stories. When covering news events, reporters are expected to be present at the same event to witness how things unfold and to be able to interview in person authorities who are experts about the news topic being covered and to talk to witnesses and other people who may be witnesses but are affected by the news event.

These practices, however, all changed during the pandemic when the national government began to impose community lockdowns that resulted in travel restrictions. A participant assigned to three beats during the pandemic noted: "Because we were on lockdown, we barely got to cover physically or in person."

Another participant noted that at the onset of the pandemic, news gathering became difficult, especially that their news sources were used to giving face-to-face interviews. One participant noted that his/her editors became "considerate" during the pandemic that they allowed them to gather information from events broadcast live via the government's television network or live streamed on online platforms.

Newsrooms also reassigned reporters to areas of coverage that are closer to where they live, making news sources more accessible in terms of proximity.

The nationwide shift to work-from-home and remote learning that prompted government offices and institutions, businesses, and private institutions to leverage on information and communication technologies like Zoom, Google Meets, Facebook, Twitter or X, and Viber also gave journalists access to news sources.

“We discovered that we reporters can also work from home,” one participant shared. S/he added that since government offices, healthcare providers, and private institutions had become active on social media, reporters only needed to monitor their social media accounts to follow news leads, monitor media advisories, and receive press releases.

One participant shared that in addition to gathering news from online media briefings, s/he was also able to gather news leads from people who “reach(ed) out” to her to suggest stories, offer information, or give news tips. “I would just (find ways they can be) corroborate(d) and build on them,” she explained. S/he also used social media to “look for news sources from groups of health workers and front liners.”

The participants were quick to clarify however that the use of social media and online messaging apps for news gathering is not new to them. The pandemic only heightened their need for them. They became “more useful to me than at any other time,” noted one participant, who added that she also relied on Twitter, now renamed X, in listening to experts on COVID-19 and the pandemic.

Another reporter shared that, during the pandemic, time and distance suddenly became a non-issue in terms of reaching out to news sources from far flung areas. Because of the new ICT tools, specifically access to Zoom, she was able to reach out

to more news sources outside of Metro Manila which gave context to his/her special reports and exclusive stories.

Cognizant of the fact that, at the onset of the pandemic, knowledge, or pieces of information about the corona virus and pandemic, were still “unfolding like it was really taking place in real time,” the same participant followed on X many science journalists from foreign online news outlets, health experts, scientists, and policy makers in the Philippines and around the world. S/he said X already gave him/her access to a rich pool of “expert voices” during the pandemic. She no longer felt the need to rely on peer-reviewed health journals that are difficult to read.

The participants also leveraged on the use of online communities such as the Viber Chatgroups created and managed by the communication officers of government offices and agencies for the members of the press. The “Viber Groups”, as the reporters referred to them, provided both reporters and news sources a new communication space where media advisories, press releases, important announcements and documents, and answers to queries from the press – especially right after a media event -- are shared for everyone in the chatgroup to see.

Another participant said s/he relied on health-oriented nongovernment organizations for their “insights” on difficult information related to COVID-19. She added that lack of time to study the disease on a deeper level and lack of available resources prevented them from writing context-rich science stories.

The participants said ICT enabled them to carry out their duty as reporters despite the lockdowns and travel restrictions during the pandemic.

Now that the pandemic is over, however, news gathering practice and standards have gone back to the old practice.

"*Hindi na kami pwedeng mag*-work (We no longer could work) from home," one participant quipped, because they are now required to do fieldwork and conduct face-to-face interviews. He feels band that reporters are now required to conduct in-person interviews when videochat would have been enough to serve the same purpose.

However, as one participant observed, offices and organizations that prefer to hold in-person media briefings now also tend to hold back from sharing information on Viber, the technology and communication space that enabled them to perform their role are beat reporters despite the lockdowns.

The participants believe newsrooms should now learn to leverage on the affordances of the ICT tools "discovered" during the pandemic. "*Sayang naman 'yung mga itinuro sa atin ng* COVID-19 *kung babalik na lang tayo* sa old ways *na* (The lessons we learned during the COVID-19 pandemic would be put to waste if we go back to the old ways and) we're not using the technology anymore," one participant noted. "We can work more efficiently now by using these tools," s/he added.

Reporting Conditions and Challenges

The political climates before, during and after the pandemic were relatively the same, one participant noted. A September 2020 survey conducted by Pulse Asia showed Duterte whose Administration showed little tolerance to a critical press, enjoyed very high approval rating of 91 percent which meant 8 to 9 out of 10 Filipinos approved of his performance (Reuters, Inquirer.net, and Rappler, October 2020) amid the pandemic that caused Filipinos economic suffering.

"It was during the lockdown when ABS-CBN faced a lot of its troubles," one participant recalled, and added that Rappler also had a difficult relationship with the

Duterte Administration even before the pandemic. ABS-CBN, the country's leading television network, lost its franchise in 2020.

Another participant opined that some news outlets and their reporters often found themselves at odds with the President and his Office for simply performing their journalism role. S/he pointed out that the media were apprehensive to a point that some journalists have become overly cautious, because "if you are not aligned with the Government, then you are its adversary."

Keeping one's independence from influential news sources during the pandemic under the Duterte Administration "was difficult", noted one participant who pointed out that news outlets are "businesses, too." S/he disclosed that it was a constant balancing act of protecting one's news organization from the wrath of influential sources and carrying out one's duty as a journalist.

The pandemic also brought business challenges to newspapers. One participant recalled that their newspaper reduced its number of pages due to limited paper supply as well as the lack of street sales. S/he recalled that some reporters were upset that their stories were not published due to competition for space, a portion of which were also allocated for advertisements.

The participant also lamented that due to limited space, they were constrained from publishing long form pieces such as in-depth reports. He noted however that despite the economic challenges, their newspaper still came out regularly because their newsroom managers remained true to their paper's "mission" and upheld their duty of regularly providing news to their readers.

Due to travel restrictions during the pandemic, newsrooms "reshuffled" the beat assignments or areas of coverage of their reporters. One participant confided that this newsroom decision posed several problems. S/he disclosed that because s/he was

new to the beat where she was transferred during the pandemic, s/he failed to get an important reaction or response from a source because at that time, s/he had yet to establish rapport with the said news source.

S/he added while s/he was already “stressed because of the pandemic”, s/he then again had to start building his/her network of news sources, had to explore the ins and outs as well as the boundaries of the new beat, and had to research on the relevant news topics specific to the beat.

The participants have never experienced covering health crisis situations. While personally going through the “psychological and mental effect” of the pandemic, the participants also had to grapple with the new topic that was COVID-19. “We were forced to learn about it because everything that was happening around was related to COVID-19”, said one participant, who disclosed that s/he was once exposed to a news source who tested positive and feared for the life of her grandmother. S/he covered COVID when vaccines were not yet available and knowledge about the corona virus and disease was still limited.

The expanded composition of the IATF (IATF Resolution No. 12, Series of 2020) caused some changes in reporting practices during the pandemic, some aspects of which posed challenges to beat reporters who in normal times would already have clearly defined beats or areas of coverage, have established relationships with trusted news sources, and are cognizant of specific news topics in their respective areas of coverage.

There were also times when participants were also assigned by their superiors to cover the live streamed media events either on behalf of absent journalists reporting on different beats or to gather input information for other journalists in different beats while also gathering information for their own stories.

Participants lamented that there was not enough time to explore and be familiar with the news topics of other beats and to follow news leads they wanted to pursue for their own stories. "*Sobrang* overwhelming *yung trabaho* (the workload was too overwhelming)," one participant noted. Another participant confided that at some point during the pandemic, s/he simply focused on a topic she deemed the most important. S/he explained, "one cannot write about everything".

Since IATF briefings were 'Malacañang events', the science journalists covering health, science research and development, and information and communication technologies beats were often in quandary as to what to focus on or which information should be included in their stories. One participant said that in deference to the more senior Malacañang reporters, s/he then only used information from the news source, e.g., a Cabinet Secretary, considered an authority in his own area of coverage.

National news outlets give special attention to news coming from the three branches of the government, the Executive, Legislative and Judiciary. The journalists covering these beats are deemed senior reporters. News coming from these areas of coverage is usually ranked higher in a news outlet's list of important stories for the day because of their nationwide impact, relevance, and prominence.

The practice of merging stories during the pandemic had negative implications on the coverage of COVID-19 as a science story. One participant lamented that despite giving complete context to the science story s/he patiently pursued and worked on, the science angle would always be buried in the body of the merged story because the focus of the story would always be the angle of the Palace reporter's story. S/he is concerned that readers were not able to read the science angle of the story because "many people today are only headline readers".

Reporters are motivated to submit quality news reports partly because they also want to see their bylines in the stories they labored on. One reporter said s/he was given main byline only when the more senior Malacañang beat reporters focused on other news topics and did not use the news sources, e.g., the officials from the Health, Science and Technology, and Information and Communication Technology Departments, featured in the *Laging Handa* press briefings. Another disclosed that s/he was also assigned to cover the Laging Handa online media briefings to gather "input information" -- not complete stories that would earn him a credit line – for the news stories of other reporters.

Some participants shared that they faced news gathering challenges when news sources in their beats began holding media briefings and press conferences online. "They were useful for a while," noted one participant, who admitted that the live streamed online media events enabled them to get information the public needed the most especially at the onset of the pandemic. But s/he was also quick to point out that those events were "tightly controlled".

Those online press briefings were not ideal spaces for some inquisitive and persistent reporters who can be quite "demanding and pushing back" in order get accurate and complete information for the news stories they are working on. "It (news gathering) was a balancing act" s/he pointed out. "You want to keep pushing but you also do not want to get kicked out or just totally be ignored (by the host and organizers of the online event) because you were already annoying," she explained.

The *Laging Handa* press briefings, according to one of the participants, also offered a glimpse at what may be construed as "personal bias" of reporters. S/he noted that some reporters tended to focus only on their preferred news sources and news topics. In some instances, they had chosen not to report about them.

The participant disclosed that indeed, there are reporters, covering private organizations being subjected to regulation by the Government, who often hesitate to report about the private organizations and instead focus on the "regulator" or government office. This practice, which s/he referred to as "regulator capture", not only leads to beat encroachment – because the "regulator" beat already belongs to another reporter – but also could lead to a dangerous path that undermines journalism independence. S/he lamented that some reporters, who had acted like communicators for the regulated private organizations, sooner or later leave their news organization to join the organization they have covered.

Safety and Welfare During the Pandemic

Prior to the pandemic, most of the participants commute on their own to meet news sources, attend press events, or be at their press offices of their beats. One participant shared that just to be able to meet his/her quota for the day, s/he learned to write his/her stories anywhere, even in crowded places like fast-food restaurants.

The pandemic caused reporters to be suddenly home-bound attending daily Zoom webinars, listening to livestreamed media briefings, and interviewing news sources using videochats apps. Still, newsrooms provided them health safety supplies such as face masks, face shields, oximeter, and vitamins.

The participants shared that they suffered from "information overload" and "burn out from excessive Zoom webinars and Zoom conferences" scheduled in a day. "Madali kasi ang *magpa*-Zoom conference noon (It was fairly easy to organize Zoom conferences back then)," one participant explained, who added that aside from the Laging Handa press briefings, sometimes UP, DOST, and DOH also held conferences on the same day.

One reporter shared that it came to a point when the topic COVID-19 became an inescapable everyday reality that took a toll on their mental health and caused burn out. "*Yung trabaho mo ay puro* COVID-19 *na at yung nababasa mo pa sa* social media when you are not working is also COVID (Your work is already about COVID-19 and then all you read on social media…is also COVID-19)," s/he pointed out, adding that unlike non-journalists who could easily turn off their cellphones or go offline, journalists rely on the Internet and social media for their research and news gathering.

Another participant disclosed that because online media events held in a day were not only too many but were also quite lengthy, some news leads picked up from those events were not developed into stories. S/he pointed out that the amount of "information was overwhelming."

S/he admitted that because of heavy workload in a day, the quality of his/her work suffered that they lacked in detail for context and regretted that his/her stories were only "limited to the press briefings", or "*kung anuman yung nilalabas* sa (whatever it is that was released by) government station" which streamed the press briefings.

One participant disclosed that because of the "very unpredictable" schedule of media events in Malacañang, some of which lasted until late at night, the managers of their newsroom rotated the beat to all reporters. "It is hard for just one reporter…they'd be really stretched out," s/he explained.

Newsrooms strictly enforced the government's policies on travel restrictions. Their movement were closely monitored by their superiors. One participant recalled that her request to interview frontliners in person when the vaccines first arrived in the country was disapproved. To this, she opined: "They have set the bar too high." Another participant, however, was allowed to gather news at vaccination sites when

the vaccines were first rolled out because they were using transportation provided by the newsroom.

One participant shared that their newsroom required that they be tested against the virus once every two weeks. A participant, who was exposed to a news source who tested positive, shared that their editor personally monitored his/her condition via telephone. S/he was constantly reminded to report for symptoms and take his/her vitamins regularly.

The participants shared that their editors became considerate and lenient during the pandemic. “We may opt not to cover a story,” said one participant adding that his/her editor never made him/her cover events whenever he cites either safety concerns or conflict of interest. Another noted that it was also quite easy to convince editors to allow them to go on leave.

Most of the participants disclosed that their newsrooms offered free but limited number of counselling per year to help them cope with the daily challenges of covering the COVID-19. However, since it was voluntary, none of them availed of the service.

Reporting Principles and Norms

This second subsection discusses the journalism norms or principles upheld by the selected participants for this study, the reporters from the Philippine’s leading online news outlets -- the Inquirer.net, PhilStar.com, GMA News Online, Rappler.com, and ABS-CBN News – who covered the COVID-19 pandemic in the Philippines at any period from 2020-2022 *(see Excerpts from Interviews with Participants - Reporting Principles and Norms in Appendix O, p195).*

Journalism norms are the ideals or principles of the journalism profession. These principles are strictly upheld to ensure that the practice of journalism is factual, ethical, and independent from the sources they cover.

Access to Verified Information

Journalists, specifically the reporters, are expected to gather only first-hand information and reliable data from credible news sources. A reporter's ability to find reliable news sources and to make them agree to be interviewed or share information about a news topic at hand is a reporting skill that separates good journalists from mediocre ones.

One participant pointed out that because reporters were unable to travel to meet news sources in person, they had limited access to first-hand information. "A lot became second-hand, and you're relying on information and experiences of other people versus your own," s/he explained. However, s/he was quick to note that the situation did not make factual and ethical reporting unachievable. "It was difficult, but it was not impossible," s/he stressed.

The participant pointed out that gathering information you need for your stories is still more efficient in face-to-face settings, because sometimes all the reporters must do is "show up every day," s/he said. Being present in person at media events is important for reporters because this allows them to "experience and understand the atmosphere in the room."

The "virtual" press briefings, including the *Laging Handa* press briefings, however, as one participant pointed out, made it difficult for reporters pursuing a different news angle to get specific information they needed because of time constraints. "They just say 'we only have one hour, and these are all the questions we

can take for today,'" she said, adding that news sources featured in the online media events also rarely got back to reporters to provide information promised to be shared later after the media event.

Before the pandemic, "enterprising" reporters, pursuing news leads different from the news topic of a media event, would often approach news sources after the conference to quietly ask their questions. This practice often results in "scoop" or exclusive stories. The shift to online mode, however, affected this practice because even answers to questions asked directly to news sources outside of the chatgroups were also posted in the chatgroups for all reporters to see.

One participant pointed out that the *Laging Handa* press briefings – attended by many reporters from different beats – may have exposed the mediocre reporters from the enterprising ones because they all had access to the same press kits and would see which reporters from other beats heavily relied on the press releases, those who did not bother to interview other news sources to get additional context or to have a fresh or different angle.

Indeed, the travel restrictions denied reporters the "opportunity to ambush a (news) source for an exclusive story," as one participant opined. "Back then, we really had to get creative," s/he added. To be able to write context-rich news stories, s/he used social media to reach out to more news sources, albeit cautiously.

Another participant pointed out that during the pandemic, getting hold of credible news sources, outside of government offices and media savvy institutions, who can provide reliable information became challenging.

To author context-rich stories, one participant disclosed s/he "infiltrated" or joined online communities not only to follow potential news sources but also to listen to their conversations to look for news leads. The same reporter, however, noted that

compared to face-to-face setting, such a process is challenging in terms of getting verified information.

To ensure the data or pieces of information gathered are correct, factual, and collected from credible news sources, the reporter engaged in simple online investigation. S/he followed potential sources on social media, thoroughly searched them on Google, reached out to their friends, “infiltrated” their online communities, and asked them “specific questions” related to their work or identity.

While acknowledging the limitations of the virtual press briefings, some participants opined that still there was “democratized access” to government data and information during the pandemic. They noted that because of the ICT enabled online media events, i.e., the live streamed and televised *Laging Handa* media briefings, important pandemic-related information and policies were immediately made available not just to reporters but to the public as well.

Some participants, however, offered more critical views about those virtual media briefings, including the *Laging Handa* media briefings which were aired on a government station and hosted by government officials. “They were controlled,” one participant pointed out. S/he disclosed that although journalists could ask questions, the hosts selected and filtered questions.

Referring to the virtual press briefing conducted by government offices, one participant said: “I think access to information was restricted. They were able to easily control what information they gave out, especially in the beginning of the pandemic. It was almost one way and controlled.”

According to some participants, access to government news sources during the pandemic became “more efficient”, as afforded by the many media chatgroups or

online media communities created and managed by the communication officers of government offices and agencies.

"*Parang naging* efficient… *dahil pag may nagbabato ng tanong eh nakikita naming lahat* (It seemed like it became efficient because when one asks a question, we all get to see it)", one participant noted. S/he added that prior to the pandemic, not all reporters could easily reach top government officials for clarification and comments.

Aside from the government offices, non-government news sources such as academic institutions and research groups also created media chatgroups.

While admitting that such chatgroups became more useful during the pandemic, one participant noted that those were not "any richer of a source than they were before or after the pandemic" for they were "just another avenue" for reporters to ask questions and receive documents.

S/he disclosed that such groups also became places of misinformation and confusion for reporters during the pandemic. S/he recalled an instance when a member of a group announced that a change in the government's quarantine policy will take effect the following day only to find out that such was unverified.

Relationship with News Sources

Principled journalism is independent from its news sources. For newsrooms, a journalists' relationship with their news source is always a serious concern because of its implications on the quality of their journalism.

The participants recalled that during the pandemic, many unverified, false, or misleading information were circulated on social media, which undermined the role of journalists as the public's chief sense-makers and truthtellers.

Admitting that even their editors also fell victims to the infodemic, the participants adopted ways to ensure their stories did not cause confusion and “panic”, nor contributed to “fearmongering”.

For any information about the virus, the disease, and its effects on patients, the participants said they always verified with the Department of Health and the World Health Organization. The participants welcomed the press briefings conducted by the DOH because it gave them a chance to ask questions.

One reporter disclosed that during the pandemic, a government news source requested her newsroom to take down an interview story she wrote. His/her editor simply dismissed the request and the news source eventually let the issue go. To avoid such situations, one participant shared, “I would never promise anything; I would never guarantee anything” to a news source.

Asked about their trusted news sources during the pandemic, the participants put public health officials, health workers, and scientists from the Department of Health and Department of Science and Technology in the top of their list.

The DOH, according to one participant, was the most reliable source during the pandemic not only because they were voluntarily providing the media new information to write about but because they were also quick to “debunk myths” and false information about the COVID-19.

“Whatever the DOH said, it was always (regarded as) the truth”, one participant noted. S/he recalls that in times of doubt about any information being circulated about COVID-19, his/her newsroom relied on the DOH to provide clarity.

The participants noted that the DOH officials not only served as accessible newsroom experts; they also shared their responses to reporters’ follow-up and clarification questions after the daily *Laging Handa* press briefings.

Other news sources the reporters found helpful during the pandemic were health workers, hospital managers, health researchers, data scientists, and local government officials.

One participant explained that health workers and hospital managers were deemed important news sources during the pandemic because they provided valuable information about the healthcare crisis that happened at the peak of the pandemic, i.e., they provided information about hospital capacity as well as on the concerns of healthcare workers.

The participants also found the officials of local government units (LGU) as important news sources during the pandemic. It can be recalled that the DILG is a member of the IATF and LGUs were tasked to enforce quarantine laws during the pandemic. They found them trustworthy news sources because they were also frontliners, and they have direct overall knowledge of the situation in their localities. And since the tail-end of the pandemic was also election time, “they (the local government officials) were easy to reach,” one participant noted.

DOST scientists and officials were also deemed trustworthy sources during the pandemic. One participant noted that DOST became a rich source of news during the pandemic because of its COVID-19 related research and development initiatives, e.g., virgin coconut oil, Lagundi, Tawa-tawa, and ventilation tent, to name a few. It can be recalled that the DOST Undersecretary for Research and Development was the chair of the Task Group on Vaccine Evaluation and Selection (TG-VES). One participant noted that the news sources from DOST were not only accessible but were in fact “proactive” in reaching out to reporters.

Other participants also relied on health-oriented non-government organizations and associations that could provide “more insights” about the news, e.g., OCTA

Research and associations of health professionals in the country, and updates. They also relied on information and media releases from the World Health Organization.

One participant noted that the period of the pandemic was a difficult period to be a journalist. "*Sobrang* pressured *kami na maglabas agad ng balita* (We had to come out with news stories fast," s/he lamented, adding that s/he would have appreciated to be given access to health journals and allowed more time to read up on those so s/he could have produced more in-depth stories about the virus and disease.

Attribution and Diversity of News Sources

The credibility of news outlets is hinged on the quality of the news stories they publish, which in turn is hinged on the reliability of their news sources. For this reason, newsrooms observe strict rules on attribution of news information as well as on the diversity of their news sources.

Editors expect reporters to personally process information they gather for their news stories. One participant shared that before the pandemic their editors never allowed reporters to source stories from other media platforms. "Unacceptable *yun*, *nakakahiya* (It - sourcing stories from other media platforms - is unacceptable, it is embarrassing or humiliating)," s/he mused, and explained that the information published in other media platforms are considered processed and deemed second-hand information.

During the pandemic, however, the participants admitted that their editors often took a less strict path and allowed reporters to cover televised and live streamed press conferences especially for minor stories.

One participant disclosed that at the height of the pandemic, the editors themselves sent reporters Zoom links to conferences as well as links to the Facebook posts of news sources that needed to be checked out.

The participants shared that before the pandemic, their newsrooms expected them to use at least two news sources to ensure that at least two sides of the story are presented. These news sources should be, upon the reporter's evaluation, are credible, e.g., and eyewitness, deemed authorities on the news topic, and they agree to be named in the story.

One participant explained that such as practice of double sourcing is not only about balanced reporting but also about being fair and accurate. In cases where a person mentioned in the news refuses to give his side, "you have to make the effort, though," s/he commented. And if the person finally agrees to give his/her side but is "obviously spewing out a lot of lies in their response, do not publish the entire lie." S/he added a fact-check should be immediately released.

During the pandemic, however, one participant disclosed that the rule on the number of news sources was not strictly enforced. "One source was enough," s/he said, especially if the source was an authoritative source like officials of the Department of Health, and there were no contradicting sides to the story.

The participants admit that indeed the rule on source diversity is a complex issue for truthtellers like them because such could result in "bothsideism" or false balance. One participant admitted that the goal to strictly adhere to the rule has its dangers, especially when the reporter already knows that the other source, e.g., an influential personality, is not truthful or ill motivated.

Another participant disclosed that s/he tries to adhere to the rule because editors want to see a "balanced story" that presents "various sides of the story", but

s/he makes sure s/he provides enough background information or sufficient context to help readers see the bigger picture. In this way, s/he explained, the story is not misleading and does not turn out to be a “he said, she said” story.

The participant, who insists that using a single news source can be acceptable for news stories that do not have two sides, describes the said rule as “*sakit ng ulo*” (a cause of headache). S/he fears such a rule can be used by media relations officers working for corrupt politicians to cause the shelving of investigative stories or the censorship of stories that matter to public interest, by refusing to cooperate with the reporter trying to get their side of the story. S/he opines that newsrooms are already being careful not to publish stories that would expose them to libel cases.

During the pandemic, the above reporter claimed s/he kept an open mind and gave voice to everyone, including the side of “(vaccine) doubters” or the groups promoting vaccine hesitancy. “*Hindi na kailangang i-legislate yung kuhanin ang* other side (There is no need to legislate the need to get the other side)”, s/he said, referring to the controversial Right of Reply Bills pending in Congress.

Journalistic Role Orientation

This third subsection discusses the journalistic role orientation of the selected participants for this study, the reporters from the Philippine’s leading online news outlets -- the Inquirer.net, PhilStar.com, GMA News Online, Rappler.com, and ABS-CBN News Online, who covered the COVID-19 pandemic in the Philippines at any period from 2020-2022 *(see Excerpts from Interviews with Participants – Journalistic Role Orientation in Appendix O, p.201).*

Role orientations relate to the idealistic intentions and goals of journalism such as to serve as independent monitor of power or watchdog role; to provide the public

with information they need to make informed decisions or facilitator role; to serve as a forum for public criticism and compromise or civic role, to serve as the public's chief sense-makers or service role, and to provide entertainment or infotainment role.

Journalistic role orientation refers to "how journalistic actors think" which, and practice, "may be limited by a range of structural factors" (Zamith, 2022, p.71), including newsroom culture. Constant tension between norms, ideals, and the practices of journalists is assumed to be at play as journalists perform their journalistic roles (Mellado, 2021).

Reporting Intentions and Purpose

The COVID-19 pandemic was an extraordinary episodic news event that impacted the world's socio-politico-economic systems. Consequently, it impacted newsrooms, too. One participant even pointed out that at the height of the pandemic, everything they covered, especially in the last three quarters of 2020 and first two quarters of 2021, were all related to the COVID-19 pandemic.

The participants had a clear understanding of their role as journalists during the pandemic, that was to provide clear, correct, and accurate information their readers could use to make timely and informed decisions.

According to the participants, the pandemic highlighted the need for journalism because "when the world went on lockdown, news became even more essential to people's lives." Journalists, according to them, were also pandemic frontliners who "played a key role for the people during the pandemic".

The participants were convinced their role during the pandemic was to ensure their readers were well informed. One participant shared that despite the reporting challenges and personal struggles s/he faced during the pandemic, s/he strove to

gather “accurate information” from news sources to provide clarity amid the disinformation.

“For me, the main function of journalism was to correctly inform the people about the COVID-19,” s/he said, and explained that their role was important because the pandemic happened in the “age of troll farms” when trolls actively participated in “political debates in the sidelines.”

Another participant noted that it was important for reporters to give only factual and accurate information during the pandemic because readers “make micro decisions that will lead to bigger decisions (such as the decision to get vaccinated) based on what they read or what they see” on the news.

For another participant, the duty of journalists during the pandemic was to simply “provide accurate information readers can use to deal with the pandemic, news from which they can form intelligent opinions and make decisions for themselves”.

S/he stressed that it was critical for journalists at the time to have refrained from sharing their opinions and to only facilitate the flow of information from experts to the public, even if the information the experts shared were conflicting information or presenting opposing views.

One participant shared that indeed, reporters served as “purveyors” of science news information from news experts. “During that time, everything was uncertain, so we relied on official sources like DOH and WHO for that matter,” s/he explained, adding that with this practice, journalists helped “assuage” public fear and uncertainly.

“So much was unknown,” said another participant, who described the role of journalist in the beginning the pandemic as “like a microphone for the government, reporting everything the government would say.” She added that the role of journalists evolved over time because “it took some time for questions to start forming our heads”.

Another participant, who also shared the same view that reporters should provide readers “news they can use”, disclosed that in the stories s/he wrote during the pandemic, s/he purposely interpreted and explained the news, e.g., use of “why this news is important” or “why this information matters” in the body of his/her story, to help readers understand the news better, something beat reporters would not normally do prior to the pandemic. “Before, we would not really spell it out for you,” she noted. During the pandemic, however, she added that subtlety served no purpose because it was more important to emphasize to readers what the news meant to them.

One participant viewed his/her practice of journalism during the pandemic as public service. Because the goal is to bring useful information to as many people as possible, s/he opined that the competitive practices of securing scoops and having exclusives reports should be discouraged. He stressed that in times of crises, reporters should help each other by sharing useful information they gathered.

Some participants viewed their role during the pandemic as another form of sacrifice for the greater good which was worth the health risks.

One participant confided that she was terrified of the health risks, but she carried on performing her role as a reporter because, s/he understood and accepted that journalist show up and deliver the news despite the circumstances, challenges, and difficulties. “If we did not report during the pandemic, the public would have been left in the dark, clueless and confused,” s/he opined.

Sharing the view that covering COVID-19 was worth the health risk for journalists, one participant retorted: “*Bakit ka pa naging journalist kung matatakot ka, kung aatras ka* (Why then are you a journalist if you are scared, if you renege)?” He pointed out that the COVID-19 pandemic was an important historical period when the country needed journalists the most.

The participant – who strongly felt frustrated of the lockdowns that prevented reporters from gathering news where they happen -- described what journalism means to him/her as a reporter during the COVID-19 pandemic:

> Journalism is one of a kind. This is the only job where you can serve people, communicate to people, answer questions for the people, and be the voice of the people. In this job you can stop the President just by asking about pressing issues and concerns; you can serve the people by raising awareness, by giving them facts; and it is really fulfilling and thrilling at the same time.

The pandemic also highlighted the significant role of journalists in the promotion of government programs such as health communication programs. One participant observed that the pandemic made government offices and officials "in a way realized" the role of journalists for government's programs, and that reporters are "not just annoying, pesky journalists."

S/he noted that some officials have eventually understood that the media could help institutions perform better, i.e., "if you work with journalists, then the public could understand vaccines better."

One participant admitted that the media had worked "hand-in-hand" with the government during the pandemic because the later was giving "important information" which the public needed to know." S/he was quick to clarify however that the media did not serve as "mouthpiece" for the government but were merely "channels" of useful information from the government. "It was part of (media's) public service to the people," s/he added.

The participants noted that the media nonetheless kept their independence during the pandemic. If the information is “useful, helpful, and lifesaving”, journalists should report it,” s/he said, and added that reporters should be “even more critical” even if the news sources “package” them as “useful report, important information” because they are “health information” which could directly affect public behaviors. S/he said reporters should always “question” and double check the information from independent sources.

Reporting on health is not mere “parroting” what the expert news sources are saying, noted another participant, who also shared the view that during the pandemic, it was critical for the media to work with the government on health communication. S/he added: “I think it is time for us to be critical about the information we get, now that we are more familiar about COVID and now that most of us are vaccinated.”

One participant disclosed that during the pandemic, s/he “looked at public sentiments” and relied on his/her sense-making ability to determine which health information should be reported on. Careful not to “overwhelm” the public with too many health information, s/he chose to focus only on vaccination stories, which s/he said were at that time the most important news topic for readers.

Archetypal Ideas for a Science News Story

The types of stories reporters write, the news topics they focus on, the news values they deem most important, and the ethical considerations they uphold offer a glimpse of their intentions and the roles they want to perform as journalists.

Asked about what stories they think were “good stories” during the pandemic, one participant quickly replied: “*Yung istorya na madali na lang intindihin, yung hindi makakapag* cause pa ng greater confusion (A story that is easy to understand, one

that will not add to the confusion).” S/he noted that during the pandemic, there was “massive disinformation” about the virus and the disease that caused people to panic.

One participant shared their superiors constantly reminded them that in times of confusion, they should always “strive to deliver news that people could use,” news that would guide them in their everyday lives. “We didn’t always have to be the first, but we always had to be the first to get it right,” s/he said.

The participants shared the opinion that the best format of news during the pandemic was either a straight news that informs or an explainer that helps readers understand. For science stories, the best format, according to the participants, was a well-researched in-depth story that contained information not limited to what was presented in the daily briefings.

Some participants regretted that they were unable to publish more explainers and in-depth stories because editors prioritized the coverage of daily breaking news. One participant, however opined that it was important for them to simply provide readers “the facts, statistics and then the (health protocol and quarantine) policies using straight news format” because the said information are important for the public to make personal decisions.

The participants also admitted that their coverage of the corona virus, the disease and its effects to patients mostly lacked deeper science context. They attributed this to the lack of available knowledge about the virus in the early stages of the pandemic, the limited access to peer-reviewed health journals that carried early research-based information about the virus, and the limited time they had for research and news gathering.

Asked about the use of images and videos in their stories, one participant shared that their newsroom used photos to add context to the story, for readers to

better understand the news content. Another participant noted that COVID news reports during the pandemic could have been more meaningful if reporters were able to “people” them had reporters been allowed go out and take videos and photos of people, e.g., healthcare workers and patients, and places, e.g., healthcare facilities or the places where patients were at.

For one participant, a good story is also sensitive and ethical. She underscored the importance of minimizing harm to COVID patients willing to be interviewed. S/he recalled that at the onset of the pandemic, patients were discriminated upon and bore the stigma attached to the disease. So as not to contribute to their burden, s/he said s/he ensured the people in her stories “feel safe.”

One participant shared that during the pandemic, s/he took his/her newsroom’s policy on breaking news to heart. S/he said s/he resisted the temptation to be the first to break a news if doing so would just add to the chaos. “That’s also how I made sure my stories were ethical, by being responsible,” she added.

The reporters acknowledged that their news reports during the pandemic were mainly “bad news” or negative information (i.e., lockdown, infection rate, death toll, full capacity hospitals, worse variant). To help readers deal with the negative effects of the pandemic, newsrooms then realized it was also important to provide the public with human interest stories. One participant shared that they started to publish “stories of hope” about patients who survived the COVID-19.

All participants underscored the importance of factual and accurate reporting during the pandemic, because the people were also dealing with the “infodemic” of false and misleading information about the virus, the disease, and its effects to patients. One participant said: “As much as possible, you would want your story to help them (with accurate and correct information) and not confuse them more.”

Looking at how the country's leading news outlets had covered the COVID-19 pandemic in retrospect, one participant mused that the country's news outlets should have focused more on the science of the COVID-19 as a science health story and less on the political aspect of the pandemic. S/he opined that science reporting could probably have been more impactful to the point that some crises such as the health and hospital care crises could have been minimized if not avoided.

Science Reportage During the Pandemic

This second section discusses the second core category of this study, the science reportage of the selected participants, the reporters from the Philippine's leading online news outlets -- the Inquirer.net, PhilStar.com, GMA News Online, Rappler.com, and ABS-CBN News Online, who covered the COVID-19 pandemic, at any given period from 2020-2022.

Qualitative evidence of their science reporting practice, i.e., characteristics of their stories, the voices privileged, the news themes prioritized, the news values highlighted in their news reports, and their journalism role performance as science reporters during the pandemic, were collected and analyzed to describe how the COVID-19 as an episodic news event was reported.

The selected participants reported on COVID-19 and the pandemic as part of their beat assignments during the covered period. They were assigned two or more government and non-government beats including education, Malacañang or Palace, the Senate, health, science and technology, energy, social works and services, information and communication technology, local government units, foreign affairs, religion, and general assignments.

Characteristics of News Stories

This first subsection discusses the characteristics of the pandemic-related news stories published by the selected participants during the covered period.

Almost 700 COVID-19 pandemic-related news stories they authored were examined using content analysis method to find out the characteristics of their news stories *(see Table 1. COVID-19 Pandemic News Stories).*

Table 1. COVID-19 Pandemic News Stories (N = 687)

News Outlets	Count	Percent
Rappler	185.00	26.93
Philstar	167.00	24.31
Inquirer	156.00	22.71
GMA News Online	144.00	20.96
ABS-CBN News Online	35.00	5.09

Since the participants were also assigned to other beats and published stories unrelated to the COVID-19 pandemic, some of their published stories during the covered period were not included in this study.

The stories included in this study were authored or co-authored by three journalists from Rappler (26.93%), two from Philstar.com (24.31%), and one each from Inquirer.net (22.71%), and ABS-CBN News Online (5.09%). All stories published in the SciTech Page of GMA News Online (20.96%) during the covered period, authored by several reporters and contributors, were included in this study.

Of the 687 COVID-19 pandemic related news stories published by the participants during the covered period, there were 434 (63.17%) science news stories related to COVID-19 *(see Table 2. Science News Stories).*

Table 2. Science News Stories (N = 434)		
News Outlets	Count	Percent
GMA News Online (N=144)	144.00	33.18
Philstar (N=105)	105.00	24.19
Rappler (N=102)	102.00	23.50
Inquirer (N=65)	65.00	14.98
ABS-CBN News Online (N=18)	18.00	4.15

Majority of the science news stories analyzed were placed in the SciTech section of GMA News Online (33.18%), in the Headlines, Nation and Business sections of Philstar.com (24.19), in the Nation and Life and Health sections of Rappler (23.5%). The rest came out in the Headlines, Nation, and Metro sections of Inquirer.net (14.98%) and in the News section of ABS-CBN News Online (4.15%).

The stories published in Inquirer.net and Philstar.com were also published in their counterpart flagship paper-based news outlets, the Philippine Daily Inquirer and Philippine Star.

In the case of ABS-CBN News Online and GMA News Online, some of the science news stories analyzed were repurposed versions of news stories already aired in their respective counterpart television news programs, TV Patrol and 24 *Oras*.

Story Types

About 60 percent of the pandemic-related news stories analyzed are in the form of straight news, usually a short piece with a simple news lead. The remaining 40 percent are in the form of news reportage, stories that contain more details for context *(see Table 3. COVID-19 Pandemic News Story Types).*

Table 3. COVID-19 Pandemic News Story Types (N = 687)

News Outlets	News Report	Percent	Reportage	Percent
Rappler (N=185)	178	96.22	7	3.78
Philstar (N=167)	93	55.69	74	44.31
Inquirer (N=156)	51	32.69	105	67.31
GMA News Online (N=144)	51	35.42	93	64.58
ABS-CBN News Online (N=35)	32	91.43	3	8.57
Totals	405.00	58.95	282.00	41.05

Most of the participants wished they could have written more in-depth and well researched stories but pointed out that doing so during the pandemic was quite challenging due to their daily workload – because they were also covering other beats – and lack of time for news gathering, difficulty in getting hold of trustworthy news sources, and limited news sources and resources on the news topic.

The distribution between news reports (55.07%) and reportage (44.93%) was slightly better when only their science news stories were included *(see Table 4. Science News Story Types).*

Table 4. Science News Story Types (N = 434)

News Outlets	News Report	Percent	Reportage	Percent
GMA News Online (N=144)	51.00	35.42	93.00	64.58
Inquirer (N=65)	27.00	41.54	38.00	58.46
Philstar (N=105)	50.00	47.62	55.00	52.38
ABS-CBN News Online (N=18)	15.00	83.33	3.00	16.67
Rappler (N=102)	96.00	94.12	6.00	5.88
Totals	239.00	55.07	195.00	44.93

Compared to news reports, there were more reportage pieces in GMA News Online (64.58%), Inquirer.net (58.46%), and Philstar.com (52.38%). Most of the

science news stories of ABS-CBN (83.33%) and Rappler (94.12%) were in the form of straight news reports.

The participants' archetypal ideas for a good science news report during the pandemic include using either a straight news format that informs, explains, and clarifies or a reportage, a well-researched, in-depth, informative, and explanatory piece that is accurate, sensitive, and ethical or does not cause undue harm to news sources (e.g., patients, public health activists, and healthcare workers) and to news readers or the public.

Story Packaging

Around two-thirds (65.6%) of the stories analyzed were accompanied by photographs, which indicates that despite the pandemic the news outlets were able to dispatch photojournalists *(see Table 5. COVID-19 Pandemic News Story Packaging).*

Table 5. COVID-19 Pandemic News Story Packaging (N = 687)

News Outlets (N=687)	W/ Photo	Percent	W/ Viz	Percent	W/ Video	Percent
Rappler (N=185)	185.00	100.00	6.00	3.24	3.00	1.62
Philstar (N=167)	154.00	92.22	-	-	4.00	2.40
Inquirer (N=156)	64.00	41.03	4.00	2.56	1.00	0.64
GMA News Online (N=144)	37.00	25.69	5.00	3.47	30.00	20.83
ABS-CBN News Online (N=35)	10.00	28.57	9.00	25.71	21.00	60.00
Totals	450.00	65.50	24.00	3.49	59.00	8.59

Rappler (100%) consistently used at least one photo for all its pandemic-related news stories analyzed for this study. A great majority of the pandemic related stories of Philstar.com (92.22%) also used photos. According to the participants, newsrooms used photos to add context to the story so that readers may be able to better understand the news.

Very few stories included visualizations (3.49%) and videos (8.59%) which could have made their news stories less text heavy and easier to understand. As expected, the news outlets of television networks, GMA News Online (20.83%) and ABS-CBN News Online (60%), used more videos.

The above can be said when it comes to the participants' science news stories, which were observed to have used more photos (60.37%) taken by photojournalists *(see Table 6. Science News Story Packaging).*

Table 6. Science News Story Packaging (N = 434)

News Outlets	W/ Photo	Percent	W/ Viz	Percent	W/ Video	Percent
Rappler (N=102)	102.00	100.00	2.00	1.96	3.00	2.94
Philstar (N=105)	100.00	95.24	-	-	2.00	1.90
GMA News Online (N=144)	37.00	25.69	5.00	3.47	30.00	20.83
Inquirer (N=65)	19.00	29.23	1.00	1.54	-	-
ABS-CBN News Online (N=18)	4.00	22.22	7.00	38.89	13.00	72.22
Totals	262.00	60.37	15.00	3.46	48.00	11.06

Of the 434 science news stories analyzed, only 15 news reports included visualizations (3.46%) and only 48 news reports were accompanied by a video (11.06%), which mostly came from the news outlets with television counterparts.

During the pandemic, reporters were issued IATF Press Cards that enabled them to travel albeit with some limitations based on prevailing quarantine guidelines. The reporters disclosed, however, that their newsrooms prevented them from covering onsite events until vaccines became available. From March 2020 to March 2021, the reporters were limited to covering live streamed online media events, briefings, and conferences.

Authorship

In more than 15 percent of the 687 COVID-19 pandemic related news stories analyzed, the participants shared authorship with other beat reporters assigned to different beats *(see Table 7. COVID-19 Pandemic News Report Authorship).* Being beat reporters covering areas exclusive to them, the participants said they hardly experienced shared bylines prior to the pandemic.

Authorship was shared with one or more reporters in either the byline, the credit line below the headline, or the tagline, the credit line at the end of the story. Tagline credit is usually given to reporters who contributed "inputs" to the news story of another beat reporter

Table 7. COVID-19 Pandemic News Report Authorship (N = 687)

News Outlets	Solo	Percent	Multiple	Percent
Inquirer (N=156)	109.00	69.87	47.00	30.13
Philstar (N=167)	119.00	71.26	48.00	28.74
GMA News Online (N=144)	139.00	96.53	5.00	3.47
Rappler (N=185)	181.00	97.84	4.00	2.16
ABS-CBN News Online (N=35)	35.00	100.00	-	-
Totals	583.00	84.86	104.00	15.14

Inquirer.net (30.13%) and Philstar.com (28.74%), the online news outlets of the country's top paper-based news outlets, featured more stories with multiple authors compared to GMA News Online (3.47%) and Rappler.com (2.16%). There were no multiple-authored news stories in ABS-CBN News Online analyzed for this study.

The multiple-authored news stories published during the covered period were merged stories individually submitted by the participants. During the pandemic -- when many beat reporters were covering the same live-streamed online press events attended by various news sources from their respective beat assignments -- editors in

the newsroom merged several related stories into a single story featuring multiple authors in the byline credit line.

For the participants' science stories, shared authorship dropped to less than 12 percent, with Inquirer.net (30.77%) and Philstar.com (22.86%) still having the highest number of multiple-authored news reports *(see Table 8. Science News Report Authorship).*

Table 8. Science News Report Authorship (N = 434)

News Outlets	Solo	Percent	Multiple	Percent
Inquirer (N=65)	45.00	69.23	20.00	30.77
Philstar (N=105)	81.00	77.14	24.00	22.86
GMA News Online (N=144)	139.00	96.53	5.00	3.47
Rappler (N=102)	100.00	98.04	2.00	1.96
ABS-CBN News Online (N=18)	18.00	100.00	-	-
Totals	383.00	88.25	51.00	11.75

During the pandemic, news outlets practiced what the participants described as "barangay byline," a credit line showing several names of reporters who contributed to the story in the byline credit line.

One participant explained this practice came about when several reporters covering different beats began to converge in a single live-streamed online media event such as the *Laging Handa* press briefings of the IATF.

Prior to the pandemic, the newsroom practice was to give byline credit only to the main author or authors, usually one to two reporters who collaborated on the story, and the rest who contributed "input information" would only receive tagline credit.

Provenance of News Stories

This second subsection discusses the provenance, or sources of news information tapped by participants during the pandemic to determine the voices privileged by their news stories. News provenance may include the influential elites like politicians, government officials, and businesses who use media for their information dissemination needs.

Majority of the pandemic related news stories analyzed for this study used news sources connected with the government (85.59%), which means that majority of the news content read by the public during the pandemic mostly came from the government and less from the private sector (34.50%), an indication that the voices and points of views privileged by the five news outlets during the pandemic were mostly those of the government *(see Table 9. COVID-19 Pandemic News Source Categories).*

Table 9. COVID-19 Pandemic News Source Categories (N = 687)

News Outlets	Govt	Percent	Non-govt	Percent
Rappler (N=185)	175.00	94.59	30.00	16.22
Philstar (N=167)	140.00	83.83	43.00	25.75
Inquirer (N=156)	124.00	79.49	78.00	50.00
GMA News Online (N=144)	118.00	81.94	64.00	44.44
ABS-CBN News Online (N=35)	31.00	88.57	22.00	62.86
Totals	588.00	85.59	237.00	34.50

Only 237 pandemic related news stories, out of 687, used news sources from the private sector (34.5 %). This includes social movements and news topic experts such as scientists, research groups, the academe, and ordinary citizens.

Some of them include officials and spokespersons from the Philippine College of Physicians, Philippine Hospital Association of the Philippines, Inc., Philippine

Alliance of Patients Organization, Senior Citizens Right Advocate, Pitmaster Foundation, Project ARK, Ecowaste Coalition, International Organization for Migration, Rotary International, and Laban Konsyumer.

For the science stories published by the participants, the ratio is similar. Majority also used news sources connected with the government (85.71%), and more than one third (33.41%) also featured news sources from the private sector *(see Table 10. Science News Source Categories).*

Table 10. Science News Source Categories (N =434)

News Outlets	Govt	Percent	on Govt	Percent
GMA News Online (N=144)	118.00	81.94	64.00	44.44
Rappler (N=102)	96.00	94.12	15.00	14.71
Philstar (N=105)	84.00	80.00	34.00	32.38
Inquirer (N=65)	56.00	86.15	18.00	27.69
ABS-CBN News Online (N=18)	18.00	100.00	14.00	77.78
Totals	372.00	85.71	145.00	33.41

The government sources most frequently cited for the participants' science stories were officials and scientists from the Department of Science and Technology (30.18%), including officials from the Philippine Council for Health Research and Development and the Food and Nutrition Research Institute, both of which were involved in several research initiatives on virgin coconut oil as a possible COVID-19 remedy *(see Table 11. News Sources Most Frequently Cited in Science News).*

The second most frequently cited news source in the participant's science stories were officials from the Department of Health (26.49%), including officials from the Food and Drug Authority, the role of which became even more important in ensuring the safety of COVID-19 vaccines.

The third most frequently cited news source in the participant's science stories were the President and other officials from his Office, the Office of the President (11.98%), and officials from local government units (11.98%), whose leadership roles became indispensable in implementing the government's guidelines and responses to the COVID-19 pandemic.

Table 11. News Sources Most Frequently Cited in Science News (N=434)

News Sources	Count	Percent
Department of Science and Technology	131	30.18
Department of Health	115	26.50
Office of the President	52	11.98
Local Government Units	52	11.98
Department of Education	39	8.99
Legislative Branch (Senate & Lower House)	30	6.91
OCTA Research Institute	27	6.22
Department of Social Work and Development	24	5.53
Virgin Coconut Oil Manufacturers and Traders	17	3.92
Healthcare Providers	16	3.69
World Health Organization	13	3.00
Law Enforcement (Police & Military	13	3.00

Of the top 12 most frequently cited news sources, three are not connected with the Philippine Government, the OCTA Research Institute (6.22%), Virgin Coconut Oil Producers and Traders (3.92%), and the World Health Organization (3%). The news sources from the healthcare industry (3.69%) quoted by the participants were related with either private or public hospital such as the UP-Philippine General Hospital.

Types of News Sources

The participants' news sources during the pandemic can be grouped into three types. The first type are expert news sources (85.59%) or persons in authority,

government officials, politicians, businessmen, scientists, and the academe; the second type are witnesses (34.35%) or ordinary citizens who have direct knowledge to a news event or news topic; and the third type are documents (21.98%) which include official records, research publications, traditional and new media platforms, and press statements *(see Table 12. COVID-19 Pandemic News Source Types).*

Table 12. COVID-19 Pademic News Source Types (N = 687)

News Outlets	Expert	Percent	Witness	Percent	Document	Percent
Rappler (N=185)	175.00	94.59	32.00	17.30	24.00	12.97
Philstar (N=167)	138.00	82.63	44.00	26.35	12.00	7.19
Inquirer (N=156)	126.00	80.77	75.00	48.08	69.00	44.23
GMA News Online (N=144)	118.00	81.94	64.00	44.44	39.00	27.08
ABS-CBN News Online (N=35)	31.00	88.57	21.00	60.00	7.00	20.00
Totals	588.00	85.59	236.00	34.35	151.00	21.98

The participants disclosed that since the news topic was unfamiliar to them and since many government offices became more accessible as afforded by ICT tools during the pandemic, their stories featured more scientists, policy and decision makers, and officials of health-oriented organizations compared to patients and “man-on-the-street” type of news sources.

When only their science news reports are considered, the result is somewhat similar. Expert news sources were used in 85.71 percent of their science news stories; 33.64 percent are witnesses and 20.51 percent are from texts in the form of written documents, audio, or video *(see Table 13. Science News Source Types).*

Table 13. Science News Source Types (N = 434)						
News Outlets	Expert	Percent	Witness	Percent	Document	Percent
GMA News Online (N=144)	118.00	81.94	64.00	44.44	39.00	27.08
Rappler (N=102)	96.00	94.12	17.00	16.67	11.00	10.78
Philstar (N=105)	83.00	79.05	35.00	33.33	3.00	2.86
Inquirer (N=65)	57.00	87.69	17.00	26.15	30.00	46.15
ABS-CBN News Online (N=18)	18.00	100.00	13.00	72.22	6.00	33.33
Totals	372.00	85.71	146.00	33.64	89.00	20.51

The participants said they used social media, e.g., Twitter and Facebook, Messaging Tools, and chat groups, to get hold of expert sources. The expert news sources they tapped identified themselves as public health advocates, infectious disease specialists, public health professors, math professors, molecular biologists, and healthcare professionals.

Diversity of News Sources

The participants turned in more single sourced stories (56.33%) during the pandemic compared to multiple sourced stories (43.67%), which indicates a more flexible newsroom policy on the number of news sources to be used for their pandemic related news reports *(see Table 14. COVID-19 Pandemic News Source Diversity).*

Table 14. COVID-19 Pandemic News Source Diversity (N = 687)

News Outlets	Single	Percent	Multiple	Percent
Rappler (N=185)	123.00	66.49	62.00	33.51
Philstar (N=167)	101.00	60.48	66.00	39.52
Inquirer (N=156)	82.00	52.56	74.00	47.44
GMA News Online (N=144)	74.00	51.39	70.00	48.61
ABS-CBN News Online (N=35)	7.00	20.00	28.00	80.00
Totals	387.00	56.33	300.00	43.67

The participants disclosed that their newsroom policy is to turn in at least double-sourced stories to present at least two sides of the news. One participant, however, pointed out that the double sourcing newsroom policy cannot be strictly enforced because there are stories, the non-controvesial ones like most science and technology stories, that do not have two sides to it.

For their science news reports, it was found out that the participants likewise published more single sourced news stories (56.91%) compared to multiple sourced stories (43.09%), which may also indicate a less strict implementation of double sourcing policy for their science news reports *(see Table 15. Science News Source Diversity).*

Table 15. Science News Source Diversity (N=434)

News Outlets	Single	Percent	Multiple	Percent
GMA News Online (N=144)	74.00	51.39	70.00	48.61
Rappler (N=102)	67.00	65.69	35.00	34.31
Philstar (N=105)	62.00	59.05	43.00	40.95
Inquirer (N=65)	42.00	64.62	23.00	35.38
ABS-CBN News Online (N=18)	2.00	11.11	16.00	88.89
Totals	247.00	56.91	187.00	43.09

ABS-CBN News Online (88.89%) and GMA News Online (48.61), the online news outlets of TV networks, more frequently used multiple-sourced stories in their COVID-19 science news stories compared to Philstar.com (40.95%), Inquirer.net (35.38%) and Rappler (34.31%).

Themes of News Stories

This third subsection discusses the pandemic related news theme or topics that emerged in the participants' news stories from 2020 – 2022. About 700 pandemic related news articles published in the five online news outlets were analyzed to find out the pandemic related and science news themes they prioritized.

Pandemic Related News Themes

After a careful textual analysis of the participants' 687 COVID-19 pandemic related news reports using axial and selective coding, six pandemic news themes emerged *(see Table 16. COVID-19 Pandemic News Themes).*

Table 16. COVID-19 Pandemic News Themes (N = 687)

Categories of Themes	Count	Percent
Science	434	63.17
Political Policy	293	42.65
Pandemic Impact	82	11.94
Education	76	11.06
Migrant Workers & Foreign Affairs	38	5.53
Community and Culture	18	2.62

The participants' top three pandemic news themes were *science news,* news stories on science, technology, medicine, and health (63.17%); *political policy* on health, news stories focused on guidelines and actions adopted by the government during the pandemic (42.65%), and *pandemic impact*, stories that focused how Filipinos were affected and how government and non-government institutions responded to the pandemic (11.94%).

Other news themes that emerged from their pandemic news coverage were *education,* mostly focused on the need for the education sector to safely carry out its education mandate despite the pandemic (11.6%); *migrant workers and foreign affairs*, focused on migrant worker concerns, geopolitical news, and diplomacy (5.53%); and *culture and community,* the stories of hope, bayanihan (heroism), and volunteerism (2.62%).

The political policy news themes found in the participants' news stories were mainly focused on national policies, protocols, and ordinances related to local and international travel, public transport, curfews and lockdowns, police checkpoints, contact tracing, disinfection and sanitation, quarantine and quarantine facilities, suspensions and closure of schools, offices and malls, cancellation of events and gatherings, mass testing, vaccination or population immunity, public health spending, social protection and cash assistance, and economic stimulus.

The pandemic impact news themes were mainly focused on the negative effect of the pandemic on the vulnerable sector of the population greatly affected by the lockdowns, closure of their livelihood, and unavailability of public transport as well as the government and non-government responses to their concerns such as relief food packages, cash aids or assistance, medical assistance, private sector donations, and online mental health counselling.

The education news themes mainly focused on the safety and wellness of learners and educators during the pandemic. Stories were mostly about the challenges and debates over remote learning, resumption of face-to-face learning, the alleged misuse of government funds in the procurement of laptops for remote learning, and the protection of the overall wellbeing of learners and teachers.

A few actors in the above news narrative came from the Movement for Safe, Equitable, Quality and Relevant Education, Save the Children Philippines, Coordinating Council of Private Educational Associations, Teacher's Dignity Coalition, National Union of Students of the Philippines (NUSP), and Alliance of Concerned Teachers. From the government side, the main actors were the Department of Education and the Council for the Welfare of Children.

Because the COVID-19 pandemic was also a cross-border news topic, there were also news stories relating to migrant workers and foreign affairs (5.53%). The news stories under this theme were mainly focused on stories about Overseas Filipino Workers getting infected by the virus and their immediate and safe repatriation to the country. Other stories also focused on international travel restrictions and guidelines as well as stories that touched on corona virus conspiracy theories and xenophobia.

A few news reports also featured positive stories of heroism (*bayanihan)*, of hope, of faith, and of rituals that reflect Filipinos' sense of community amid the pandemic, which are labeled in this study as community and culture news themes (2.62%). The participants pointed out that because of concern for their readers who were already flooded with negative information, both from the news and social media, they then began to feature positive stories.

Because the participants were not assigned to the same beats during the pandemic, the themes they focused on were also not the same *(see Table 17. Comparative Data on Pandemic News Stories).*

Table 17. Comparative Data on Pandemic News Themes

Top 3 News Themes	Science News		Political Policy		Pandemic Impact	
News Outlet	Count	%	Count	%	Count	%

Inquirer (N=156)	65.00	41.67	92.00	58.97	35.00	22.44
PhilStar (N=167)	105.00	62.87	21.00	12.57	30.00	17.96
GMA News Online (N=144)	144.00	100.00	38.00	26.39	1.00	0.69
Rappler (N=185)	102.00	55.14	121.00	65.41	12.00	6.49
ABS-CBN News Online (N=35)	18.00	51.43	21.00	60.00	4.00	11.43
News Outlets (N=687)	434.00	63.17	293.00	42.65	82.00	11.94

Bottom 3 News Themes	Education		Migrant Workers/ Foreign Relations		Culture & Community	
News Outlet	Count	%	Count	%	Count	%
Inquirer (N=156)	36.00	23.08	-	-	7.00	4.49
PhilStar (N=167)	33.00	19.76	3.00	1.80	2.00	1.20
GMA News Online (N=144)	-	-	-	-	2.00	1.39
Rappler (N=185)	6.00	3.24	33.00	17.84	4.00	2.16
ABS-CBN News Online (N=35)	1.00	2.86	2.00	5.71	3.00	8.57
News Outlets (N=687)	76.00	11.06	38.00	5.53	18.00	2.62

Political policy was the news theme prioritized by Inquirer.net (58.97%, see *Table 2. COVID-19 Pandemic News Themes - Inquirer in Appendix F, p. 172*), Rappler (65.41%, *see Table 3. COVID-19 Pandemic News Themes - Rappler in Appendix F , p172*), and ABS-CBN News Online (60%, *see Table 4.COVID-19 Pandemic News Themes - ABS-CBN News Online in Appendix F, p.173)* partly because the participants also covered politics and government beats during the pandemic. The participants from ABS-CBN News Online and Inquirer.net covered the local government units, while Rappler's reporter covered the national government.

All participants from Inquirer.net, ABS-CBN News Online, and Rappler never considered themselves science writers. They disclosed they became science

reporters only when they were assigned to report on COVID-19 during the pandemic. As a result, science news became their second most prioritized pandemic news theme. Of their respective total pandemic related news stories published during the period, science news theme was 41.67% for Inquirer.net, 54.59% for Rappler, and 51.53% for ABS-CBN.

Education was the number three theme prioritized in Inquirer.net (23.08%), migrant workers and foreign affairs in Rappler (17.84%), and pandemic impact in ABS-CBN News Online (11.43%), because the selected participants were at some period during the pandemic also assigned to cover those topics.

For GMA News Online, all news stories analyzed were science news stories published in its SciTech page. The news outlet's second most prioritized theme is political policy (26.39%), telling evidence that science news during the pandemic was not separate from politics *(see Table 5. COVID-19 Pandemic News Themes – GMA News Online in Appendix F, p. 173).*

Science news (62.87%) and education (19.76%) were the most and second most prioritized themes in Philstar.com *(see Table 6. COVID-19 Pandemic News Themes – Philstar in Appendix F, p.173).* This can be expected because the participants, who were also assigned to cover other beats including education and health during the pandemic, consider themselves science writers or reporters and were already covering the science beat even before the pandemic.

Science News Themes

Science stories comprised the majority of the participants' pandemic related news stories. After a careful textual analysis of their 434 COVID-19 science news

stories using axial and selective coding, 14 deeper science news themes emerged *(see Table 18. COVID-19 Science News Themes).*

Table 18. Covid-19 Science News Themes (N = 434)

Categories	Count	Percent
Science-based Responses	112	25.93
Patient Care	111	25.69
Surveillance (Testing & Diagnostics)	87	20.14
Healthcare System	86	19.91
Preventive Policy Responses	80	18.52
Safe Public Spaces Protocols	73	16.90
Vaccine Supply	71	16.44
Vaccination (Population Immunity)	47	10.88
Origin, Mutation & Variants	29	6.71
Med Equipment and Supplies	22	5.09
ICT Rollout and Utilization	19	4.40
Vaccine Hesitancy	13	3.01
Psychosocial Support	13	3.01
Medical Waste Disposal	3	0.69

The science news themes that emerged from their news reportage are the more relevant and urgent science related public concerns during the pandemic.

- *Science-based Responses and Solutions (25.93%)* -- the need for science-based knowledge and solutions such as the use of statistical data to inform the pandemic responses of national government and LGUs and the use of researched-based healthcare practices by the country's healthcare system and the public.
- *Patient Care (25.59%)* - the need to provide Filipinos alternative and more accessible patient care, protection from, and treatment for COVID-19.

- *Surveillance - Testing and Diagnostics (20.14%)* - the need for accessible, safe, and reliable COVID-19 tests kits, for more testing centers, diagnostic facilities, and sequencing facilities to tract the virus.
- *Healthcare System (19.91%)* - the need to address the capacity and capability of the country's healthcare system, i.e., hospital capacity, supply of healthcare workers, and safety and support for healthcare workers.
- *Preventive Responses (18.52%)* - the need for immediate and appropriate responses to the pandemic to reduce infection or viral reproduction, i.e., contact tracing, use of plastic barriers and masking, physical distancing, school and work suspensions, work from home, sanitation, religious services protocols, and individual behavior changes so as not to put others at risk.
- *Safe Public Spaces (16.9%)* - the need to limit the movement of people to keep public spaces safe for all, i.e., the enforcement of effective community quarantine policies, e.g., isolation, self-quarantine, CQ, ECQ, MECO, "lockdowns" and curfews; quarantine facilities, international and domestic travel bans; bans on “mass gatherings” such as public demonstrations and family reunions.
- *Vaccine Supply (16.44%)* - the need for adequate and accessible supply of safe and efficacious COVID-19 vaccines.
- *Population Immunity or Vaccination (10.88%)* - the need for COVID-19 mass vaccination or population immunity towards achieving herd immunity.
- *Origin, Mutation and Variants (6.71%)* - the need for knowledge about the viral disease, the nature – genomics – virus, its causes, symptoms, and effects, how it spreads, how it can be contained, its origin, mutation, and variants.

- *Medical Equipment and Supplies (5.09%)* - the need for adequate and accessible medical supplies and protective equipment such as masks and PPEs, swab booths for healthcare workers.
- *Information and Communication Technology Rollout and Utilization (4.4%)* - the need for accessible ICT solutions for safe and more efficient delivery of government services and healthcare services, and to enable remote learning, work from home, and business processes.
- *Vaccine Hesitancy (3.01%)* - the need to recognize and appropriately address COVID-19 vaccine hesitancy among Filipinos.
- *Psychosocial Support (3.01%)* - the need to provide psychosocial support for Filipinos during the pandemic, e.g., medical workers, government frontliners, and remote learners and teachers.
- *Medical Waste Disposal (.69%)* - the need for proper disposal of used face masks, personal protective equipment (PPE), and other medical waste so as not to endanger public health.

Majority of the participants' science news stories focused on two science news themes: science-based responses and solutions (25.93%) and patient care (25.69%).

Science-based responses were their top news theme because many participants almost always included statistical data about COVID 19 in their news reports. This is consistent with their expressed objective of providing readers, which include policy makers and decision makers both at the national and local government levels, with information they can use to make informed policy decisions

The overall increase in the number of stories on patient care can be attributed to the increased frequency of news coming from the Department of Science and

Technology, which pushed and funded several research projects in support of the country's search for alternative and more accessible remedies for patient care, protection from, and treatment for COVID-19 such as those involving the use of virgin coconut oil, Tawa-tawa, and Lagundi.

Under the patient care science news theme, there were also news stories citing some DOST officials as news sources about the use of blood plasma, an antiparasitic drug called ivermectin, and an antiviral drug called remdesivir, to name a few, as possible cures for COVID-19.

Surveillance - testing and diagnostics (20.14%) became an important topic amid calls for mass testing from health activists; healthcare system (19.91%) gained heightened attention when its capacity to respond became stretched at the height of the pandemic; preventive responses (18.52%) gained prominence as a result of the numerous behavior change campaigns and initiatives of the government and the public sector to reduce COVID-19 infection and viral reproduction; safe public spaces (16.90%), the measures implemented by the government to limit the movement of people and to keep public spaces safe became important as the government grappled for ways to contain the spread of the virus; and vaccine supply (16.44%) became important because of urgent need for the government to secure enough supply of vaccines for the country.

Population immunity (10.88%) was discussed in the public sphere amid concerns on who gets to be included in the COVID-19 vaccination priority list and how LGUs would ensure that said list was to be strictly followed, concerns about public officials, e.g., Chief of the Public Attorney's Office (PAO) Persida Acosta, who was reported to have refused vaccination, the use of institutional vaccine tracers which courted disagreements due to data privacy and discrimination issues, the need to hire

more vaccinators, e.g., post-graduate and undergraduate interns, clinical clerks, graduating medical students and nursing graduates and for more vaccinations sites, the need convince vaccinated individuals to return to complete their doses, and the need to achieve inoculation targets to catch-up to world vaccination pace and to use vaccines before they expire.

Some government efforts were also highlighted. These include the DOST-supervised Philippine-World Health Organization (WHO) “Solidarity Trials for COVID-19 Vaccines (STV)”, DOST’s research initiatives to look into the effectiveness of the nationwide vaccination program as well as the reliability of “mix and match” of vaccines, and VaxCertPH set up by the DICT for the issuance of vaccination certificates has been updated with added security features and information on booster shots received and complies with World Health Organization certificate issuance standards.

Themes on origin, mutation, and variants (e.g., the UK and South African variants) were discussed in the public sphere in the context that they could potentially undermine the vaccination program of the Government. Some called for the strengthening of biosurveillance in Metro Manila which quickly became the “epicenter” of the surge driven by the fast-spreading Omicron variant. News stories also focused on the P.3 variant which was first identified in the Philippines as well as on the concern that another variant, the Delta variant which was found to stay airborne for a longer time, could make COVID-19 spread more quickly.

Because the participants’ areas of coverage and professional experience are not the same, the science news themes they focused on were also diverse *(see Table 19. Comparative Data on Science News Themes).*

Table 19. Comparative Data on Science News Themes

	Inquirer		Philstar		GMA		Rappler		ABS-CBN	
Categories	n65	%	n105	%	n144	%	n102	%	n18	%
Patient Care	4	6.15	44	41.90	51	35.42	9	8.82	3	16.67
Vaccine Supply	5	7.69	23	21.90	35	24.31	6	5.88	2	11.11
Population Immunity	8	12.31	14	13.33	10	6.94	3	2.94	12	66.67
Vaccine Hesitancy	0	0.00	8	7.62	2	1.39	0	0.00	*3*	16.67
Surveillance	22	33.85	8	7.62	12	8.33	40	39.22	5	27.78
Med Equipment &Supplies	4	6.15	2	1.90	5	3.47	11	10.78	0	0.00
Psychosocial Support	3	4.62	6	5.71	0	0.00	3	2.94	1	5.56
Preventive Policy Responses	27	41.54	8	7.62	13	9.03	26	25.49	7	38.89
ICT Rollout and Utilization	3	4.62	8	7.62	5	3.47	3	2.94	0	0.00
Medical Waste Disposal	1	1.54	1	0.95	0	0.00	0	0.00	1	5.56
Healthcare System	19	29.23	5	4.76	2	1.39	52	50.98	8	44.44
Safe Public Spaces Protocols	28	43.08	5	4.76	7	4.86	30	29.41	4	22.22
Science-based Responses	2	3.08	9	8.57	47	32.64	42	41.18	12	66.67
Origin, Mutation & Variants	0	0.00	4	3.81	18	12.50	1	0.98	6	33.33

Philstar.com extensively published the most stories on the COVID-19 research programs funded by the DOST (patient care, 41.90%) and closely followed and reported on the Government's COVID-19 vaccine strategy and population immunity program (vaccine supply, 21.90% and vaccination or population immunity, 13.33%), *(see Table 2. COVID-19 Science News Themes – Philstar in Appendix G, p.174)*

The news outlet published 30 science news stories on virgin coconut oil, seven news stories on Tawa-tawa, and three news stories on Lagundi. Other possible remedies or COVID-19 cures reported on by Philstar.com were blood plasma, melatonin, an antiparasitic drug called ivermectin, an antimalarial drug called hydroxychloroquine, and some antiviral medicines called remdesivir, lopinavir-ritonavir, and favipiravir. Under the same category, there were also reports on the DOST-funded research and development project for OstreoVent Ventilator for COVID-19 patients.

Patient care (35.42%) was also the top science news theme of GMA News Online, followed by science-based responses (32.64%), and vaccine supply (24.31%), *(see Table 3. COVID-19 Science News Themes – GMA News Online in Appendix G, p. 175).* It published 17 stories on virgin coconut oil, eight news stories on Lagundi, six news stories on Ivermectin. Compared to Philstar.com, GMA News Online published more stories on Ivermectin, a politicized science news topic in the second and third quarter of 2021. Other COVID-19 remedies or cures reported on by GMA News Online are Tawa-tawa, blood plasma, melatonin, some antiviral medicines including molnupiravir, a costicosteroid medicine called dexamethasone, and oseltamivir + lopinavir + ritonavir.

The above results – where patient care was the top science news theme for Philstar.com ang GMA News Online – can be attributed to the fact that the participants have been science writers or reporters with established expert science news sources even before the pandemic.

In contrast, the reporters from Inqurier.net, Rappler, and ABS-CBN News Online, the research participants who became science reporters only during the pandemic, focused more on political health policy implemented by the national government and local government units during the pandemic.

The above result can be expected because the participants did not have previous experience nor formal training in science reporting prior to the pandemic. Also, they were assigned to other beats during the pandemic, which included national government offices such as the Palace and local government units including Metro Manila and Greater Metro Manila Area. Their news sources were not only science and health experts and activists from the private sector but also local and national politicians, local government administrators, and national and local health officials.

Furthermore, compared to the participants from Philstar.com and GMA News Online who have been writing for the science pages of their respective news outlets prior to the pandemic, the participants from the tree news outlets (Inqurier.net, Rappler, and ABS-CBN News Online) were less focused on context-rich science and health stories about COVID-19 but were more focused on "breaking news" related to pandemic health policy.

One participant disclosed that during the pandemic, their editors were less interested in context-rich science stories that took time and were more difficult to produce. Reporters were more expected to immediately report on breaking news that have urgent nationwide impact or relevance.

The top four themes in the science news stories of the participant from Inquirer.net were safe public spaces (43.08%), preventive responses (41.54%), surveillance: testing and diagnostics (33.85%), and healthcare system (29.23%), which suddenly became an urgent topic especially at the heigh of the *pandemic (see Table 4. COVID-19 Science News Themes – Inquirer in Appendix G, p. 175).* It should be noted that the participant, having been a beat reporter who has established news sources in government offices and government units, focused more on the policy aspect of the pandemic and less on its science.

The same can be said for the participants from Rappler and ABS-CBN News Online. Both were also assigned to several government beats and general assignments.

In Rappler, the top five science news themes were healthcare system (50.98%), science-based responses (41.18%), and surveillance: testing and diagnostics (39.22%), safe public spaces (29.42%), and preventive responses (25.49*%), (see Table 5. COVID-19 Science News Themes – Rappler in Appendix G, p. 176).*

The top three science news stories of the participant from Rappler also relate to his/her watchdog function which mostly focused on criticizing the government for reported delays in meeting its testing and population immunity target as well as some alleged irregularities in the health department *(see Table 2. Watchdog Role Performance-Rappler in Appendix K, p.183).*

For ABS-CBN News Online, its top three science news themes were population immunity (66.67%), or stories featuring or derived mostly from vaccination sites, science-based responses (66.67%) or stories derived from data analytics, and healthcare system (44.44%) or stories focused on public health concerns during the pandemic such as hospital occupancy and healthcare workers' benefits, *(see Table 6. COVID-19 Science News Themes – ABS-CBN News Online in Appendix G, p.176).*

News Values of Science News Stories

This fourth and last subsection looks closely into the COVID-19 science news stories authored by the selected participants to determine the news values they highlighted in their science news reports as part of their storytelling techniques during the pandemic.

News values, the attributes and qualities of news stories that make them "different and more valuable than other content in the media universe" (American Press Institute, n.d.), are measures of newsworthiness of journalistic articles. Their presence or absence in a piece determine whether they are publishable or not in specific pages or sections of news outlets such as science pages or sections.

After a careful textual analysis of the participants' 434 COVID-19 science news stories using axial and selective coding, following are the news values that emerged: relevant science news topics, connects to deeper science themes, explores tension or

disagreements, empowers readers, captures emotions, and context-rich news stories, or stories that contain enough background and more details about the news topic.

News Values Highlighted

All stories analyzed for this subsection are the participants' COVID-19 science news stories with relevant science news topics or information that impacts readers, *(see Table 20. News Values of COVID-19 Science News Stories).*

Table 20. News Values of Covid-19 Science News Stories

News Story Attributes	Count (N=434)	Percent
Relevant Science Topic	434.00	100.00
Connects to Deeper Themes	417.00	96.08
Explores Tension	91.00	20.97
Empowers Readers	87.00	20.05
Context-Rich	69.00	15.90
Captures Emotion	27.00	6.22

A great majority or 96.08 percent of the participants' science news stories analyzed in this study mostly connected to deeper science themes *(Refer: Science News Themes, p. 96),* providing readers with relevant science news stories gathered mostly from government news sources that needed the media to inform the public of their COVID-19 pandemic responses *(Refer: Provenance of News Stories, p.84).*

The above is consistent with their expressed service role orientation of providing "clear, correct, and accurate information" readers needed to know to make timely and informed decisions during the pandemic.

Consistent with watchdog role orientation, the participants were also inclined to either explore tension (20.97%) by publishing stories with controversial news topics that depict disputes, disagreements, or conflict during the pandemic. Consistent with

their expressed service role intention, they also provided readers useful or empowering pieces information (20.05%) they can use in dealing with the pandemic.

The participants published less context-rich science stories (15.90%) that included more background information about the news and lesser positive and emotionally engaging news stories or the stories that tend to appeal or capture readers' emotions (6.22%).

The participants regretted that due to factors beyond their control, they were unable to publish more context rich science stories because they more expected to report on breaking news, but this did not prevent them from giving readers important information readers could use.

At some point at the height of the pandemic, they realized that part of what they could do for their readers -- to minimize harm caused by the infodemic and bombardment of negative COVID-19 news -- was to also publish positive and emotionally engaging news stories or the stories that tend to appeal or capture readers' emotions such as stories of heroism and hope *(Refer: Archetypal ideas for a Science News Story, p.74).*

Not all the science news stories published by the participants connected to the 14 deeper science news themes *(see Table 21. Comparative Data on the News Values of COVID-19 Science News Stories).*

Table 21. Comparative Data on News Values of Covid-19 Science News Stories

	Inquirer		PhilStar		GMA		Rappler		ABS-CBN	
News Story Attributes	n65	%	n105	%	n144	%	n100	%	n18	%
Relevant Science News Topic	65.00	100.00	105	100.00	144	100.00	102.00	100.00	18.00	100.00

Connects to Deeper Themes	61.00	93.85	105	100.00	134	93.06	99.00	97.06	18.00	100.00
Context-Rich News	12.00	18.46	30	28.57	15	10.42	9.00	8.82	5.00	27.78
Empowers Readers	39.00	60.00	10	9.52	24	16.67	10.00	9.80	4.00	22.22
Explores Tension	16.00	24.62	10	9.52	27	18.75	39.00	38.24	1.00	5.56
Captures Emotion	5.00	7.69	5	4.76	11	7.64	3.00	2.94	3.00	16.67

All science news stories published in Philstar.com *(see also Tables 2. News Values of COVID-19 Science News Stories- Philstar in Appendix H, p.177)* and ABS-CBN News Online (see also *Table 3. News Values of COVID-19 Science News Stories - ABS-CBN News Online in Appendix H, p.177)* were relevant science news topics that connected to at least one of the 14 science news themes previously discussed (*Refer: Science News Themes, p.96).*

Only about a third of the science news stories published by the participants in Philstar.com were found to be context-rich (28.57%) or stories that contained extensive related background information about the news topic.

These context-rich stories were either science and technology or health stories, some of which were news stories on the Senate inquiry on the country's alleged "poor contact tracing" that resulted in blame game among government actors, virgin coconut oil as food supplement or anti-viral remedy, ivermectin as a cure, Lagundi as adjunct treatment, the feared backlog in supply and need to locally produce face masks, the call for blood plasma donation, the case of the locally made test kit, the heightened need for mental health services, the country's urgent vaccination program, clinical trials and mix-and-match vaccine studies, the need to address vaccine hesitancy, and some important statistical data from OCTA Research.

More than one fourth of the science news stories authored by the participant from ABS-CBN News Online were context-rich (27.78%), less than a fourth empowers readers (22.22%), only three out of 18 appealed to human emotion (16.67%), and only 1 story explored tension. The situation of ABS-CBN during this time was quite unique because it was vying for the renewal of its Congressional franchise which eventually expired on 4 May 2020.

The context-rich stories of the participant from ABS-CBN News Online were all health stories. These include science news stories on COVID-19 infection, reproduction, and mortality, the overwhelmed healthcare providers, and the tension on why the country was still on a state of calamity when the country could already start going back to normalcy.

Unlike in the case of PhilStar and GMA News Online, there were few relevant COVID-19 science news stories published by the participants in GMA News Online (10 stories out of 144), Inquirer (4 stories out of 65), and Rappler (3 stories out of 102), that did not connect to at least one of the 14 deeper science news themes previously discussed but were nonetheless newsworthy COVID-19 science stories that discussed news themes of lesser significance.

In contrast to the case of ABS-CBN News Online, where the science news stories authored by the participant hardly explored tension for his/her news values during the period, the third most highlighted news values in the stories of the participants from Rappler (38.24%, *see Table 3. News Values of COVID-19 Science News Stories – Rappler in Appendix H, p177)* and GMA News Online (18.75%, *see Table 5. News Values of COVID-19 Science News Stories - GMA News Online in Appendix H, p.178)* is tension or disagreement of news sources about certain news topics.

Some of the stories authored by the participant from Rappler that depicted tension news values were about:

- the President who failed to go on self-quarantine as other exposed officials did; the need for Palace officials to assure the public that the President is "fit and healthy to perform" his duties; the fuss about a solon who allegedly breached Palace COVID-19 protocols; the President rejecting the resumption of face-to-face classes being pushed by the Department of Education; the President defending a Health Secretary who was to be investigated by the Office of the Ombudsman; and the President threatening hospitals, already experiencing limited number of beds to care for patients, for allegedly not accepting COVID-19 patients;
- the DOH – which approved only the use of RT-Polymerase Chain Reaction based test kits – rejecting the use of rapid test kits amid calls for mass testing, the President ordering their purchase despite the lack of DOH guidelines; the government's inability to meet its mass testing target; DOH's alleged "issues regarding accuracy and timelines of COVID-19 data" which mislead even government officials; DOH condemned for ordering the deployment of health professionals to Cebu City without consultation; and DOH clarifying that home quarantine for mild cases "should be allowed", contradicting a Cabinet Secretary, and
- the "*bayani"* or hero and "lucky to die" healthcare workers – reportedly attacked and discriminated upon during the pandemic -- who raised alarm on the dangerously low supply of personal protective equipment to protect them from the virus; the "worrisome trend" of infection rate among health workers in the Philippines; and the backlash related to the case of overseas

Filipino health workers with existing contracts being asked by the President to stay in the country.

Some of the science news stories published on GMA News Online that depicted tension news values were about:

- UP professors contradicting WHO's initial claim that the corona virus may be transmitted through infected banknotes; a study debunking claims about the origin of the virus, i.e., the virus was a bioweapon supposedly created in a laboratory in China as claimed by the French scientist who discovered HIV; a hospital official belying false claims that the corona virus was already "weakening";
- the DOH warning against the use of PRODEX B and Fabunan antiviral injections for COVID-19; the FDA belying information circulating on social media about their supposed effectiveness against COVID-19; the disagreement among doctors and health officials over the merits of ivermectin as cure for COVID-19; the debate on the effectiveness of face shields as protection from the virus;
- Russia's Sputnik vaccine which received criticism for allegedly receiving regulatory approval without the crucial phase 3 trial; members of the Presidential security received donated vaccines brought to the country without clearance from DOH;
- experts' "barely cuts the expenses" take on the Php50 million reward offered by the President to vaccine developers and suggesting that the President should "fund the research and not offer a reward" after the vaccine has been produced; and

- the concern about the lack of consistent and timely data on COVID-19 cases and the confusion on the difference between first and second waves in DOH's statistical data.

For the participant from Inquirer, the news value most observed in his/her science news reports was readership empowerment (60%, *see Table 6. News Values of COVID-19 Science News Stories – Inquirer in Appendix H, p 179),* providing readers practical information they can use in their daily lives such as an LGU's COVID-19 hotline, curfew hours, sites and schedule of community-based testing for residents, schedule (e.g., disinfection, online activities, closure and opening) of hospitals, courts, schools, malls, groceries and supermarkets, constant updates on community quarantine status and lockdowns, sites and schedule of testing centers offering free services, and issuance of color coded quarantine pass for authorized persons outside of residence (APOR).

In almost 40 news stories of the participant from Inquirer, an empowering piece of information (e.g., for more news about the novel coronavirus click here: What you need to know about Coronavirus.), a public service announcement (e.g., for more information on COVID-19, call the DOH Hotline:…,) and a call for support for its corporate social responsibility initiative (e.g., the Inquirer Foundation supports our healthcare frontliners and is still accepting cash donations …) were added at the end.

Science Journalistic Role Performance

This third section also takes a deeper look into the 434 COVID-19 science news stories authored by the selected participants, which were carefully analyzed using

textual analysis method, to examine the reporters' journalistic role performance during the COVID-19 pandemic.

The discussion on the reporters' journalistic role performance focuses on three interrelated domains theorized by journalism scholars including Mellado (2021).

These domains, namely, journalists' voice, power relations, and audience approach, "relate to different expectations of journalism in different political, economic and media contexts" (Mellado, 2021, pp. 33 – 37).

Journalists' Voice

Journalists are assumed to be neither passive onlookers nor neutral observers. There are times they manifest their active voice, or perform an interventionist role, and this can be gleaned from the journalistic pieces they write.

A higher presence of journalistic voice renders a higher presence of the interventionist role; the absence of such a role is a sign of a more neutral or disseminative instance of the journalist (Mellado, 2021, p. 34).

Interventionist journalists, according to Zamith (2022, p.71), "are typically involved, socially committed, and motivated to engage in social affairs." They are more likely to think of themselves as journalists on a mission, advocates for social change, or influencers of public opinion for a greater social cause.

As interventionists, they may simply make their points of view or standpoints quite explicit. They may even interpret or explain the news to help readers better understand it and/or may even go as far as making calls for action, i.e., individual behavior changes such as wearing masks for personal health safety or call for collective action for social change.

In the 434 COVID-19 science news stories analyzed, the participants were found to have sometimes made their viewpoints quite explicit (18.66%), but they were more inclined to interpreting and explaining the news (37.79%). They all shunned from making calls for action *(see Table 22. Interventionist Role Performance).*

Table 22. Interventionist Role Performance

Indicators	Count (N=434)	Percent
Explicit point of view	81.00	18.66
Interprets and explains	164.00	37.79
*Calls for action	36.00	8.29

**PDI-Call for donation blurb for their CSR*

As mentioned earlier, the few data on calls for action were not written by the participant from Inquirer; they were public service announcements on the news outlet's corporate social responsibility project for healthcare workers.

The generally low frequency of stories on this category can be attributed to the professionally defined role of beat reporters and type of journalistic pieces expected from them. As one of the participants had clarified, reporters are not supposed to editorialize the news, nor pose as topics experts for this could put their credibility as news reporters into question.

A comparative analysis of the findings showed that some reporters tended to manifest stronger journalistic voice in performing their facilitator role of interpreting and explaining the news to serve their readers (see Table 23. Comparative Data on Interventionist Role Performance).

Table 23. Comparative Data on Interventionist Role Performance

	Inquirer	PhilStar	GMA	Rappler	ABS-CBN

Indicators	n65	%	n105	%	n144	%	n120	%	n18	%
Explicit point of view	14	21.54	22	20.95	9	6.25	34	33.33	2	11.11
Interprets and explains	15	23.08	41	39.05	41	28.47	64	62.75	3	16.67
*Calls for action	36	55.38	-	-	-	-	-	-	-	-

**PDI-Call for donation blurb*

The reporters from Rappler appeared to have the strongest journalistic voice compared to the reporters from the other online news outlets included in this study. They published the greatest number of science news stories that interpreted and explained the news (62.75%) and news stories that explicitly showed their points of view (33.33%), *(see Table 2. Interventionist Role Performance – Rappler in Appendix I, p.179).*

One participant from Rappler admitted s/he tried harder than usual to explain the news during the pandemic so that readers may understand it better, adding that they were expected to publish news the readers can use in their everyday life *(Refer: Archetypal ideas for a Science News Story, p.74).*

Journalistic voice was also present in the science news reports of participants from the other four news outlets covered in this study, the Philstar, GMA News Online, Inquirer, and ABS-CBN News Online, albeit to a lesser degree.

The reporters from Philstar *(see Table 3. Interventionist Role Performance-Philstar in Appendix I, p. 179)* and GMA News Online *(see Table 4. Interventionist Role Performance- GMA News Online in Appendix I, p.179)* published more stories that explained and interpreted the news (Philstar, 39.05%; GMA News Online, 28.47%) and less news stories that showed their points of views (Philstar, 20.95%; GMA News Online, 6.25%), which indicate that as reporters -- already somehow involved with the facts they reported on that they even went as far as interpreting them

-- they maintained restraint in making their own viewpoints explicit because, as one participant pointed out, they were reporters and not opinion writers *(Refer: Reporting Intentions and Purpose, p.70)*

Compared to the reporters from all five news outlets included in this study, the reporters from Inquirer *(see Table 5. Interventionist Role Performance – Inquirer in Appendix I, p. 180)* and ABS-CBN News Online *(see Table 6. Interventionist Role Performance – ABS-CBN - Inquirer in Appendix I, p. 180)* published relatively the least percentage of news stories that interpreted or explained the news (Inquirer, 23%; ABS-CBN News Online, 16.67%), and even less stories with their explicit points of views (Inquirer, 21.54%; ABS-CBN News Online, 11.11%) indicating a less active voice or more passive stance as journalists.

None of the participants published stories that made calls for action. Inquirer's calls for action (55.38%) that appeared in the analyzed stories were not written by the reporter. They were standard corporate social responsibility announcements added at the end of COVID-19 stories of reporters.

Power Relations

Journalism as an institution performs legitimate functions for the public, either as a watchdog that protects the public's rights and interest from those in power or as a facilitator that collaborates with those in power as they work for the common good.

Journalists who subscribe to a watchdog role orientation are reproving observers who constantly use critical lenses to scrutinize, criticize, and denounce institutions, individuals, and their actions and decisions. This role orientation is broadly grounded in the ideal journalism as "Fourth Estate" that holds those in power to account (Zamith, 2022).

On the other hand, journalists who subscribe to a facilitator role orientation tend to collaborate and act as partners of the government and its programs (Zamith, 2022). Journalists may provide the influential elite a platform to disseminate their messages to the public, amplify their voices to reach more people; and may even praise, promote, and defend them against adversaries.

It should be noted that journalistic roles performed by journalists are not mutually exclusive, and the two types of journalistic roles that describe journalists' relationship with those in power (i.e., their watchdog and facilitator journalistic roles) "are independent from each other" (Mellado, 2021, p.35), which means that a lower presence of one does not necessarily imply a higher presence in the other.

Consistent with the above propositions -- that the two roles are independent from each other -- the participants in this study were observed to have performed both roles, as facilitators and watchdogs of power during the pandemic *(see Table 24. Comparative Data on Facilitator Role Performance and Table 25. Comparative Data on Watchdog Role Performance)*, albeit at varying degrees or extent.

Table 24. Comparative Data on Facilitator Role Performance

	Inquirer		PhilStar		GMA		Rappler		ABS-CBN	
Indicators	n65	%	n105	%	n144	%	n120	%	n18	%
Praises, promotes, and defends	-	-	6	5.71	4	2.78	-	-	-	-
Presents positive image	1	1.54	51	48.57	28	19.44	-	-	-	-
Reports on initiatives, progress, success	41	63.08	37	35.24	50	34.72	33	32.35	7	38.89

When it comes to their facilitator role performance, Inquirer.net showed the highest tendency to perform the said role in terms of reporting on the government's initiatives specifically on local and national government initiatives to contain the virus and inoculate the population. It published the greatest percentage of stories that reported on the feats – initiatives, progress, and successes -- of influential elite (63.08%, *see Table 2. Facilitator Role Performance – Inquirer in Appendix J, p. 181).*

Like in the case of Inquirer, the reporters from ABS-CBN News Online (38.89%, *see Table 3. Facilitator Role Performance – ABS-CBN News Online in Appendix J, p.181*) and GMA News Online (34.72%, *see Table 4. Facilitator Role Performance – GMA News Online in Appendix J, p.181)* also published the greatest percentage of news stories that reported on the feats – initiatives, progress, and successes -- of influential elite.

GMA News online also published news stories that presented a positive image of influential elite (19.44%), and as in the case of Philstar (5.72%), it also published news stories that somehow approved or showed support for influential elites (2.78%). Inquirer, Rappler, and ABS-CBN News Online did not publish any story that praises, promotes, or defends influential elites.

In terms of presenting a positive image of news sources, Philstar topped the list (48.57%, *see Table 5. Facilitator Role Performance – PhilStar in Appendix J, 182)*. It frequently reported stories that portrayed news sources and their initiatives as responsive, sensitive, responsible, and/or effective.

The role performance of the participants from Rappler was found to be less of facilitators when compared to the participants from the other news outlets *(see Table 6. Facilitator Role Performance – Rappler in Appendix J, p. 182).*

Table 25. Comparative Data on Watchdog Role Performance

	Inquirer		PhilStar		GMA		Rappler		ABS-CBN	
Indicators	n65	%	n105	%	n144	%	n120	%	n18	%
Wrongdoings	7	10.77	7	6.67	5	3.47	10	9.80	-	-
Expose	-	-	-	-	-	-	-	-	-	-
Investigations	2	3.08	2	1.90	-	-	2	1.96	-	-
Doubtful	-	-	1	0.95	2	1.39	7	6.86	-	-
Criticizes	2	3.08	6	5.71	-	-	23	22.55	-	-
Media Conflict	-	-	-	-	-	-	1	0.98	-	-

In terms of performing a watchdog role, Rappler showed the highest tendency to perform the said role by publishing the highest number of articles that criticized influential news sources *(see Table 2. Watchdog Role Performance – Rappler in Appendix K, p. 183)*.

Rappler published the greatest percentage of news stories that criticized (22.55%) influential elite. Said news stories focused on the government's reported inability to meet its testing and vaccination targets as well as on the reported irregularities in the health department, e.g., the delayed procurement of personal protective equipment (PPE) and other medical gear necessary for the protection of healthcare workers, delayed procurement of personal protective equipment (PPE) and other medical gear necessary for the protection of healthcare workers, delayed release of benefits and financial assistance of "fallen" and infected medical frontliners, and the confusing and delayed reporting of COVID-19-related deaths and confirmed cases. Rappler was also the only news outlet that published a news report where a conflict between the journalist and the news source was observed.

Inquirer, on the other hand, published the greatest percentage of news stories that reported on wrongdoings (10.77%), which means that the reporter was also able to apply a critical nose for news despite the news gathering challenges during the

pandemic *(see Table 3. Watchdog Role Performance – Inquirer in Appendix K, p. 183).* This finding indicates that the reporter's role performance in terms of his/her relationship with influential news sources was indeed not mutually exclusive.

None of the participants published expository reports; only Philstar, Inquirer and Rappler made reports on investigations; and only Rappler, GMA News Online, and Philstar were observed to have expressed doubtful stance in their news stories.

The reporters from GMA News Online published a smaller number of news stories that scrutinized, criticized, or denounced institutions compared to news stories where they play a facilitator role. The participant from ABS-CBN did not publish any news report that meets the criteria for watchdog role.

Like in the case of Inquirer, the participants from Philstar (6.67%, *see Table 4. Watchdog Role Performance – Philstar in Appendix K, p. 184*) and GMA News Online (3.47%, *see Table 5. Watchdog Role Performance– GMA News Online in Appendix K, p. 184)* published the greatest percentage of news stories that reported on wrongdoings during the pandemic.

Overall, the participants were found to have performed their journalistic role more as facilitators that they sometimes collaborated with those in power and published reports on their initiatives, progress, and achievements during the pandemic (38.71%) and even portrayed them in a positive light (18.43%), *(see Table 26. Facilitator Role Performance),* but they also performed a watchdog role of criticizing the influential elite (7.14%) or reporting on their wrongdoings (6.68%), *(see Table 27. Watchdog Role Performance),* which indicates that their role performance in terms of their relationship with their news sources was not mutually exclusive.

Table 26. Facilitator Role Performance

Indicators	Count (N=434)	Percent
Praises, promotes, and defends	10.00	2.30
Presents positive image	80.00	18.43
Reports on initiatives, progress, success	168.00	38.71

Table 27. Watchdog Role Performance

Indicators	Count (N=434)	Percent
Wrongdoings	29.00	6.68
Expose	-	-
Investigations	6.00	1.38
Doubtful	10.00	2.30
Criticizes	31.00	7.14
Media Conflict	1.00	0.23

As previously discussed, the participants' most privileged news sources during the pandemic were expert sources from the government, especially the Departments of Health and Science and Technology *(Refer: Provenance of News Stories, p. 84).*

Performing their journalism role as facilitators, the participants gave their news sources -- mostly influential elite from government offices, most of them were also their trusted science news sources – a "microphone" that amplifies messages as they served as "purveyors" of important COVID-19 pandemic related information which the public needed to know *(Refer: Relationship with News Sources, p.64).*

This indicates that when the time calls for a collaborative role, journalists can cease to behave like "pesky reporters" before government news sources -- i.e., those in power or positions of authority and influence being monitored by journalists while performing their role as members of the Fourth Estate -- and begin to support them, cooperate with them, and accept them and their policies, mandate, agenda, programs, causes, and advocacies as legitimate and newsworthy.

During the pandemic, the reporters may have served more as facilitators or "channels" of useful information, which according to one participant is part of media's

public service to the people *(Refer: Reporting Intentions and Purpose, p. 70),* but they also explored tension among news sources and published stories that depict disputes, disagreements, and conflict on important public concerns during the pandemic *(Refer: News Values Highlighted p. 104).*

Audience Approach

Journalism as an institution caters to segmented publics or audiences that use journalism products for different purposes, and journalists' approach to these audiences, their journalistic role orientation and performance, are linked to their understanding of their readers' information needs.

They perform their journalistic roles in three ways: service role, civic role, and infotainment role (Mellado, 2021). These journalistic roles are independent from each other and may be performed simultaneously, albeit at varying extent or degrees.

Those who subscribe to audience approach are more likely to think of themselves as knowledge professionals, more likely to think of their work as public service, and of their outputs as commodities, consumer goods, or public goods.

Journalists generally view their audiences in three ways: *1) as clients* who utilize journalism for knowledge and skills enrichment, *2) as citizens* who need journalism for a healthy public or civic life, and *3) as consumers* who desire journalism for self-gratification. Journalists strive to provide these audiences "with the sort of information that appeals most" (Zamith, 2022, p.73) to them.

The participant from Inquirer (60%), followed by the participant form ABS-CBN News Online (22.22%), published the greatest percentage of news stories that gave useful information readers could use in their everyday lives *(see Table 28. Comparative Data on Service Role Performance),* indicating a higher inclination

toward service role compared to civic role (*see Table 29. Comparative Data on Civic Role Performance)* and infotainment role *(Table 30. Comparative Data on Infotainment Role Performance).*

Table 28. Comparative Data on Service Role Performance

	Inquirer		PhilStar		GMA		Rappler		ABS-CBN	
Indicators	n65	%	n105	%	n144	%	n120	%	n18	%
Explains impact of news	-	-	6	5.71	1	0.69	2	1.96	-	-
Gives useful information	39	60.00	5	4.76	3	2.08	8	7.84	4	22.22
Gives useful advice	-	-	6	5.71	-	-	1	0.98	-	-

Both participants from Inquirer *(see Tables 2. Service Role Performance – Inquirer in Appendix L, p. 185)* and ABS-CBN News Online *(Table 3. Service Role Performance - ABS-CBN News Online in Appendix L, p.185)* refrained from explaining the impact of the news and giving advice to readers.

To a much lesser extent, the participants from Rappler *(see Table 4. Service Role Performance – Rappler in Appendix L, p.185)*, Philstar *(see Table 5. Service Role Performance – Philstar in Appendix L, p.186)*, and GMA News Online *(see Table 6. Service Role Performance – GMA News Online in Appendix L, p.186)* also performed service role by sometimes providing useful information and explaining the news.

For their civic role performance, the participant from Philstar published the greatest percentage of news stories that featured citizens' demands and proposals (15.25%, *see Table 2 Civic Role Performance – Philstar in Appendix M, p. 187)*, followed by the participants from Rappler (10.78%, *see Table 3. Civic Role Performance - Rappler in Appendix M, p. 187).*

It should be noted that the reporters from Rappler mostly covered national news and rarely reported on news stories sourced from LGUs.

Table 29. Comparative Data on Civic Role Performance

	Inquirer		PhilStar		GMA		Rappler		ABS-CBN	
Indicators	n65	%	n105	%	n144	%	n120	%	n18	%
Citizen reactions	5	7.69	3	2.86	1	0.69	5	4.90	1	5.56
Citizen demands, proposals	2	3.08	16	15.24	1	0.69	11	10.78	1	5.56
Depicts localized impact	-	-	6	5.71	-	-	-	-	-	-
Depicts community impact	1	1.54	5	4.76	-	-	1	0.98	-	-
Instructs, educates public	-	-	3	2.86	2	1.39	1	0.98	-	-
Context for informed decisions	1	1.54	6	5.71	7	4.86	-	-	-	-
Reports on citizen-led activities	1	1.54	5	4.76	1	0.69	1	0.98	-	-

To a much lesser extent, the participants from Inquirer (*see Table 4. Civic Role Performance – Inquirer in Appendix M., p.188),* GMA News Online (*see Table 5. Civic Role Performance – GMA News Online in Appendix M., p.188), and* ABS-CBN News Online (*see Table 6. Civic Role Performance – ABS-CBN News Online in Appendix M., p.188)* also performed their civic journalism role.

An example of an article that demanded government action is about an official of the Philippine College of Physicians calling on the Inter-Agency Task Force (IATF) to put Metro Manila back on lockdown for two weeks since they were again fighting “a losing battle.”

The participants from Inquirer published the greatest percentage of news stories that made explicit references to emotions (4.62%, *see Table 2. Infotainment Role Performance – Inquirer in Appendix N, p.189),* followed by GMA News Online

(2.78%, *see Table 3. Infotainment Role Performance – GMA News Online in Appendix N, p.189).* Both publications also published stories that featured people's interesting characters (GMA New Online, 2.78% & Inquirer, 1.54%) and only GMA News Online featured a story that highlighted the unusual and spectacular.

To a much lesser extent, the participants from Rappler (*see Table 4. Infotainment Role Performance – Rappler in Appendix N, p.190)* and Philstar (*see Table 5. Infotainment Role Performance – PhilStar in Appendix N, p.190)* also performed their infotainment journalism role. Infotainment role was not observed in the articles published by the participant from ABS-CBN News Online.

Table 30. Comparative Data on Infotainment Role Performance

	Inquirer		PhilStar		GMA		Rappler		ABS-CBN	
Indicators	n65	%	n105	%	n144	%	n120	%	n18	%
Features people's interesting characters	1	1.54	-	-	4	2.78	2	1.96	-	-
Features private life of public people	-	-	1	0.95	-	-	-	-	-	-
Highlights the unusual, spectacular	-	-	-	-	1	0.69	1	0.98	-	-
Make explicit references to emotions	3	4.62	-	-	4	2.78	2	1.96	-	-
Exacerbates attention to violence	-	-	-	-	-	-	-	-	-	-

The above findings indicate that the participants, except for the participant from ABS-CBN News Online who did not publish stories with infotainment characteristics, performed all roles related to audience approach – civic role, service role, and infotainment role-- in different ways and at varied extent.

Overall, for their service role performance, all news outlets published the greatest percentage of stories, authored by the participants, that gave useful

information readers could apply in their day-to-day lives during the pandemic *(see Table 31 Service Role Performance).*

Table 31. Service Role Performance

Indicators	Count (N=434)	Percent
Explains impact of news	9.00	2.07
Gives useful information	59.00	13.59
Gives useful advice	7.00	1.61

To some extent, the participants, indeed, catered to the self-interest of their readers like clients and explained the impact of the news to them, provided them with helpful information, and gave them pieces of advice they can use or apply as they dealt with the pandemic. This is consistent with their expressed journalism intension and purpose (Refer: Reporting Intentions and Purpose, p.74)

For their civic role performance, all news outlets published the greatest number of stories, authored by the participants, with citizens' demands or proposals *(see Table 32. Civic Role Performance).*

Table 32. Civic Role Performance

Indicators	Count (N=434)	Percent
Citizen reactions	15.00	3.46
Citizen demands, proposals	31.00	7.14
Depicts localized impact (LGU)	6.00	1.38
Depicts community impact (SIG)	7.00	1.61
Instructs, educates public	6.00	1.38
Context for informed decisions	14.00	3.23
Reports on citizen-led activities	8.00	1.84

During the pandemic, the participants may have served more for the information dissemination needs of government news sources, but they also gave voices to various non-government news sources, including health-oriented professional groups who were able to participate in public conversations related to the pandemic because the media also covered them (Refer: Reporters' Relationship with News Sources, p.64; and Provenance of News Stories, p. 84)

And for their infotainment role, the news outlets published the greatest percentage of stories, authored by the participants, that made explicit references to emotions *(see Table 33. Infotainment Role Performance).*

Table 33. Infotainment Role Performance

Indicators	Count (N=434)	Percent
Features people's interesting characters	7.00	1.61
Features private life of public people	1.00	0.23
Highlights the unusual, spectacular	2.00	0.46
Make explicit references to emotions	9.00	2.07
Exacerbates attention to violence	-	-

Although some participants recognized the need to provide readers with positive stories, e.g., stories of hope and recoveries from the disease, they did not perform their infotainment role as much as they did for their service and civic roles. In the few times that they did, they were more inclined to only make explicit references to emotions and/or highlight people's interesting characters.

The above findings indicate that the participants catered to all three types of audiences but were more inclined to catering to the needs of readers as either clients that need information about the COVID-19 disease and the pandemic, or citizens who needed to participate in the public discourse about the disease and the pandemic.

Chapter VI
SUMMARY AND CONCLUSIONS

Summary as Analytic Storylines

This section of this chapter summarizes the findings of this study -- the conceptualizations of the core categories of this study -- and presents them as analytic storylines. These core categories are a) newsroom culture, b) science reportage, and c) role performance.

Storylines are used in this study as tools to facilitate the integration, explication, and presentation or rendering of the emerging grounded theory.

Newsroom Culture

The following are analytic storylines for the first core category of this study, the participants' newsroom culture:

Reporting Practices and Routines

The participants are loosely supervised, self-reliant, and enterprising beat reporters assigned to report on more than one area of coverage, which at some point or during the entire period of the pandemic also included the health and science beats. They observed either a self-imposed or a newsroom-imposed deadline if the online news outlet they are part of has a paper-based news outlet counterpart. They were required to submit varying number of stories daily – from a minimum of one to two or more stories.

The travel restrictions during the pandemic made reporting difficult, and this prompted newsrooms to introduce changes in their beat assignments to make news

sources more accessible and to prevent burn out in the workplace. They then had to adjust to a new beat while also trying to compete for a byline against more senior reporters who were also attending the government's centralized online media events. Their co-bylined stories are merged stories and not a result of team reporting.

During the pandemic, under an Administration that showed little tolerance to an adversarial press, reporters struggled to maintain their independence from influential news sources. They grappled with a science news topic they barely understood, forced to adjust to the limitations of online press briefings, and suffered "information overload" and burnout from excessive media events scheduled in a day.

The shift to work-from-home and the use of information and communication technology also afforded them ease of access to news sources from here and around the around the world. Although they were mainly home-bound especially in the first year of the pandemic, they were provided with health and safety supplies and offered psychosocial support.

Reporting Principles and Norms

Access to context-rich and verified first-hand information became challenging because of travel restrictions, and the "controlled" online press briefings gave reporters limited means to understand the atmosphere in the room, to personally follow up information requests from evasive news sources, and to be given more time to ask questions for their chosen news angle.

Still, the participants recognized that there was "democratized" and more "efficient" access to data and information because more news sources leveraged on the affordances of online communities. Officials, scientists, and healthcare professionals attached to the Department of Health, Local Government Units, and the

Department of Science and Technology were their trusted and accessible news sources.

Because of their desire to give voice to everyone – "including vaccine doubters" -- and for fear of retaliation from influential news sources, some participants admitted to having practiced false balance in their reporting.

Newsrooms were more considerate in terms of the need to use only firsthand information, i.e., relying only on one's personal experience and information personally gathered and processed, if they observe proper attribution and transparency. The "at least double-sourced rule in attribution", which the participants think is not always applicable, was not strictly enforced by all newsrooms.

Journalistic Role Orientation

The participants believed the pandemic was a significant period that called for journalists to perform their role as usual despite the upended routines and the threats to their health and wellbeing.

They believe the pandemic highlighted the need for journalism -- because news became even more essential -- and this made journalists frontliners and public servants, too. It was their duty to provide clarity amid the disinformation and to assuage fear amid uncertainties and confusion. Their perceived role was to provide clear, correct, and accurate information readers could use to make timely and informed opinions and decisions.

Cognizant of the need to always maintain their independence from their news sources, the exigencies of the pandemic impelled the participants to work "hand-in-hand" with the government and performed a science journalism role described by Allan (2021) as "informational relay function", serving like "microphones" that amplified the

voices of experts who are mostly from the government, “purveyors” that supplied essential information from experts to the non-expert public, and “channels” that facilitated the flow and exchange of useful (i.e., helpful and lifesaving) and empowering information from experts and among experts to help them make informed decisions.

The participants’ idea of a good news story is one that is easy to understand but context-rich, sensitive, and ethical (does not harm both readers and news source), does not editorialize, the information being shared is correct and useful to readers, and the format is either straight news that informs or an explainer that helps readers understand the news.

Science Reportage

The following are analytic storylines for the second core category of this study, the participants’ science reportage:

News Characteristics and Provenance

Despite the reporting challenges they faced during the pandemic *(refer, Storylines: Newsroom Culture - Reporting Practices and Routines p. 127 & Reporting Principles and Norms, p.128),* the participants managed to publish slightly less reportage or news stories that contained more details for context, compared to simple news reports.

Most of their news reports are accompanied by a photo; they rarely featured videos and visualizations; and most are authored by a single reporter. Consistent with their role orientation *(refer, Storylines: Newsroom Culture - Journalistic Role Orientation, p.129),* and reporting principles and norms *(refer, Storylines: Newsroom Culture - Reporting Principles and Norms, p.128),* the participants heavily relied on

expert news sources from the government and published slightly less stories using multiple news source.

Themes of News Stories

The participants published the greatest number of pandemic related stories with science news themes (science, technology, medicine, and health), followed by political policy news themes (government's pandemic policy and actions), and pandemic impact (effects of and responses to the pandemic).

Fourteen science news themes emerged, the top seven of which are science-based responses and solutions, patient care, surveillance (testing and diagnostics), healthcare systems, preventive policy responses, safe public spaces protocols, and vaccine supply.

Except for preventive policy responses and safe public spaces news themes which were directly useful to the individual reader, the top news themes were more useful to pandemic policy and decision makers both at the national and local government levels. This is consistent with their expressed role orientation during the pandemic as a partner of the government *(refer, Storylines: Newsroom Culture - Journalistic Role Orientation, p.129).*

News Values Highlighted

Most of the science news stories of the participants connected to, or had something to do with, the science news themes that emerged from data *(refer, Storylines: Science Reportage - Themes of News Stories, p.131).*

As they admitted in their interviews, they were unable to publish more context-rich science news stories due to some challenges they faced during the pandemic

(refer, Storylines: Newsroom Culture - Reporting Practices and Routines, p. 127 & Reporting Principles and Norms, p. 128).

Consistent with data on their newsroom culture, which showed that they played a collaborative role during the pandemic, only a fifth of their stories explored tension and disagreement among news sources, another indication that they performed less as a fourth estate. This also indicates that their perceived role during the pandemic was not mutually exclusive, that they were also ready to perform other journalistic roles, such as a watchdog role, if such a role is called for.

Also, only a fifth of their news stories contained empowering pieces of information individual readers could apply in their daily lives, e.g., information on preventive policy responses and safe public spaces. This could be attributed to the fact that most of their reports, featuring experts from the government as news sources, were more useful to pandemic policy and decision makers both at the national and local government levels *(refer, Storylines: Science Reportage - Themes of News Stories, p. 131),* which is also more consistent with their expressed role orientation during the pandemic *(refer, Storylines: Newsroom Culture - Journalistic Role Orientation, p.129).*

Role Performance

The following are analytic storylines for the third core category of this study, the participants' journalistic role performance:

Journalists Voice

Although to a limited degree, the participants actively used their voice and performed an interventionist role during the pandemic. They sometimes interpreted

and explained the news but showed restraint in making their viewpoints explicit, and completely shunned from making calls for action.

As interventionists that catered to the information needs of segmented publics *(refer, Storylines: Role Performance - Audience Approach, p.135),* the participants performed the role of science journalists referred to by Fioravanti (2013) as “mediator”, or journalists who add value to information and reflect on its consequences.

The above is consistent with the participants’ expressed journalistic role intention of providing readers impacted by the pandemic with news stories that inform, explain, and clarify using either a simple straight news or a reportage format. They felt it was their duty to provide readers, who were already bombarded with false and misleading information circulating on social media, with “clear, correct, and accurate” information they could use to make timely and informed decisions for themselves *(refer, Storylines: Newsroom Culture: Journalistic Role Orientation, p. 129).*

Also consistent with data on their role orientation, the participants generally took a passive stance in their news reports, i.e., showed restraint in getting involved in the news they wrote, which can be attributed to their understanding that as beat reporters they are not to editorialize the news nor pose like topic experts for this could put their credibility as beat reporters into question *(refer, Storylines: Newsroom Culture: Journalistic Role Orientation, p. 129).*

This tendency to keep a passive stance in role performance, according to Mellado et. al, is linked to a literature with neutral and disseminative journalistic roles, which put premium on a professional distance between the journalist and the facts.

A passive stance in journalists’ interventionist role performance is linked to a literature with neutral (Cohen, 1963 in Mellado, 2014) and disseminative (Weaver & Wilhoit, 1986 in Mellado, 2014) journalistic roles that put premium on a professional

distance between the journalist and the facts (Tuchman, 1973; Donsbach & Patterson, 2004 in Mellado, 2014).

Power Relations

The participants performed their journalistic role more as facilitators providing readers with useful information, i.e., science and political policy news stories sourced from influential elites from government, their most privileged news sources *(refer, Storylines: Science Reportage - News Characteristics and Provenance, p. 130 and Storyline: Science Reportage – Themes of News Stories, p. 131)*, but at the same time they also performed a watchdog role of criticizing them, providing the public a forum for criticism and compromise and performing a role referred to by Kovach & Rosenstiel (2001) as "independent monitor of power".

They also explored tension among news sources and published stories that depicted disputes, disagreements, and conflict on important public concerns during the pandemic. Tension is a news value more consistent with their watchdog function *(refer, Storylines: Science Reportage – News Values Highlighted, p. 131).*

This above indicates that their role performance during the pandemic was not mutually exclusive or that the participants performed both roles at the same time. This is consistent with Mellado's (2021, p. 35) proposition that journalists' relationships with those in power, either as watchdog or facilitator, "are independent from each other, which means that a lower presence of one does not necessarily imply a higher presence of the other" (Mellado, 2021, p. 35).

The finding is also consistent with what Fjaetad (2007) described as "mission" or role orientation of journalists operating in democratic societies, that they "do not see it as their task to work for any special interest" because their mission is to "serve their

audiences, the citizens, by informing them about recent developments (“news”), and by naming and warning of insufficiencies of various kinds” (Fjaetad, 2007, p.126)

Audience Approach

The participants viewed their audiences either as clients who utilize journalism for knowledge and skills enrichment or as citizens who need journalism for a healthy public or civic life.

They catered to the self-interest of the readers as clients and explained the impact of the news to them, provided them with helpful information, and gave them pieces of advice they can use or apply as they dealt with the pandemic. This is consistent with their expressed journalism orientation *(refer, Analytic Storylines: Newsroom Culture - Journalistic Role Orientation, p129).*

During the pandemic, the participants may have served for the information dissemination needs of influential elites in government offices such as the Department of Health and Department of Science and Technology, but they also gave voices to citizens, the various non-government news sources, including health-oriented professional groups, who were able to participate in public conversations related to the pandemic because the participants also covered them *(refer: Analytic Storylines: Newsroom Culture – Reporting Principles and Norms, p.128).*

Although some participants recognized the need to provide readers with positive stories such as stories of hope and recoveries, they did not perform their infotainment role as much as they did for their service and civic role. In the few times that they did, they were more inclined to only make explicit references to emotions and/or highlight people’s interesting characters.

Conclusion

Explication of the Emergent Grounded Theory

For its conclusion, this section presents the grounded science journalism theory on the participants' science journalism praxis during the pandemic. This emergent grounded theory is also discussed in relation to some proposed science reporting frameworks identified in the literature review.

The Participants' Science Journalism Praxis

The *newsroom culture* – reporting practices and routines, reporting principles and norms and journalistic role orientation -- of the selected participants from the Philippine's leading online news outlets that covered the COVID-19 pandemic as an episodic science news event from 2020-2022 is consistent with their *science reportage* – news characteristics, provenance, themes, and news values - and *journalistic role performance* – journalists voice, power relations and audience approach.

The participants were observed to have actively used their voice as interventionists that added value to science information by explaining and interpreting facts on 14 deeper science news topics that included science-based solutions, patient care, surveillance, healthcare system, preventive policy responses, safe public spaces, vaccine supply, population immunity, origin, mutation and variants, medical equipment and supplies, ICT rollout and utilization, vaccine hesitancy, psychosocial support, and medical waste disposal.

They faced unprecedented reporting challenges, especially at the height of the pandemic, but they skillfully upheld their journalistic principles and dealt with facts and their news sources with professional distance to cater to segmented publics. As science journalists they performed a disseminative role, an informational relay

function, and a mediator role between their trusted news sources who were mostly influential elites -- the science and health officials and politicians -- and their segmented publics -- both specialists and non-specialists -- whom they viewed more as clients that needed to be supplied with relevant information they could use in their daily lives and to make informed decision for their communities, and as citizens that needed to be given their voice so that they could participate in the public conversations about certain news topics.

They did not hesitate to take on mainly a facilitator role providing important news on science and political policy on health both for the expert and non-expert publics, and to use their interventionist card to perform a journalistic service role providing useful and empowering news reports that either inform or explain to non-expert readers when the exigencies of their function as journalists reporting on a public health emergency demanded it.

To a much lesser extent the participants also managed to perform their watchdog role, civic role, and infotainment role during the pandemic. Being beat reporters expected to avoid editorializing the news, they only went as far as actively explaining the news to the non-expert public.

The role they played in terms of their relationship with those in power, whether as facilitator or watchdog, and their view of their audiences, whether as clients, citizens, or consumers, are not mutually exclusive. To some extent, they also performed a watchdog role that exposed wrongdoing and criticized those in power. Although to a much lesser extent compared to their service and civic roles, they also performed their infotainment role that catered to audiences as consumers who use information for entertainment.

In conclusion, the participants performed their role as science journalists covering the COVID-19 pandemic from 2020 to 2022 more as facilitators between their trusted sources who were mostly influential elites, the science and health officials and politicians, and their segmented publics, both specialists and non-specialists, whom they viewed more as clients that needed information and citizens that needed to participate in the public sphere and less as consumers who use information for entertainment. They were observed to have actively used their voice as interventionists that added value to science information focused on 14 deeper science themes which includes science-based solutions, patient care, surveillance, healthcare system, preventive policy responses, safe public spaces, vaccine supply, population immunity, origin, mutation and variants, medical equipment and supplies, ICT rollout and utilization, vaccine hesitancy, psychosocial support and medical waste disposal.

The Grounded Theory (GT) on Science Journalism

In times of public health emergencies, science journalists may use their active voice and take an interventionist stance that adds value to science information; perform a facilitator role or informational relay function in the dissemination of relevant information from influential news sources to segmented publics, specialists and nonspecialists, who are viewed as clients that use information for empowerment or citizens that need to participate in public conversations to help them make informed opinions, decisions, and actions for themselves and for their communities.

The GT and Other Reporting Frameworks

The science journalism praxis of the selected participants from the Philippine's leading online news outlets that covered the COVID-19 pandemic as an episodic

science news event from 2020-2022 confirms the propositions of *Science Popularization Framework*.

Their science reporting praxis was more consistent with the traditional science literacy transmission model, which seeks to translate scientific information so that non-expert publics may be able to understand them, and the traditional contextual model, which seeks to tie science to specific audiences, which in this study were viewed more as clients and citizens and less as consumers. In this framework, journalists join science communicators in promoting public understanding of science.

By actively taking on an interventionist role that explained the news to non-expert publics and catering to the information needs of expert publics that needed useful information from other expert news sources (e.g., other health workers and chief executives of local government units), the participants to some extent helped the government and health workers promote public understanding of COVID-19.

In performing their journalistic role orientation, the participants of this study mainly performed a facilitator role or an informational relay function (Allan, 2011) and served like “microphones”, as “channels” or as “purveyors” of relevant science and political policy on health news generally sourced from expert government sources and supplied to both expert and non-expert publics so that they could make informed opinions, decisions, and actions. According to Allan (2011), informational relay is performed by science journalists in “accordance with professional norms, fairness, and balance” Allan, 2011, p. 2)

As science journalists, the participants performed the role of what Fioravanti (2013) referred to as “mediator”, one who adds value to information and reflects on its consequences. Consistent with the ideas of Fioravanti -- who discussed two approaches to science journalism, namely, classical approach where science is

viewed as an authoritative source, and wider approach where science is viewed as part of an information network to which journalists are also a part of -- the participants published news reports that are more sensitive and relevant to their readers, the specialist and non-specialist readers.

The participants' science journalism praxis was also found, to some extent, consistent with *Interactional Expertise Reporting* framework, where journalists are not expected to be content experts but must have enough knowledge of scientific concepts and thought processes to enable them to negotiate their way across different science topics and report about them, and *Environment Reporting* framework, where journalists who are transparent in their methods are able to apply trained judgment and expert interpretation that enabled them to sort through competing claims.

Although the participants reported on a difficult news topic that much was unknown, uncertain, and confusing, the participants, dutifully observing journalistic principles and expertly applying journalistic practices of the journalism profession, managed to find reliable science news sources from here and around the world, sorted through uncertain and misleading pieces of information, and were able to publish important news focused on science and political policy on health. They also actively used their journalists' voice and took on an interventionist role and provided useful and empowering news reports that either inform or explain to non-expert readers.

The science journalism praxis of the participants, all of them beat reporters of online news outlets, were not found to be consistent with *Knowledge-based Reporting and Peace Journalism frameworks.* Although most of them can be considered expert reporters and storytellers in terms of experience in the field, they were not subject matter experts and did not focus on conflict transformation.

Knowledge-based Reporting is a science reporting framework where journalists as influential knowledge professionals are expert storytellers and subject matter experts. On the other hand, *Peace Journalism* is a reporting framework where journalists focus on conflict transformation by investigating, diagnosing, and proposing suggestions to resolve issues.

Likewise, the science journalism praxis of the participants during the pandemic was not found to be consistent with either *Advocacy Reporting or Solutions Journalism* frameworks. Although the reporters were motivated to perform a journalistic orientation that seeks to serve the public, they kept their newsroom culture – journalistic routine, principles, and orientation -- and maintained a professional distance between facts and their news source. Their engagement with public agenda did not go beyond showing an active interventionist role and performing a watchdog role.

Advocacy Reporting framework is motivated by political or social agenda, does not separate facts from values, and presents news from a distinct point of view while *Solutions Journalism* is a reporting framework where journalists, through rigorous and compelling reporting, focus on finding solutions to social problems.

The syntheses of the findings of this study are as follows:

On the core category, Newsroom Culture: This study concludes that the participants are professionals who did their job as usual despite reporting challenges that included difficulty of access to information, keeping their independence from influential sources, and burnout. However, they were able to leverage the affordances of ICT and online communities and enjoyed few newsroom considerations and health safety support.

On the second core category, Science Reportage: This study found that the participants' science news stories on COVID-19 were sourced mostly from influential

elites (govt officials, scientists, and politicians) and a great majority of these connected to 14 deeper science themes about COVID-19 which includes science-based responses, patient care, surveillance (testing and diagnostics), healthcare system, preventive policy responses, safe public spaces, vaccine supply, population immunity, origin, mutation and variants, medical equipment and supplies, information and communication technology rollout and utilization, vaccenic hesitancy, and psychosocial support. For their news values, they also explored tension and provided empowering pieces of information.

On the third core category, Role Performance: This study found that the journalists used their active voice as interventionists by interpreting and explaining the facts, and performed their role more as facilitators that catered to the information dissemination goals of influential elites and to the information needs of segmented readers, specialists and nonspecialists, which they viewed either as clients that use information and citizens that need to participate in public conversations.

The Grounded Theory Generated: In times of public health emergencies, science journalists may use their active voice and take an interventionist stance that adds value to science information; perform a facilitator role in the dissemination of relevant information from influential news sources to segmented publics, who are viewed as clients that use information for empowerment or as citizens that need to participate in public conversations, to help them make informed opinions, decisions, and actions for themselves and for their communities.

The above GT confirms the principles and propositions of Science Popularization, Interactional Expertise Reporting, and Environment Reporting. It does not confirm, or it is inconsistent with Knowledge-based Reporting, Advocacy Reporting, Peace Journalism, and Solutions Journalism

Chapter VII

IMPLICATIONS AND RECOMMENDATIONS

This chapter identifies the implications of the study and its findings in terms of framework, methodology, and practice. It also suggests future directions on studies in science journalism as well on journalism in general.

A. Study Framework

Grounded Theory Method (GTM) provided an appropriate general framework for this three-part study, which sought to generate a grounded theory to describe the praxis of reporters from the country's leading online news outlets that covered the COVID-19 pandemic, an unprecedented episodic science news event from 2020-2023. GTM was leveraged in this study both as a coding procedure and as a theory building method.

GTM was introduced in the 1960s in response to the "strong call to generate and ground theory, and to refocus on qualitative data rather than quantitative verification of theories" (Urquhart, 2013, p. 15). From the time of its introduction, GTM quickly spread across many disciplines and fields so that in the 1990s, it became a "common feature (of qualitative) analytic method" (Miles & Huberman in Urguhart, 2013, p. 15).

For the first part of this study, which sought to determine the participants' journalistic role orientation as science journalists during the three-year period, GTM was used both as a coding and theory building method. The researcher embarked on

the research process without preconceived theoretical ideas making the low-level theory generated a true data-grounded one.

GTM, specifically for the first part of the study, enabled the research process to gather and analyze significant contextual data on the orientation of the participating journalists, i.e., their practices and routines, their principles and norms, and intentions and purpose, as science journalist during the pandemic, and to generate a truly grounded low-level theory.

For the second part of the study, GTM was also useful in collecting and analyzing data on the science reportage of the participants, specifically in determining the voices they privileged, the science news themes they prioritized, and the news values they highlighted in their science news reports.

For the third part, which sought to determine the participants' journalistic role performance as science journalists during the three-year period, Journalistic Role Performance (JRP) framework, with prescribed journalistic research constructs and concepts, was used in the coding process. GTM however was again used as a theory building method in generating the low-level theory that described the journalistic role performance of the participants as science journalists during the three-year period.

JRP, which describes the practice of journalism as a context-based role performance (Mellado, 2021), a journalistic culture-specific professional experience (Hanitzsch, et. al. 2019), and that the performance or which is shaped, influenced, or limited by social systems (Zamith, 2022), is a relatively new journalism framework that was developed based on global data collected by the Worlds of Journalism Studies (WJS) project "from more than 27,500 journalists in 67 countries" (Hanitzsch, et. al. 2019).

JRP prescribes a menu of journalism related constructs and concepts that could help researchers determine the role performance of journalists and provide contextual insights on the practice of their profession. The WJS project, with support from the UNESCO and the International Federation of Journalists, has only been conducting journalism studies since 2007.

GTM, which provided the overall backdrop for this study, was found to be extremely useful in generating the low-level theory that described both the participants' orientation and performance as well as the overall theory that described the participants' science journalism praxis during the pandemic.

The theory generated -- which described the contextual role orientation and performance of journalism as an institution in time of a public health emergency -- can be valued for its epistemological and ontological appropriateness, openness, validity, and heuristic value (Littlejohn & Foss, 2011, pp. 34-35).

The theory offered a data-grounded and qualified explanation that science journalism as an institution could take a collaborative stance and perform a facilitator role in society – allowing other roles to take a backseat-- if the times call for such role orientation and performance.

The new grounded theory generated was found to be most consistent with Science Popularization Framework because participants were observed to have voluntarily, albeit temporarily, embraced a collaborative stance and performed their role alongside science communicators.

To some extent, the new grounded theory generated is also consistent with the principles of Interactional Expertise Reporting framework because all participants are not science content experts but used their reporting skills to build knowledge and eventually became temporary topic news experts which enabled them to write few

context-rich pieces. Moreover, the new theory, to some extent, is also consistent with the principles of Environment Reporting framework because the participants applied newsroom prescribed journalistic practices, also applying trained judgment and expert interpretation, in their reporting process.

To expand the findings of this study or to further scale up the grounded theory generated by this study to include other specialized areas of coverage during the pandemic, or to gather deeper contextual insights on the journalistic role orientation and performance of other journalists covering other beats but also reported on the COVID-19 during the pandemic, future research initiatives could use the frameworks used for this study, either as combined or separately.

The frameworks tapped for this study, both or either the GTM and/or JRP frameworks, could also be applied in other journalism contexts, i.e., other episodic news events that happened recently or in the distant past, i.e., news events related to politics, government policies and services, foreign relations, war and conflict, elections, entertainment, business, economic, energy, agriculture, to name a few.

Future studies could also focus on the journalistic cultures of reporters that covered the COVID-19 pandemic and examine both or either the extrinsic dimension of their journalistic culture (i.e., journalists perceived influences and editorial autonomy) and/or the intrinsic dimension (i.e., their role orientations, ethical considerations, and trust in institutions) of their culture using cultural media theories for their study framework. These media theories may include, but not limited to, political economy of media, agenda-setting, gatekeeping, media bias, dependency, uses and gratification, priming, and news framing.

B. Methods and Procedures

This study adopted the methods and procedures of Grounded Theory Method (GTM) to generate a theory on the science journalism praxis of journalists from the Philippines' leading online news outlets that reported on the COVID-19 pandemic, an unprecedented science news event that challenged the preparedness, resilience, and resoluteness of news outlets as an intuition during the pandemic, from 2020-2022.

Iterative and overlapping data collection and analysis was achieved through a triangulation research process that examined the newsroom culture, science news reportage, and journalistic role performance (Mellado, 2015) of participants. Through this process, low-level theories on their newsroom culture, science reportage, and role performance were generated, and these served as the building blocks for the overall grounded theory generated on their science journalism praxis.

Since the goal of the study was to generate a substantive grounded theory, a triangulation research process was conducted to leverage on the strengths of GTM while acknowledging recent developments in the journalism scholarship and recognizing the significant contributions of journalism scholars to the discipline, specifically on the ideas and thoughts related to journalistic role orientation and performance.

With the use of Mellado's (2015) Journalism Role Performance (JRP) framework which already has its own established concepts and explanations, one could argue that this study failed to observe a general rule in GTM, "that researchers should make sure that they have no preconceived theoretical ideas before starting their research" (Urquhart, 2013, p. 16) so as not to "contaminate, stifle or otherwise

impede the researcher's effort to generate categories" (Glasser, 1992 in Urquhart, 2013, p. 17).

Glaser himself, however, clarified in 1992 that the need to not have preconceived theoretical ideas "applies only at the beginning" (Urquhart, 2013, p. 17), which this study had done in the first two processes and eventually added JRP as the last process to make the study iterative and to ensure that a more substantive grounded theory was to be generated.

As earlier mentioned, GTM was the overall study framework used to generate the grounded theory. GTM's coding process was a fitting method in generating the theoretical codes from the first two research processes that focused on the participants' newsroom culture and science news reportage that served as building blocks for the emergent grounded theory.

Data generation and collection for this study involved several sequential steps which began with the preparation of the interview script focused on newsroom culture, the preparation of the content analysis coding sheet to generate data on news reportage, and the preparation of the JRP textual analysis coding sheet to generate data on role performance. All three instruments were used for all recruited participants.

The next steps taken were participant recruitment and the discussion of the informed consent form (ICF), the interview with the participant either in person or a Zoom meeting, the transcription of the recorded interview, and finally the coding of the interview transcript using GTM coding process.

It was observed that because the participants were assured of anonymity in the write-up, they talked freely and meaningful qualitative data, including a few sensitive pieces of information, were collected from them.

After the GTM coding of a participant's interview, the internet search for his/her COVID-19 pandemic-related news reports was immediately conducted to build the corpus of the study on the participant's news reportage and role performance. GTM coding process was used on his/her news reportage and JRP coding process was used for his/her role performance.

Since the reporters were also covering other beats, many of their articles published during the period were not included in the corpus of this study. Also, many of their COVID-19 pandemic related news reports were not science news reports but were still included in the news reportage study only to determine the general themes or the frames of reporting COVID-19 during the pandemic.

However, only their science news reports on COVID-19 were considered in generating the core categories, which were generated through a process of constant comparison of data, a key process and component of GTM, which was conducted as soon as the data collection and analysis for the second participant began.

The final and last steps of the GTM method for this study are the explication of the theoretical codes that emerged from the core categories using Birks & Mills (2014) storyline technique, the presentation and discussion of the emergent grounded theory, and the process of grappling this emergent grounded theory with other existing science reporting frameworks discussed in the literature review.

Birks & Mills (2014) storyline technique, a strategy for facilitating integration, construction, formulation, and presentation of findings, is recommended for future journalism and communication studies using GTM for their study framework. It is a reflexive process better suited for studies where the researcher is involved from data collection and analysis to writing the emergent theory.

The explication technique is specifically recommended for use in qualitative studies focused on studying the cultures of journalism professionals in different settings or context as well as in studying the extrinsic and intrinsic dimensions of their journalistic culture. Extrinsic dimension refers to journalists' perceived influences and editorial autonomy. Intrinsic dimension on the other hand refers to their role orientations, ethical considerations, and trust in institutions (Zamith, 2022).

The last step, which seeks to find out whether the emergent theory could confirm, extend, contradict, or challenge existing theories, gives GTM "potentially… a huge role to play in theory building, in all disciplines" (Urquhart, 2013, p. 17).

As demonstrated in this study, GTM can be a fruitful research method and procedure that could help contribute to theory building or to the advancement of knowledge in the field of communication in general, and in the journalism discipline in particular. This method is recommended for qualitative studies focused on studying the cultures of journalism professionals in different settings or context. Its coding procedure can be mixed with other coding techniques like content and textual analysis.

C. Practical Implications

In examining how the country's leading online news outlets reported the COVID-19 pandemic as an episodic science news event in the country from 2020-2022, this study was able to generate a grounded theory on the reporters' contextual science journalism praxis.

The emergent theory, generated from data collected on the participants' newsroom culture, science reportage, and role performance as science journalists in

times of public health emergencies, contributes to the body of knowledge in communication and journalism, specifically on the advancement of research-based knowledge in journalistic cultures, journalistic role orientations, and journalistic role performance. These three research topics offer journalism scholars vast opportunities for academic investigations or research.

Specifically, this study contributes to theory building or advancement of the body of knowledge in science journalism, which to these days has remained a low priority of newsrooms and journalism schools despite its relevance to human life and societies. Science journalism not only helps the public understand science, but it also helps check on irregularities and encourages best practices in the science community and could promote science narratives that could lead to the creation of shared experiences and promotion of science culture (Congjuico, 2017).

The findings of this study also contribute to the enhancement of J133 Science Reporting, a journalism elective course instituted by the Journalism Department of the University of the Philippines College of Mass Communication (UPCMC) in 2018, as well as to the science journalism courses or programs of other journalism schools in the country.

The contextual knowledge and insights generated from this study provide newsrooms some research-based insights about their practice, and science communicators and media literacy educators additional resource which they can refer to when designing programs that promote science news literacy in the country.

The following are some specific insights on and implications of the findings of this study particularly on the three core categories of the emergent theory, namely the participants' newsroom culture, science reportage, and their role performance as science journalists during the COVID-19 pandemic, from 2020-2022:

1. Newsroom Culture

For this category on newsroom culture, the study investigated the reporting practices and routines, reporting principles and norms, and journalistic role orientation of the participants.

Data collected showed that the science journalism beat remains a low priority of newsrooms, that it is but an add-on beat to their reporters who were assigned three or more beats, covering several virtual media events in a day, and sometimes had to work beyond normal work hours to cover media events that lasted late at night, well beyond newsroom deadlines.

The reporters, some of them were also rotated to news beats and needed to quickly learn the ropes of their coverage, were quite stretched out during the pandemic, and this resulted in burnout and the temptation to leave their profession.

The participants, consistent with Witsen and Takahashi's (2018) interactional expertise framework, performed their reporting task as they normally would do in their previous beats prior to the pandemic, i.e., doing research on the news topic and learning about their coverage on the job; closely coordinating with their editors and observing newsroom policies on deadlines, quota, news source independence and attribution; and relying on their personal news source network, and receiving help from trusted news sources and topic experts. They learned that they could leverage on the affordances of technology and online communities to perform their job just as efficiently, albeit more challenging, even during lockdowns.

The "controlled" and "restrictive" *Laging Handa* online press briefings of the Government posed news and information gathering issues to science reporters. The online media event also led to the blurring of beat boundaries and resulted in more

merged stories, and in some newsrooms, with “barangay bylines” where the stories of the science writers got buried in the stories bylined by reporters from the major beats.

The participants -- by providing clear, correct, and accurate information readers could use to make timely and informed decision -- believed they played a key role for the people during the pandemic, even proposing that the media should have focused more on the science of the news topic and less on its political aspect.

While newsrooms could not be dictated upon to give prominence and importance to science, there might be a need to study the workload, working hours, professional development, and psychosocial support for reporters and find ways to address these issues.

This study suggests the need for newsrooms to work together as one industry to develop a “playbook” which newsrooms in the country can activate or refer to in times of public health emergency.

The proposed newsroom manual not only outlines safe and ethical reporting practices and protocols, but also incentivizes collaboration or teamwork to encourage productivity and quality work. The playbook should also come with a “customized” yet constantly updated or always evolving science reporting stylebook.

2. Science Reportage

For this category on science reportage, the study investigated characteristics, provenance, themes, and news values of the participants’ COVID-19 pandemic related news reports.

Due to their daily workload and other reporting challenges during the pandemic, the participants who are used to individually pursuing stories were unable to publish more in-depth and context-rich news stories with proper visualizations for

impact and comprehension as they would have wanted, but nonetheless were able to publish “clear, correct and accurate” news reports that also explored tension, contains empowering information, and captures emotion.

Majority of their news sources who are mostly topic experts are with the local and national government, an indication that the voices and points of views they privileged were those of the government which includes both the politicians and government scientists, the influential and authoritative news sources trusted by the participants during the pandemic.

Of the six pandemic news themes that emerged, science news themes (which include science, technology, medicine, and health stories), political policy (which include guidelines and actions adopted by the government during the pandemic), and pandemic impact (how Filipinos were affected and how the government and nongovernment institutions responded) were their top three news themes. This indicates that the COVID-19 pandemic was a complex episodic science news event with multiple dimensions that include social, political, economic, and peace and order.

The news values of the participants’ science news stories connected to 14 deeper science news frames, namely patient care, vaccine supply, population immunity, vaccine hesitancy, surveillance – testing and diagnostics, medical equipment and supplies, psychosocial support, preventive policy responses, ICT rollout and utilization, medical waste disposal, healthcare system, science-based solutions and responses, safe public spaces protocols, and origin, mutation, and variants of the virus.

Of these news themes that emerged, science-based solutions and responses (e.g., use of statistical data to inform the pandemic responses of national and local government units and research-based healthcare practices for the country’s

healthcare system and the public), patient care (i.e., alternative and more accessible patient care, protection from, and treatment), and surveillance – testing and diagnostics (i.e., accessible, safe, and reliable test kits, more testing centers, diagnostic facilities and sequencing facilities to tract the virus) were the top three science news themes.

These news frames and media discourses above indicate that society and the media turned to science to provide answers, giving the science news sources the opportunity to influence public policies and individual or community decisions. This study recommends that future studies should be conducted to also find out the extent to which news sources had influenced policies and decisions during the pandemic.

Given the complexity of the COVID-19 pandemic as an episodic science news event, this study recommends that future studies could further investigate the relation between the media and influential forces in society (e.g., government, the pharmaceutical companies, manufacturers of remedies and facilities, etc.) as science news sources to gain further insights on their power relations.

Other scholarly studies could also examine the newsroom culture of news outlets and investigate their perceived influences and editorial autonomy in relation to news sources and society. They could also analyze news reportage to examine the media representations of vulnerable and/or most likely muted voices such as those of health workers, patients, and health activists or advocates.

3. Role Performance

For this category on role performance, the study investigated the journalists' voice, power relations, and audience approach of participants as observed in their published science news reports.

To some extent, the participants used their voice as journalists to realize their expressed role orientation as “key players for the public during the pandemic” by providing news stories that inform, explain, and clarify, either using a simple straight news or a reportage that provides readers – already bombarded with false and misleading information from social media – “clear, correct, and accurate” information about the COVID-19.

This above findings indicate or imply that when the time calls for “journalists on a mission” (Zamith, 2022), even beat reporters -- who are expected to only perform disseminative or informational relay function, to observe professional distance from the facts, and to always uphold professional norms of impartiality, fairness and balance -- are also ready to take on an interventionist role, a proactive role that interprets and explains the news as an act of public service to readers, albeit sparingly.

During the pandemic, the participants embraced a facilitator role for the government and performed an informational relay function, but this did not mean that they abandoned their role as a watchdog of power. Although to a much lesser extent, they also published news reports on wrongdoings, on investigations, and news that criticized or expressed doubts or suspicion.

Their most privileged news sources are the influential elite from government offices helping them communicate their COVID-19 response initiatives, progress, and success to the public. Their second most prioritized pandemic news themes, next to science, is the government’s political policy on health in response to the pandemic.

The above findings indicate or imply that power relations between the media and the government are contextual, fluid, and may be influenced by external factors such as the nature of the episodic news event and the information need of the public. In the case of the COVID-19 pandemic, their perceived public service role called for

them to trust the government and work alongside with its officials to keep the public informed so that they could make rational decisions for themselves.

For their audience approach, the participants regarded the public as clients that utilize news information for knowledge enrichment and citizens that need to participate in public affairs. They prioritized to give readers useful information they could use in their day-to-day lives during the pandemic while also giving voices to citizens -- individuals and groups -- who came forward with their demands and proposals, albeit to a much lesser extent. This implies that they viewed their profession as another form of public service and their news reports are empowering pieces of information readers need to make better informed decisions.

The above findings on journalistic role performance, specifically on the constructs on journalists' voice, power relations and audience approach – the three interrelated domains of JRP framework, further support the proposition that journalism as a profession is a culturally grounded role orientation and performance, that knowledge generated from research are context-specific and time-specific.

As mentioned, JRP is a relatively new journalism framework which journalism scholars should use to generate more knowledge about the journalism discipline. Other studies could either replicate this study in other journalism contexts or focus their studies on the occupational ideology of journalists, journalists cultural values, journalistic cultures, role orientation, role performance, journalist voice, power relations, and/or audience approach to understand how Filipino journalists collectively legitimize themselves to the Philippine society.

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APPENDIX A

Participant Interview Guide

Statement of Research Purpose: To describe the science journalism role performance of Filipino journalists that reported on or edited published stories about the COVID-19 pandemic, an episodic science news event which Filipino journalists have had to make sense of and report on amid scientific uncertainties and confusion, disinformation, disruptions, and public despair.

Note: *Before the interview, make sure the Informed Consent Form has been signed. Seek permission to record the interview*. *Inform the participant that they will be anonymized in the writeup.*

News Outlet: _____ Female☐ Male☐ Age: _____ Code Name:_____
Reporter Beat/Assignment _____
Section/Segment _____
Performed role as reporter for COVID-19 stories in: ☐2020 ☐2021 ☐2022

Focus Questions: Newsroom culture, the shared reality that allows journalists to see and understand news events (e.g., the COVID-19 pandemic) in distinctive ways; it creates the conditions for good or quality journalism. Specifically, the interview will focus on journalism practices, norms, and intentions of journalists that covered the COVID-19 pandemic.

Part I: Newsroom Practices

The routines and established procedures and processes related to the practice of journalism, e.g., deadlines, verification process for factual reporting, beat system or team system in covering the news, freelancing, ways of disclosure in case of conflict of interests, safety procedures.

Beats, Assignments, Deadlines – Reporter' day during the pandemic, i.e., how they performed each day as a journalist, quota, and deadlines, where and they you looked for stories, what news stories to submit daily and/or weekly, attribution policy, disciplinary rules on infractions, and on co-bylined stories, etc.

News Gathering Methods and Tools – the editorial policies, practices (i.e., news gathering methods – in person, online) introduced during the pandemic.

Polices & practices – Pandemic policies still in place? Which ones should be made permanent?

The reporting tools - e.g., information and communication technology, software apps, online communities and chatgroups, that became useful to you as a reporter during the pandemic; how the use of these tools impacted on the coverage of COVID-19 during the pandemic; etc.

Safety and Welfare During the Pandemic – the safety procedures you needed to observe as beat reporters during the pandemic; the kinds of support provided by the news organization (e.g., medical safety supplies, psychosocial support).

Mentoring and Professional Development -- mentoring and professional development programs and initiatives for reporters; how does one get promoted, the criteria for promotion; are these criteria clear to you; how are reporters compensated for meritorious performance; does your editor perform the role of a mentor or a critique/evaluator; etc.

Part II: Principles and Norms

The codes and ideals of the journalism profession. Organizations and associations express them differently, but the basic assumption is that a principled journalism is factual, ethical, independent from its sources.

Access to Verified Information During the Pandemic – was there was "shrinking space for press freedom" during the pandemic? Was there limited/easy access to information during the pandemic? What is your take on the state organized *Laging Handa* press briefings? Was information access democratized and more efficient?

News Sources During the Pandemic - who or what were your most trusted news sources for your COVID-19 stories during the pandemic? If you were given more time and granted access, who do you think would be the ideal news sources for COVID-19 stories?

Reporter's Relationship with News Sources –were there forces outside of the newsroom, i.e., individuals, groups and/or institutions and developments that made factual and ethical reporting difficult? How did you protect your independence from these sources?

Attribution and Diversity of News Sources – newsroom policy on number of sources for news stories, your take on bothsideism (false balance), your take on the pending RORBs.

Tentative and Uncertain Science Information – available pieces of information about the COVID-19 were tentative and uncertain, and yet you already had to report about it. Does your organization have policies or guidelines on reporting uncertain and tentative (e.g., experimental meds, airborne or not, vaccine hesitancy) information. How did you report on tentative and uncertain information?

Part III: Intentions and Purpose

The goals or the purpose of journalism, e.g., to serve as an independent monitor of power, to provide a forum for public criticism and compromise, to serve as the public's chief sense-makers, and to provide the public with information they need.

The COVID-19 Science Story - In your own view, what is an ideal science story? A good news story about the COVID-19?

News Values - what news values were the most important at the time, e.g., facticity, accuracy, correctness/ethical, timeliness, human interest, completeness, etc. What are the ways you made sure your stories met the criteria of being factual and ethical/responsible?

News Packaging -- what types of stories/reports (i.e., news, features, commentary, etc.) and story packaging (e.g., use of photos, visualizations, etc.) about the COVID-19 were deemed more suitable for the readers during the pandemic?

Reporting Role and Intentions - the functions and role of journalism during the COVID-19 pandemic, why was journalism important during the pandemic, was journalism during the pandemic worth the health risks for journalists.

Health Comm Programs – reporter's take on the government's health communication programs; what role should journalists play re gov't health comm programs

Reporting Challenges and Difficulties During the Pandemic -- challenges, difficulties, and problems specific to the coverage of the COVID-19 pandemic, the limitations or shortcomings of reporters and newsrooms that covered the COVID-19 pandemic

APPENDIX B

Content Analysis Coding Guide

Part I: General Information

Date – the publication date of the article on the Internet.
Outlet – the name of the publication that published the news story.
Placement – the section of the news outlet where the story appears.
Author – the reporter who wrote or co-wrote the news and given either a byline or a tagline credit.
Co-authors – all other authors of the news story being analyzed.
Byline – a credit line before the start of the news story.
Tagline – a credit line at the end of the news story.
Story Link – the hyperlink that shows the headline and provides direct access to the full story

Part II: Story Characteristics

Pandemic-related Story – stories that mention Corona Virus, SARS-COV, COVID-19, global pandemic, new normal, IATF, quarantine, in either the headline or the body of the article authored by the research participants from Philippine Star, Philippine Daily Inquirer and ABS-CBN, and published from 2020 to 2022.

Merged Story – a single story with multiple authors who are given either a byline or a tagline credit for their contribution to the story.

Story *Types*: News Report – a report that provides information on "who, what, how, when and where" about the topic; and Reportage – not just a reporting of facts; contains context-rich info, maybe an in-depth analysis of recent events that have already been covered by the media, usually includes several sources

Story Packaging: Image – the photograph that accompanies a story; Visualization – the graphs or illustrations that represent data or information about the story; and Video – a clip that displays moving visual data or information.

News Story Topic: General News Topic – the general news topics usually covered by the media which include governance such as legislatures, executive and judiciary, banking, budget and finance, economy and business, transportation, education, infrastructure, public works, social works, social issues, health and wellness, lifestyle, science and technology, climate, environment, faith and religion, culture, etc.; and *Specific Topic*; Emerging Topics – the specific topic or subject of the story

Part III: Reporting Process/Practice

News Gathering Method (if mentioned): in person interview – synchronous mode, face to face; Phone Interview – synchronous mode, using landline of mobile phones; Email Interview – asynchronous mode, electronic mail exchanges; info/doc shared on online community – information shared by source in online community such as on Viber or Messenger; Presscon: streamed on Facebook, YouTube, Live broadcast coverage (TV or radio)

Source Category: Government – the source is a politician or someone who works for the Government; Non-government – NGOs, IOs, private companies, associations, and organizations; and Organization/Identifier – name of organization e.g., DOH, WHO, mother, patient, etc.

Source Type: Expert – the source is an official or a person of authority; Witness – the source is a person who shared a first-hand account of events; and Document – the source of the story is a document such as a white paper, brief, speeches.

Source Diversity: None – the story does not mention a source; Single – the story mentions only one source; and Multiple – the story mentions two or more sources.

APPENDIX C

Textual Analysis Coding Guide

Part I: News Values

Relevant topic (information is important to or impacts readers)
Context-rich (includes background information about the news)
Captures emotion (interesting, engaging and appeals to readers emotion)
Explores tension (depicts disputes, conflict, war disagreements, debates)
Empowers readers (information provided is beneficial to readers)
Connects to deeper themes (relates to bigger, more relevant topics, urgent societal problems/issues)
Other Emerging Concepts
Notes and Memos

Part II: News Themes / Frames

Emerging Pandemic Related Themes
Emerging Science Related Themes (Science, Medicine, and Health)
Notes and Memos

*Part III: Journalistic Role Performance

Journalists Voice

A. Interventionist
   Author's POV (judgement, stand, position) is explicit; author Interprets, explains; author calls for action (government, community, individual behavior change); and other emerging concepts

Power Relations

A. Watchdog
   Author's reports inform of wrongdoing (violations, non-compliance, unethical conduct); author exposes hidden wrongdoings/irregularities (violations, non-compliance, unethical); author reports on investigations; author denotes his or her doubt on claims; author criticizes, judges, condemns; author exposes media conflict with the elite; and other emerging concepts
B. Facilitator
   Author praises, promotes, defends elite sources and their pandemic response policies; author presents positive image of the elite sources, pandemic responses, and endeavors; author reports on pandemic responses, initiatives, successes, progress, triumphs of sources; and other emerging concepts

Audience Approach

A. Service
   Author explains the impact of the news; author gives useful or empowering information; author gives useful and important advice; and other emerging concepts
B. Civic
   Story includes reaction and questions of citizens on news events; story includes demands, proposals from citizens, socio-civic, and non-government orgs; story mentions or depicts localized impact or relevance (LGU); story mentions of or depicts socialized group or community impact; story instructs, educates the public on their duties and rights; story provides context to help the public make informed decision; story includes information about citizen-led activities, movements; and other emerging concepts
C. Infotainment
   Story features a people and highlights their interesting characteristics; story features the private life public people; story highlights or emphasizes the unusual, incredible, spectacular; story makes explicit references to emotions (e.g., anger, sadness, happiness); story exacerbates readers' attention to violence, crime, etc.; and other emerging concepts

*JRP Instrument adapted from: Mellado, C. (2015 and 2021)

APPENDIX D

PARTICPANT INFORMED CONSENT

This Informed Consent Form has two parts: I. Information Sheet (to share information about the study with you), and II. Certificate of Consent (for signature if you agree to participate). Please read the following information carefully and feel free to ask me if there is anything that is not clear, or if you need more information. You will be given a copy of the full Informed Consent Form.

Part 1. Information Sheet

Introduction. I am Asst. Prof. Teresa S. Congjuico, a Doctor of Communication student at the University of the Philippines Open University and a faculty member of the Journalism Department of the College of Mass Communication, University of the Philippines Diliman, currently working on my doctoral dissertation entitled, *The Praxis of Filipino Science Journalists During the Covid-19 Pandemic (2020-2022).* You are being invited to participate as an interviewee for this study.

Purpose of the research. This research seeks to describe the science journalism role performance of Filipino journalists that reported on or edited published stories about the COVID-19 pandemic as an episodic science news event from 2020-2022.

Participant Selection. The COVID-19 pandemic is an episodic news event which Filipino journalists have had to make sense of and report on amid scientific uncertainties and confusion, disinformation, disruptions, and public despair. You are being invited to participate because of your first-hand involvement in its coverage either as a reporter or an editor.

Voluntary Participation. Your participation is entirely voluntary. If you decide to participate, you will be asked to sign this consent form. After you sign this consent form, you are still free to withdraw at any time.

Confidentiality. Be assured that your privacy shall be preserved as all data sources shall be anonymized in the write up (i.e., personal information shall not be shared nor will appear in any part of the dissertation).

Procedures. The interview shall focus on newsroom culture, the shared reality that allows journalists to see and understand particular events (e.g., the COVID-19 pandemic) in distinctive ways. Specifically, the interview will focus on journalism norms, practices, and intentions of journalists during the COVID-19 pandemic, from 2020-2022.

Risks. There is a risk that you may share some personal or confidential information by chance, or that you may feel uncomfortable talking about some of the topics. Be assured that participants shall be anonymized.

Benefit. There will be no direct benefit to you, but your participation will contribute to the goals of this study which include: to provide journalism schools a learning resource on science journalism with a Philippine perspective; to offer science journalists and newsrooms some research-based insights about their practice; and to provide both the science communicators and media and information literacy educators additional local resource material which they can use in promoting science culture and science news literacy in the country.

ICF adapted from:
World Health Organization Informed Consent Templates
https://www.who.int/rpc/research_ethics/InformedConsent-qualitativestudies.doc?ua=1

APPENDIX E

CERTIFICATE OF CONSENT

I have read the foregoing information. I have had the opportunity to ask questions, and questions I have asked have been answered to my satisfaction.

I voluntarily consent to be a participant in this study

Signature of Participant: _____

Print Name of Participant:

Date _____
Day/month/year

Statement by the researcher/person taking consent

I have accurately explained the information sheet to the participant, and to the best of my ability made sure that the participant understood that the following will be done:

1. They will be anonymized in this study
2. All personal information shared will be kept confidential

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability.

I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.

A copy of this ICF has been provided to the participant.

Print Name of Researcher/person taking the consent: TERESA S. CONGJUICO

Signature of Researcher /person taking the consent: _____

Date _____
Day/month/year

ICF adapted from:
World Health Organization Informed Consent Templates
https://www.who.int/rpc/research_ethics/InformedConsent-qualitativestudies.doc?ua=1

APPENDIX F

Pandemic News Themes

Table 1. COVID-19 Pandemic News Themes (N = 687)

Categories of Themes	Count	Percent
Science	434	63.17
Political Policy	293	42.65
Pandemic Impact	82	11.94
Education	76	11.06
Migrant Workers & Foreign Affairs	38	5.53
Community and Culture	18	2.62

Table 2. COVID-19 Pandemic News Themes - Inquirer (N = 156)

Categories of Themes	Count	Percent
Political Policy	92	58.97
Science	65	41.67
Education	36	23.08
Pandemic Impact	35	22.44
Community and Culture	7	4.49
Migrant Workers & Foreign Affairs	0	0.00

Table 3. COVID-19 Pandemic News Themes - Rappler (N = 185)

Categories of Themes	Count	Percent
Political Policy	121	65.41
Science	101	54.59
Migrant Workers & Foreign Affairs	33	17.84
Pandemic Impact	12	6.49
Education	6	3.24
Community and Culture	4	2.16

Table 4. COVID-19 Pandemic News Themes - ABS-CBN News Online (N = 35)

Categories of Themes	Count	Percent
Political Policy	21	60.00
Science	18	51.43
Pandemic Impact	4	11.43
Community and Culture	3	8.57
Migrant Workers & Foreign Affairs	2	5.71
Education	1	2.86

Table 5. COVID-19 Pandemic News Themes - GMA News Online (N = 144)

Categories of Themes	Count	Percent
Science	144	100.00
Political Policy	38	26.39
Community and Culture	2	1.39
Pandemic Impact	1	0.69
Education	0	0.00
Migrant Workers & Foreign Affairs	0	0.00

Table 6. COVID-19 Pandemic News Themes - PhilStar (N = 167)

Categories of Themes	Count	Percent
Science	105	62.87
Education	33	19.76
Pandemic Impact	30	17.96
Political Policy	21	12.57
Migrant Workers & Foreign Affairs	3	1.80
Community and Culture	2	1.20

APPENDIX G

Science News Themes

Table 1. Covid-19 Science News Themes (N = 434)

Categories	Count	Percent
Science-based Responses	112	25.93
Patient Care	111	25.69
Surveillance (Testing & Diagnostics)	87	20.14
Healthcare System	86	19.91
Preventive Policy Responses	80	18.52
Safe Public Spaces Protocols	73	16.90
Vaccine Supply	71	16.44
Vaccination (Population Immunity)	47	10.88
Origin, Mutation & Variants	29	6.71
Med Equipment and Supplies	22	5.09
ICT Rollout and Utilization	19	4.40
Vaccine Hesitancy	13	3.01
Psychosocial Support	13	3.01
Medical Waste Disposal	3	0.69

Table 2. Covid-19 Science News Themes - PhilStar (N105)

Categories	Count	Percent
Patient Care	44	41.90
Vaccine Supply	23	21.90
Vaccination (Population Immunity)	14	13.33
Science-based Responses	9	8.57
Vaccine Hesitancy	8	7.62
Surveillance (Testing & Diagnostics)	8	7.62
Preventive Policy Responses	8	7.62
ICT Rollout and Utilization	8	7.62
Psychosocial Support	6	5.71
Healthcare System	5	4.76
Safe Public Spaces Protocols	5	4.76
Origin, Mutation & Variants	4	3.81
Med Equipment and Supplies	2	1.90
Medical Waste Disposal	1	0.95

Table 3. COVID-19 Science News Themes - GMA News Online (N = 144)

Categories	Count	Percent
Patient Care	51	35.42
Science-based Responses	47	32.64
Vaccine Supply	35	24.31
Origin, Mutation & Variants	18	12.50
Preventive Policy Responses	13	9.03
Surveillance (Testing & Diagnostics)	12	8.33
Vaccination (Population Immunity)	10	6.94
Safe Public Spaces Protocols	7	4.86
Med Equipment and Supplies	5	3.47
ICT Rollout and Utilization	5	3.47
Vaccine Hesitancy	2	1.39
Healthcare System	2	1.39
Psychosocial Support	0	0.00
Medical Waste Disposal	0	0.00

Table 4. Covid-19 Science News Themes - Inquirer.net (N=65)

Categories	Count	Percent
Safe Public Spaces Protocols	28	43.08
Preventive Policy Responses	27	41.54
Surveillance (Testing & Diagnostics)	22	33.85
Healthcare System	19	29.23
Vaccination (Population Immunity)	8	12.31
Vaccine Supply	5	7.69
Patient Care	4	6.15
Med Equipment and Supplies	4	6.15
Psychosocial Support	3	4.62
ICT Rollout and Utilization	3	4.62
Science-based Responses	2	3.08
Medical Waste Disposal	1	1.54
Vaccine Hesitancy	0	0.00
Origin, Mutation & Variants	0	0.00

Table 5. Science News Themes - Rappler (N = 102)

Categories	Count	Percent
Healthcare System	52	50.98
Science-based Responses	42	41.18
Surveillance (Testing & Diagnostics)	40	39.22
Safe Public Spaces Protocols	30	29.41
Preventive Policy Responses	26	25.49
Med Equipment and Supplies	11	10.78
Patient Care	9	8.82
Vaccine Supply	6	5.88
Vaccination (Population Immunity)	3	2.94
Psychosocial Support	3	2.94
ICT Rollout and Utilization	3	2.94
Origin, Mutation & Variants	1	0.98
Vaccine Hesitancy	0	0.00
Medical Waste Disposal	0	0.00

Table 6. Science News Themes - ABS-CBN (N = 18)

Categories	Count	Percent
Vaccination (Population Immunity)	12	66.67
Science-based Responses	12	66.67
Healthcare System	8	44.44
Preventive Policy Responses	7	38.89
Origin, Mutation & Variants	6	33.33
Surveillance (Testing & Diagnostics)	5	27.78
Safe Public Spaces Protocols	4	22.22
Patient Care	3	16.67
Vaccine Hesitancy	3	16.67
Vaccine Supply	2	11.11
Psychosocial Support	1	5.56
Medical Waste Disposal	1	5.56
Med Equipment and Supplies	0	0.00
ICT Rollout and Utilization	0	0.00

APPENDIX H

News Values of Science New Stories

Table 1. News Values of Covid-19 Science News Stories

News Story Attributes	Count (N=434)	Percent
Relevant Science Topic	434.00	100.00
Connects to Deeper Themes	417.00	96.08
Explores Tension	91.00	20.97
Empowers Readers	87.00	20.05
Context-Rich	69.00	15.90
Captures Emotion	27.00	6.22

Table 2. News Values of Covid-19 Science News Stories - Philstar

News Story Attributes	Count (N=105)	Percent
Relevant Science Topic	105	100.00
Connects to Deeper Themes	105	100.00
Context-Rich	30	28.57
Explores Tension	10	9.52
Empowers Readers	10	9.52
Captures Emotion	5	4.76

**Bylined by two research participants*

Table 3. News Values of Covid-19 Science News Stories - ABS-CBN News Online

News Story Attributes	Count (N=18)	Percent
Relevant Science Topic	18	100.00
Connects to Deeper Themes	18	100.00
Context-Rich	5	27.78
Empowers Readers	4	22.22
Captures Emotion	3	16.67
Explores Tension	1	5.56

**Bylined by one research participant*

Table 4. News Values of Covid-19 Science News Stories - Rappler

News Story Attributes	Count (N=102)	Percent
Relevant Science Topic	102	100.00
Connects to Deeper Themes	99	97.06
Explores Tension	39	38.24
Empowers Readers	10	9.80
Context-Rich	9	8.82
Captures Emotion	3	2.94

**Published by three science journalists*

Table 5. News Values of Covid-19 Science News Stories - GMA News Online

News Story Attributes	Count (N=144)	Percent
Relevant Science Topic	144	100.00
Connects to Deeper Themes	134	93.06
Explores Tension	27	18.75
Empowers Readers	24	16.67
Context-Rich	15	10.42
Captures Emotion	11	7.64

**Published in Scitech Page where the research participant is a contributor*

Table 6. News Values of Covid-19 Science News Stories - Inquirer

News Story Attributes	Count (N=65)	Percent
Relevant Science Topic	65	100.00
Connects to Deeper Themes	61	93.85
Empowers Readers*	39	60.00
Explores Tension	16	24.62
Context-Rich	12	18.46
Captures Emotion	5	7.69

**Call for donation blurb*

APPENDIX I

Interventionist Role Performance

Table 1. Interventionist Role Performance

Indicators	N=434	Percent
Explicit point of view	81.00	18.66
Interprets and explains	164.00	37.79
*Calls for action	36.00	8.29

**PDI-Call for donation blurb for their CSR*

Table 2. Interventionist Role Performance - Rappler

Indicators	N=102	Percent
Explicit point of view	34.00	33.33
Interprets and explains	64.00	62.75
Calls for action	-	-

Table 3. Interventionist Role Performance - PhilStar

Indicators	N=105	Percent
Explicit point of view	22.00	20.95
Interprets and explains	41.00	39.05
Calls for action	-	-

Table 4. Interventionist Role Performance - GMA News Online

Indicators	N=144	Percent
Explicit point of view	9.00	6.25
Interprets and explains	41.00	28.47
Calls for action	-	-

Table 5. Interventionist Role Performance - Inquirer

Indicators	N=65	Percent
Explicit point of view	14.00	21.54
Interprets and explains	15.00	23.08
*Calls for action	36.00	55.38

**PDI-Call for donation blurb for their CSR*

Table 6. Interventionist Role Performance - ABS-CBN News Online

Indicators	N=18	Percent
Explicit point of view	2.00	11.11
Interprets and explains	3.00	16.67
Calls for action	-	-

APPENDIX J

Facilitator Role Performance

Table 1. Facilitator Role Performance

Indicators	N=434	Percent
Praises, promotes, and defends	10.00	2.30
Presents positive image	80.00	18.43
Reports on initiatives, progress, success	168.00	38.71

Table 2. Facilitator Role Performance - Inquirer

Indicators	N=65	Percent
Praises, promotes, and defends	-	-
Presents positive image	1.00	1.54
Reports on initiatives, progress, success	41.00	63.08

Table 3. Facilitator Role Performance - ABS-CBN News Online

Indicators	N=18	Percent
Praises, promotes, and defends	-	-
Presents positive image	-	-
Reports on initiatives, progress, success	7.00	38.89

Table 4. Facilitator Role Performance - GMA News Online

Indicators	N=144	Percent
Praises, promotes, and defends	4.00	2.78
Presents positive image	28.00	19.44
Reports on initiatives, progress, success	50.00	34.72

Table 5. Facilitator Role Performance - PhilStar

Indicators	N=105	Percent
Praises, promotes, and defends	6.00	5.71
Presents positive image	51.00	48.57
Reports on initiatives, progress, success	37.00	35.24

Table 6. Facilitator Role Performance - Rappler

Indicators	N=102	Percent
Praises, promotes, and defends	-	-
Presents positive image	-	-
Reports on initiatives, progress, success	33.00	32.35

APPENDIX K

Watchdog Role Performance

Table 1. Watchdog Role Performance

Indicators	N=434	Percent
Wrongdoings	29.00	6.68
Expose	-	-
Investigations	6.00	1.38
Doubtful	10.00	2.30
Criticizes	31.00	7.14
Media Conflict	1.00	0.23

Table 2. Watchdog Role Performance - Rappler

Indicators	N=102	Percent
Wrongdoings	10.00	9.80
Expose	-	-
Investigations	2.00	1.96
Doubtful	7.00	6.86
Criticizes	23.00	22.55
Media Conflict	1.00	0.98

Table 3. Watchdog Role Performance - Inquirer

Indicators	N=65	Percent
Wrongdoings	7.00	10.77
Expose	-	-
Investigations	2.00	3.08
Doubtful	-	-
Criticizes	2.00	3.08
Media Conflict	-	-

Table 4. Watchdog Role Performance - PhilStar

Indicators	N=105	Percent
Wrongdoings	7.00	6.67
Expose	-	-
Investigations	2.00	1.90
Doubtful	1.00	0.95
Criticizes	6.00	5.71
Media Conflict	-	-

Table 5. Watchdog Role Performance - GMA News Online

Indicators	N=144	Percent
Wrongdoings	5.00	3.47
Expose	-	-
Investigations	-	-
Doubtful	2.00	1.39
Criticizes	-	-
Media Conflict	-	-

Table 6. Watchdog Role Performance - ABS-CBN

Indicators	N=18	Percent
Wrongdoings	-	-
Expose	-	-
Investigations	-	-
Doubtful	-	-
Criticizes	-	-
Media Conflict	-	-

APPENDIX L

Service Role Performance

Table 1. Service Role Performance

Indicators	N=434	Percent
Explains impact of news	9.00	2.07
Gives useful information	59.00	13.59
Gives useful advice	7.00	1.61

Table 2. Service Role Performance - Inquirer

Indicators	N=65	Percent
Explains impact of news	-	-
Gives useful information	39.00	60.00
Gives useful advice	-	-

Table 3. Service Role Performance - ABS-CBN News Online

Indicators	N=18	Percent
Explains impact of news	-	-
Gives useful information	4.00	22.22
Gives useful advice	-	-

Table 4. Service Role Performance - Rappler

Indicators	N=102	Percent
Explains impact of news	2.00	1.96
Gives useful information	8.00	7.84
Gives useful advice	1.00	0.98

Table 5. Service Role Performance - PhilStar

Indicators	N=105	Percent
Explains impact of news	6.00	5.71
Gives useful information	5.00	4.76
Gives useful advice	6.00	5.71

Table 6. Service Role Performance - GMA News Online

Indicators	Count (N=144)	Percent
Explains impact of news	1.00	0.69
Gives useful information	3.00	2.08
Gives useful advice	-	-

APPENDIX M

Civic Role Performance

Table 1. Civic Role Performance

Indicators	N=434	Percent
Citizen reactions	15.00	3.46
Citizen demands, proposals	31.00	7.14
Depicts localized impact (LGU)	6.00	1.38
Depicts community impact (SIG)	7.00	1.61
Instructs, educates public	6.00	1.38
Context for informed decisions	14.00	3.23
Reports on citizen-led activities	8.00	1.84

Table 2. Civic Role Performance - PhilStar

Indicators	N=105	Percent
Citizen reactions	3.00	2.86
Citizen demands, proposals	16.00	15.24
Depicts localized impact (LGU)	6.00	5.71
Depicts community impact (SIG)	5.00	4.76
Instructs, educates public	3.00	2.86
Context for informed decisions	6.00	5.71
Reports on citizen-led activities	5.00	4.76

Table 3. Civic Role Performance - Rappler

Indicators	N=102	Percent
Citizen reactions	5.00	4.90
Citizen demands, proposals	11.00	10.78
Depicts localized impact (LGU)	-	-
Depicts community impact (SIG)	1.00	0.98
Instructs, educates public	1.00	0.98
Context for informed decisions	-	-
Reports on citizen-led activities	1.00	0.98

Table 4. Civic Role Performance - Inquirer

Indicators	N=65	Percent
Citizen reactions	5.00	7.69
Citizen demands, proposals	2.00	3.08
Depicts localized impact (LGU)	-	-
Depicts community impact (SIG)	1.00	1.54
Instructs, educates public	-	-
Context for informed decisions	1.00	1.54
Reports on citizen-led activities	1.00	1.54

Table 5. Civic Role Performance - GMA News Online

Indicators	N=144	Percent
Citizen reactions	1.00	0.69
Citizen demands, proposals	1.00	0.69
Depicts localized impact (LGU)	-	-
Depicts community impact (SIG)	-	-
Instructs, educates public	2.00	1.39
Context for informed decisions	7.00	4.86
Reports on citizen-led activities	1.00	0.69

Table 6. Civic Role Performance - ABS-CBN

Indicators	N=18	Percent
Citizen reactions	1.00	5.56
Citizen demands, proposals	1.00	5.56
Depicts localized impact (LGU)	-	-
Depicts community impact (SIG)	-	-
Instructs, educates public	-	-
Context for informed decisions	-	-
Reports on citizen-led activities	-	-

APPENDIX N

Infotainment Role Performance

Table 1. Infotainment Role Performance

Indicators	N=434	Percent
Features people's interesting characters	7.00	1.61
Features private life of public people	1.00	0.23
Highlights the unusual, spectacular	2.00	0.46
Make explicit references to emotions	9.00	2.07
Exacerbates attention to violence	-	-

Table 2. Infotainment Role Performance - Inquirer

Indicators	N=65	Percent
Features people's interesting characters	1.00	1.54
Features private life of public people	-	-
Highlights the unusual, spectacular	-	-
Make explicit references to emotions	3.00	4.62
Exacerbates attention to violence	-	-

Table 3. Infotainment Role Performance - GMA News Online

Indicators	N=144	Percent
Features people's interesting characters	4.00	2.78
Features private life of public people	-	-
Highlights the unusual, spectacular	1.00	0.69
Make explicit references to emotions	4.00	2.78
Exacerbates attention to violence	-	-

Table 4. Infotainment Role Performance - Rappler

Indicators	N=102	Percent
Features people's interesting characters	2.00	1.96
Features private life of public people	-	-
Highlights the unusual, spectacular	1.00	0.98
Make explicit references to emotions	2.00	1.96

Exacerbates attention to violence	-	-

Table 5. Infotainment Role Performance - PhilStar

Indicators	N=105	Percent
Features people's interesting characters	-	-
Features private life of public people	1.00	0.95
Highlights the unusual, spectacular	-	-
Make explicit references to emotions	-	-
Exacerbates attention to violence	-	-

Table 6. Infotainment Role Performance - ABS-CBN

Indicators	N=18	Percent
Features people's interesting characters	-	-
Features private life of public people	-	-
Highlights the unusual, spectacular	-	-
Make explicit references to emotions	-	-
Exacerbates attention to violence	-	-

APPENDIX O

Excerpts from Interviews with Reporters

A. Reporting Practices and Routines During the Pandemic

- As it's (the media event is) done, so you break the story. You can continually update it, or if it's not that urgent you submit it as soon as the press conference is done, so that probably take around an hour to 2 hours at the most after every press conference.

- *Yong* deadline *hindi naman nagbago nong* lockdown. *Nagbago lang nong* lockdown, *dahil ang Presidente may* presscon, *umaabot ng* midnight. *Ang apektado don yong* Malacañang reporter. *Dahil nagbabago minsan yong* layout *dahil kunwari malaki ang sinabi niya, nagbabakbak sila*, so *pwedeng pumasok yong story mo*. *Yong parang mga* editors *magre* remat, *so submit mo na yan.*

- Our newsroom came up with this policy, where we rotated the coverage of President Duterte. It (events) could run up to very late in the night. It was hard for just one reporter to do that. He'd be really stretched so the task was divided among all the reporters in the newsroom. We took turns covering him.

- I was holding three beats. Once the lockdown started, I would cover the press briefings every day. That would include *yong Laging Handa*, *yong* Malacañang presscon, yong DOH presscon... By then, I was probably submitting a minimum of six stories a day.

- The policy on beat assignments was a bit more fluid. *Kapag absent ang isang* reporter they will assign…they'll tell you, DOH *ka ngayon* over your other beats so I think that's how it kind of blurred the coverage especially on days *na kung ako lang nagsusulat ng Laging Handa*. *Sunod-sunod* so you have to pick and choose which one is the most newsworthy coz you can't write about everything.

- (Required) to submit two stories per day. Noong pandemic everyone was reporting on the same thing and then basically they merged our stories *kasi lahat naman yon ay* COVID... *Kahit na naglagay ka nang magandang* context about it, as long as you're competing with a Palace reporter, *yong* Palace ang *iaakyat nilang angle*… *Parang may* danger *din kasi* some people *talaga* are headline readers *lang*. Somehow *naging* powerless *kami* to control... the angle (of our story).

- Yung IATF (Interagency Task Force Against COVID-19) meron *silang* daily briefer (*Laging Handa*)…*isa na lang yong pinagkukunan namin* (*ng balita*)...*Parang na* blurr yong line (*ng* beats). *Lahat don pumupunta. Pati* Malacañang reporter, *kino*-cover *yon*… Malacañang ang *pinaka*-main (story) ...so I will focus on S&T. So, *ang gagawin mo na lang don, kung sino yong*

secretary, *sayo, pero pwede kang kuhanin nang* Malacañang *don dahil* IATF Malacañang event yon.

- (I used) Zoom and Google Meets. *Dahil sa tools na ito*, I was able to reach people *na hindi ko kayang maabot* using my own means *lang na* face to face.

- *Ang kagandahan non na*-discover *natin na* we can work from home. *Kahit pala* reporter *ka pwede kang mag* work from home. The government officials, *naging* active *sila sa pag* post *sa* social media *ng mga* activities *nila* or *kung may mga* advisories *sila*. Same as with hospitals and other private institutions.

- They (news sources) also post on social media. So, you just have to monitor those things and then *kung kailangan mong puntahan* then *puntahan mo*. *Hindi yong lalabas ka saka ka pa lang maghahanap*. Now, we monitor social media, we monitor the news and then *saka namin pupuntahan*, like *hindi kami lalabas ng walang plano* like before *na ikot lang kami nang ikot*. So, now we may monitor them on social media.

- The use of Viber and Viber Groups. We we're using Viber even before the pandemic *pero mas naging* active *siya sa* height ng COVID pandemic. And then Zoom, of course, very helpful. *Don natin na* discover *na* we can do press conference *pala kahit online lang*. Facebook Live, *pwede naman pala na hindi puntahan* so *don natin na* discover *na* we can work remotely. We can work more efficiently now by using these tools.

- *Doon* (Viber chatgroups), *pati mga* questions…*may magbabato ng tanong e nakikita namin lahat…*officials answer questions on their Viber chatgroups, *parang nagiging* cartel. | Even before pandemic, there're Viber Groups *na*, officials will post something in the group and then *wala nang* exclusivity *kumbaga*.

- It's the full usage of Viber, the Viber group for media, *na hanggang ngayon ginagamit na…parang* message board. But now (2023), *ito a, napansin ko, konti nalang din pumupunta sa* presscon, *dahil don*.

- During the pandemic, …*hindi nagagamit (ang ibang* stories) *dahil nag* reduce *kami ng* pages. *Parang*... (carrying out a) mission *lang dahil* affected *ang* newspaper publishing *non*. *Manipis ang dyaryo*, so we were not obliged to submit many stories like before the pandemic

- During the first six months (of the lockdowns) *nagkaroon kami ng* anxiety because of the reshuffling (of beats), inability to reach out to our sources. It was much more difficult back then to introduce yourself to the source *kasi hindi ka naman nila kilala*. It was difficult because restricted *yong* movement *namin*. As journalists *non,* there was less freedom to ask questions, to go to your sources kasi videoconferencing *na lahat*. Limited time for everything, limited time *yong* briefing, *pati yong pagtatanong*.

- It was much more difficult for me *kasi yong iba* (sources) *kapag hindi ka nila kilala hindi ka talaga nila sasagutin* at all *tapos parang nakaka*-pressure when your editor asks you to get their reaction. *Hindi ko makuha kasi hindi niya ako kilala kaya ayaw niya akong sagutin*. So, it was difficult but at the same time I guess *nong naka* adjust *na lahat ng tao* to that kind of setup *naging medyo okay na, maluwagluwag na*.

- (I am) still processing it (the information gathered) *tapos may* press con *na naman* after a few minutes. The (amount of) information was overwhelming and *minsan hindi mo na matapos-tapos kasi sunod-sunod*.

- *Yong* lockdown (*ang* challenge) *pero nong nagka* IATF ID *kami hindi na masyado*. There was burnout from excessive webinars, zoom conferences, information overload. *Masyadong marami*. L*ahat na lang*. *Madaling magpa* Zoom conference non e. *Kung magpapa* Zoom conference *ang* UP, *magpapa* Zoom conference *ang* DOST, *magpapa* Zoom conference *ang* DOH.

- I also wrote inputs and I had to do my own COVID story, too. So, *pipili lang ako ng*, *dito sa* pres con *na ito, kunin ko yong mga, yong* COVID story, for example, and then *may sinabing* story about lockdowns. So, I have to write that, and then *ibibigay ko don sa nagko* cover ng lockdown. *Nakakapagod*. *Hindi ka na makapag* legwork *kasi naubos na sa kakasulat*. *Saka minsan nawawala na yong* quality *ng* story, nawawala yong quality ng work kasi too much work.

- I could not write more in-depth stories because we were limited to attending press briefings. *Ang hirap*, overwhelming, *minsan ang haba*. *So, lagi akong* limited *na lang kung ano man yong* press briefing, *kung ano man yong nilalabas sa* government station.

- I had tried to cover several stories in person, for instance, like, I just wanted to go out and cover front liners or even when the vaccines arrived for the first time, but that wasn't approved. The risks were too high, they'd say and so there was that.

- We were forced to learn about it (COVID-19) because everything that was happening around was related to COVID. Like we had to understand and know what those levels of quarantine are.

- As a young reporter back then *noon lang ako naka* experience *ng ganon ka grabe na* epidemic *noon na naging* pandemic so *hindi ko alam* how to go around it *nong una*. *Ang mahirap pa non*, aside from doing your job *parang meron pang* psychological and mental effect *kasi natatakot ka din* for your family

- *Yong trabaho mo nga puro* COVID *na, yong mga nababasa mo pa sa* social media when you're not working are also about COVID so very tiring siya in the sense na as reporters we couldn't escape it. For some people *na hindi* journalists, *na hindi nagre* rely on social media for information, they can quickly turn off, go offline *pero kami kasi non* we couldn't afford to do that. I guess *yon*

po yong naging isa sa causes *ng* burnout back then, *kung bakit ang dami na* burnout, so mentally taxing for us na *magtrabaho nong* 2020-2021.

- Don sa safety procedures, in terms of safety procedures, they provide(d) us the necessary equipment, *kung meron* disasters, *kung meron bagyo* and for COVID-19. They provide(d) us the necessary equipment and medicine for us to be safe in covering COVID-19 situation, and it's very strict din in terms of going to hospitals, *kailangan din* recorded *lahat*, and then *laging may* testing…every two weeks *kami nagte* test for COVID-19 *kahit pa* work from home *lang kami*.

- *Binibigay lang po sa amin* were facemasks, face shield *nong* required, (transport) service for reporters, and counselling session with a therapist. | *Nagbigay lang ng* vitamins, facemasks, and face shields.

- For the welfare support system, *merong kaming* counselling during the drug war *na nagtuloy-tuloy hanggang ngayon na* if we're going through something, we may consult the counselors in our office.

- When it came to support provided by the newsroom in terms of medical safety supplies, I didn't receive much. I think there's one time they sent a medical supply package, one time only throughout the whole three years.

- (Our newsroom) was caring. We may opt not to cover the story, if we're not comfortable about it. If for us, it's dangerous, if for us, there's a conflict of interest, so we just have to explain *kung bakit ayaw naming i*cover *yong* story. Lenient *naman.*

- When it came to safety and welfare during the pandemic, we really couldn't go out a lot as field reporters because the newsroom policy was unless it was like a life-or-death story kind of thing, then you can't go out. And even then, it had to be approved by the bosses. The bar was very high so, there wasn't a lot of stories that we could really cover in person.

- When it came to psychosocial support, they extended three free sessions of therapy for a year, which I think wasn't enough. But you could continue *naman*. The first three would be free, and then the rest you could get at your own expense.

- The climate wasn't any different than it was before the pandemic. It was during the lockdown when ABS-CBN really faced a lot of its troubles, for instance. Yeah, there was shrinking space for press freedom during the pandemic

- I think the Philippines really had a unique case because we were under the Duterte Administration at that time. *May panggigipit sa* media at that time… we saw how the government responded to Rappler, to Inquirer, to ABS-CBN… that if you are not aligned with the government then you are an adversary. *Parang may takot ang* media *sa* government… because they were sensitive.

- It's a balancing act. You wanna keep pushing, but also you don't wanna get kicked out of the group or you don't wanna just be totally ignored because you were so annoying already. And I think they have the capacity to do that, to do that more than they would, let's say on more normal times, because, like, you could be really annoying but then, if you were in the newsroom, if you were in the press conference, and you were like constantly raising your hand, they would have no choice but to acknowledge you, whereas, like in a zoom room, they could be like, Oh, sorry I didn't see you. I didn't see that your hand was raised. Yeah, kind of thing. So that was also something.

- Now (2023) *Bumalik na sa* old ways, *hindi na kami pwedeng mag* work from home. So, *minsan*, video conference *lang naman tong* press con *na to* or *itong* interview *na to, kaya ko naman tong* video conference *lang pero* we have to be in the field (*pumunta ka sa* press office*) na kahit wala naman kaming gagawin*. *Bawal na rin kaming magpasundo sa mga* drivers. *Nalipat na rin ng* beat or area of coverage.

- I (prefer) *yong* hybrid setup. Since I like to do in-depth stories -- usually the scientists I interview are not based in Manila, they're based in other parts of the Philippines or abroad -- *so mas gusto ko talaga yong* remote setup *kasi* you just interview online, no need to physically go and endure the traffic.

B. Reporting Principles and Norms

- In terms of access to information, the government then launched the *Laging Handa* public briefings. But it was controlled because it's always in the government station, *kumbaga* the host is a government employee, so the host can also filter the questions. Although we can ask, we only send questions to the host, and then the host, will select what questions to be used. So, I think there's there was limited access to information.

- *Sa tingin ko naging* efficient (*ang* access to information), *dahil lahat nakukuha* 'yong information. *Parang* democratized (ang access), *na sa totoo lang kung gusto nila to* make it wider beyond media, *mag* invite *lang sila kunwari*, barangay chairman, if they want full dissemination.

- I think information was restricted, especially when the official source was from the Government because we were on lockdown. They were more easily able to control what information they gave out. It was like almost one way.

- The *Laging Handa* press briefings were useful for a while only because there were so many questions, and people really were searching for answers. And this was the only avenue where you'd have access to the Palace, but then ever since, even in the very beginning, it was already tightly controlled. You can ask a few questions, but it would be hard to keep following up.

- No opportunity to ambush a source for an exclusive (scoop) story. *Yong ganong* version is *iba* Viber message *ko* separately *yong* source, *kasi lahat ng* agencies *na kinover ko non ay may* Viber groups *po sila para sa* media.

- How many cases, how many deaths, new variant? At that time *wala po kaming* fee time *na pag aralan* on a deeper level *yong* COVID… no matter how much you want to study it on a deeper level, wala ring available resources (like) health journals *na makakapag* provide *ng* brackground about the corona virus, *hindi lang yong* COVID-19 itself, *kasi mahirap po siyang intindihin talaga para sa amin non.*

- Back then we really had to be creative, so I used Twitter, Facebook…infiltrated online groups. *Don sila nagpo* post *ng* discussions, photos, *so don ako nakakuha noon ng* stories. *Medyo nakakapanibago din siya* back then *kasi,* compared to face-to-face interviews, at least *alam mo kaagad na* ok *dito talaga siya nagta trabaho*, *ganyan.*

- In a way, it's (access) still limited because as a reporter, the best kind of information is really like when you get to be there in person and you get to like, understand the room. And you get to experience the atmosphere. You get to do it in a setting where other reporters are there, and everybody can benefit from the questions that you ask. But if you're a reporter who didn't do that, then your news story would be incomplete or lacking context. And I think that was also the case for a lot of, I mean like, I don't know if you would share this observation, but sometimes, when you look at the news like some, some news, some articles would have more context than others.

- *Mga* Zoom press conference and *mga* email, email press release from DOST, livestream on social media, Facebook, Viber groups Viber groups, DOH, DEPED, DOST. Ang mga government agencies *non* ay *bumuo ng mga* Viber groups. *Lahat na mga* accredited and known reporters *nila, isinama nila don sa* group.

- (To verify information,) I asked specific questions, googled them, checked their "friends". I had doubt at first *sa* reliability and accuracy *nong ganong* type of data gathering (from social media) *pero* eventually *kasi* the editors *na mismo yong nagpapadala sa amin sa* Zoom conference calls, *sa mga pinapadala sa amin na mga* Facebook posts, *na* can you look into this, *ganyan* so before *kasi hindi sila ganon*.

- They (apps and chatgroups) were a lot more useful to me (in my career as a reporter) than in any other time because again, we were on lockdown. I tried to look for groups of like health, of like health workers and front liners and OFW's there, but that's not anything new. I mean, I had already been doing that a lot even before COVID. So, I wouldn't say that was particularly, that was something particular to do covering COVID, or the pandemic

- The whole press corps *nabuo na kami sa* Viber. For OPTA *may* messenger group. So *pag nagtanong ka*, *sasagutin ka nila* don *sa* group. Today (2023)

they (news sources) still use the Viber, *pero dahil may mga* onsite events *na lumalabas na yong sipag (to get scoop)*.

- Those (Viber and chatgroups) existed long before, but we used (them) a lot during the pandemic, also because well, again, lockdown**.** So, the groups became a source of information. But I wouldn't really say it was any richer of a source than it was before or after the pandemic like, it's just an avenue for you to be notified of the press conferences to ask questions, and for pertinent documentation to be sent.

- I think the interesting thing about COVID was everything was unfolding like really taking place in real time. And so, what was happening in the US would be very relevant to the Philippines. The same thing with the UK or in Europe. So, if a variant was found in US, you know, Science Twitter would be very active in trying to unpack like what it meant and its risks. And so, I had access to all of these expert voices.

- *Dati kasi hindi din* okay *sa kanila yong manonood ka lang sa* TV *ng Laging Handa* briefing, for example*. Kailangan pumunta ka don mismo*. *Pero nong* pandemic *okay na sa kanila yong mga ganon kasi alam nila yong* difficulties. *Dati* unacceptable *yong magre*-report *ka ng* something that was said in a radio interview. *Parang nakakahiya na isulat yong ganon*, but during the pandemic *medyo mas naging* lax.

- It was hard to get in a question or challenge, especially that everything was virtual, because then they would just say that we only have one hour or it's all the questions that we can take for the day, or they'd say we don't know that right now we'll get back to you, but then will never get back to you, even if you constantly follow up. It's different when, if it were in person, because then I guess they'd feel more pressured to take your question or to get back to you.

- There was no physical means to follow up. As a reporter, sometimes it usually comes down to showing up every day until they give you the information that you need. So that wasn't an option anymore *sa* pandemic. So, in a way there really was a restriction of information.

- Some of the challenges and difficulties were that there's so little opportunity for physical coverage, and I mean it was rightly so, it was very risky but that also meant… you only gave the best and most accurate story that you could write under the circumstances that you were in, like being in your home.

- For a long time, the Government really controlled a lot the information that was coming out and in what manner and in what. In like, yeah, and what manner and how fast. But as journalists, you probably could have done better in like demanding and pushing back for more accurate pandemic information.

- *Ang kino* cover *ko sa* weekends *ay* DOH, and then I was also assigned to do the press con, the regular press briefings of IATF, *parang kung meron mang* something *sa* Malacañang, *may* press con *sa* Malacañang, *ginagawa ko rin*

yon. *Ang problema don sobrang* overwhelming *ng trabaho* and you also have to understand all aspects ng government, the PNP, MMDA, etc.

- What I would say about Viber, though, is that it was a place where a lot of false information would be shared. I remember, you know, like people would say would send or pass along these messages like tomorrow, there will be an extension of the ECQ.

- If an error would take place. I mean you as a reporter would have to own up to it and would have to tell the editors so that they could issue a correction, and it would be on, collated on a correction space at the end of the month.

- We had like a COVID style guide, a constantly evolving style guide. So COVID-19, for instance, had to be in all caps. Just those kinds of things. But beyond that, that wasn't really much else in terms of editorial policies and practices.

- When it came from official sources, yes (there was limited access to information), but there's also, for example, Twitter and having access to a lot of experts in a way. It was access that you wouldn't have had before because they weren't very open to virtual interviews. Because of lockdowns, they had no choice.

- For me back then, DOH *talaga*. *Sila* yong most trusted *kasi unang una sila po talaga yong nag*tsi churn out ng information about COVID and they were also the first to debunk *yong mga* myths, *yong mga chismis* about COVID. Even the public, *sila mismo yong tinitingnan* for information so that for me is enough, aside from it (DOH) being the Health Department *naman po talaga.*

- Hospitals and doctors *din kasi sila yong nagre* report *noon na kapag* over capacity *na po sila*. *Sila po kasi mismo yong nasa* frontline so for me *sila yong* reliable *talaga na* sources.

- Some of the biggest news sources were still the government, yong mga decisions nila or the policies that they would institute, and implement would come from them. Also, frontline health workers …who are affected by the government's decisions like mga business owners, the experts who this time are like your scientists and your doctors as well, who are experts in their field. yeah. So, you know, like the people who make the decisions, the people who they impact and the people who like are consulted on both sides for it.

- Another source of stories would be when people reach out to me. And yeah, when people reach out and suggest stories or give me information and tips. And I would just corroborate and build on it. That's another way.

- Local government heads *din*. *Sila yong mga* important sources for me back then *kasi sila yong nag e* enforce *nong mga* quarantine restrictions and then *yong sa* ordinances *naman, mga parusa para sa mga ganito/ganyan.*

- Health NGOs also, *na makakapag* provide *ng* further insight *kasi* at that time *sobrang* pressured *din kami na maglabas agad… mga pinaka* pressing *na* issues about COVID.

- Another place where I would look for stories would be in Twitter**.** So aside from the press conferences and what people would send me, Twitter was also a big source of stories when it came to COVID because I had followed many experts and policy makers.

- The frontline health workers would be an ideal source for COVID-19 stories because they, the frontline workers, essential workers, both in the health setting and in places like in supermarket, the first responders na police and all of them I think they were, they would be an ideal news source, because they feel the impact of the decisions being made day to day… and patients' families as well. Although, patient is hard, because, you know, just by the nature of the virus, it was hard to access that.

- The experts. *Parang may mga suki kaming* experts at that time… explaining the phenomenon. The DOH was the authority *lagi*. *Kung may sinabi si* DOH, that's always the truth. That's always the fact, *kumbaga don lagi nakasandal ang* story. *Kung meron mang* issue, *lagi dapat sasagutin ng* DOH.

- So, DOH at that time was the most trusted source. And then, of course, the local government officials *kasi parang sila pagkakatiwalaan mo*, they have the overview of everything, and then they respond. They had to respond to everything, to the situation. Then you always have to get their side and *kagandahan non malapit siya sa* election, so, *yong mga* officials *non* are easy to contact, easy to reach.

- *Sa akin* DOST scientists and officials who were a leading *yong mga R*&D and *mga* R&D activities. DOST provided enough experts. *Parang wala akong maalalang nahirapan ako* (to access news sources) and also *naging parang* proactive *din yong* mga sources *non* in in reaching out to us because they want to disseminate information.

- DOH and WHO for COVID stories, *tapos* for other stories like senate, energy, *yong mga* government agencies and I also go to their websites *din* to check *kung may mga* memos or statements sila.

- *Meron ding yung mga nagde* develop *ng* VCO (products)… manufacturers *na* they push for VCO as *parang* backup prophylactic so, *pero nagpapa* identify *naman sila non* and mga doctor, inventors *din*.

- There were people who would be giving tips, who would be giving leads for you to pursue *na parang*, I'm telling you because if you report on it maybe the corruption will stop, or, like some at least, people will pay attention to and kind of like question what they're doing.

- I think coverage would have been a lot richer and a lot more useful if we were able to go out, although it's a balance, right? Because if you go out and you risked getting sick and bring in the virus home, so that was really, that was a real challenge and a real difficulty.

- The policy is you must double source at the very least. You seek comment from the other side, at the very least. It's not just balance, it's also a part of being fair and accurate.

- One source is enough *lalo na kung siya talaga yong ano* (authoritative source)…(if there is a) contradicting health view *ay di lalagpas ng* editor *yon*. *Sabihin mo sa kanya* (news source) *na magpakilala siya kundi hindi ilalabas yan*.

- *Mahigpit* … (double-source attribution rule) to maintain newsroom credibility. I admit that I do that (false balance), *kasi talagang* we're strict to balance the story. *Minsan kahit alam mong nagsisinungaling na* or *minsan kahit walang* comment *naman yong kabilang* side, or nonsense *naman yong sinasabi niya*, we have to balance the story. I admit *na medyo alam mo namang nagsisinungaling* or *alam mo naman na* nonsense *yong sinasabi niya*.

- *Mahirap siyang isipin* but sometimes *ganon talaga*. *Nagre* result *na sa ganon* (false balance) *na medyo* questionable *yong sinabi ng* source *tapos naglagay ka ng isa pang* source *na mag-o* oppose. Sometimes, for them (editors), it's enough, at least *merong namang nagko*-contest. *Ang* important *na lang* on our part is that *maglagay kami ng* enough background. We give enough context just to make sure *na hindi siya sobrang* misleading and *hindi na siya sobrang* he said/she said. *Pero minsan kasi*, like *ang naging* trend *noon* is okay *na sila sa ganong* types of stories especially *kapag it's* coming from a top official, like for example *si* (President) Duterte *mismo*, very unreliable source *pero kailangan naming i*report *kasi siya yon*, President *kasi*.

- *Yong ganong* policy (to double source your story) was born out of the insistence on getting the other side and be fair*. Sakit ng ulo yong ganon*. *Kunwari*, graft, *minsan parang nalalaman na nong* PR *yon na hindi ka nila sasagutin para hindi lumabas yong* story mo *dahil walang* other side. So *hindi gagamitin ng* editor. *Napapatay yong* story.

- *Parang naging* considerate *yong* newsroom *na* you don't need to go in person *kapag may* livestream. *Basta ma* cover *mo ang* event, *basta makuha mo yong sinabi ng* source and you were able to get naman the gist of the event then you can write about it. So, you just have to put it in the story na … said on an online briefing... *para malaman ng mga* readers na you attended the online briefing, or you saw the livestream.

- For uncertain and tentative information…we are careful not to cause panic. We verify with DOH *mismo kung totoo ba*. *Kailangan ganoong* type of verification. I guess *yong* use of certain phrases (like still undergoing further studies) *sa*

reporting *kapag hindi* confirmed or cite the studies and how big is the (research) population will also do.

- I was covering DOST which became the government authority on certain issues, like *kunwari* vaccine development, *yong pag* develop *nong* wearable face masks, *yong* VCO clinical studies, *pati yong sa* Lagundi, *nag* conduct *sila ng mga* R&D *non*, *yong* DOST-funded diagnostic tool, *yong* genomics, *yong ginamit sa* RTPCR, UPPGH, scientists and personalities in the academe, the mathematicians and OCTA.

- (Our newsroom) was strict on uncertain or tentative information that we really have to get the sides of all people involved in the story or get the sides of all experts that can explain this information. If there's an information is to correct or to check, then correct it. Verify and explain to people kung *ano ba talaga yong istoryang ito*, we have to laymanize.

C. Journalistic Role Orientations

- I don't think the role of journalism changed just because of COVID. If anything, it really highlighted what the role has always been which is to provide accurate and timely information and to question, to question power. They (journalists) help us understand society better. (The pandemic) only really highlighted the role of journalism and the role that journalists play, because when the world went on lockdown, all the information people was getting, people were getting was from the news and so it highlighted how usually it serves that purpose. It really is like essential to people's lives.

- It was important for me to get accurate information *kahit sa* social, *kahit sobrang nabe* burnout *na po ako, kailangan ko siyang makuha kasi yon yong* main function… to inform, correctly inform people about COVID which happened in the age of troll farms *so medyo nagkakaroon pa ng* political debates on the sidelines *yong* mga trolls. So, for me, *yong pinaka* important *na role noon* was to really churn out accurate information, to inform the public, to provide clarity. *Yon talaga yong* important *po noon kasi marami pong natatakot, marami pong nalilito*.

- In the beginning it was almost like journalists, because so much was unknown, we were a microphone for the government. Yeah, amplifier also cause then we were just report everything the government would say. It took some time for the questions to start forming in your head.

- To inform, basically, we provide the news, from which people can make intelligent decisions and opinions. *Kunwari* reporter *ka, huwag ka naman munang magbigay ng* opinion. *Ang* role *mo, bigyan mo sila ng* information, opposing information, they will make the decision. Hopefully, intelligent decision.

- Journalism is a service for the greater good. Because you're a journalist, you're expected to work *kahit na sobrang hirap ng* circumstances, despite the risk *na mae*-expose *ka sa* virus *dahil yan yong trabaho mo,* to report on these situations, *kasi kung hindi ka magre*-report about it, *paano na yung* public, *magiging* clueless *sila*, mas confused.

- I think journalists are one of the key characters during the pandemic *kasi* they provided information the people needed. It was important *kasi* during the pandemic for the people to know. It's an important service for the people to know. So, in this situation, I think the government, with the media, had to work hand in hand, to serve the people, to communicate to people what they could do, or they should do in this crisis, and what they can avail. So, it's part of your public service to the people. You are not a mouthpiece, but you are a channel of the government for the people to know what they can do, or what they should do.

- If it's a public concern like an advisory that the people need to know, okay lang sa akin kahit hindi exclusive. I would share it to other reporters. As a journalist my goal is not to have exclusive stories. My goal is to serve the people and communicate to people….I don't really like the idea of having exclusive or competition sa media. We need to help each other *kasi* our goal *naman talaga ay iisa lang*, to serve the people. To communicate to people

- It (journalistic role) evolved over time. What was also interesting was that some government offices and some officials realized…(that) if you work with journalists then the public could understand vaccines better. Journalists are not just annoying or pesky journalists. There were some officials who understood that the media is a way for you to try and make institutions perform better.

- We had the option then to work from home and option also to not cover the story if we deemed it dangerous, or if you're not comfortable about it *pero parang paano ka, bat ka pa naging journalist kung matatakot ka, di ba*? *Bat ka pa naging* journalist *kung aatras ka*? And you know, I think you have a job to do, and it's really fulfilling to work in this kind of situation kasi *dito ka pinakakailangan*. *Parang ito yong pagkakataon, ito yong bahagi ng kasaysayan na di mo pwedeng ma* miss out *kasi mahalaga ka dito*.

- We were just constantly reminded that in a time of confusion we should really strive to deliver news that people could use that would really guide them in their day to day, because a lot of people were looking for answers. And also because of that, the news we delivered didn't have, we didn't always have to be the first, but we always have to be the first to get it right. So, I mean, being first is already built in into kind of like your DNA as a reporter. You always have that drive to break first. But the drive to break first, you're always like you're reminded, you can't override the need to be the first to get it right or to be accurate, because if we broke false information that wouldn't really be very helpful.

- *Mas naging mahalaga yong* role *ng mga* journalists during the COVID-19 pandemic especially in disseminating information from official sources like DOH

and WHO. I wouldn't say *na naging* mouthpiece but *parang naging* purveyor because *di ba* during that time, everything was so uncertain and *siguro* it was okay to rely on official sources, so DOH and WHO for that matter. We don't know how they get their info *so basta* we just trust them *na lang*. I think *mas naging* important yong journalism during the pandemic because of that. *Yong mga* statistics, *yong mga paalala ng* DOH. I think journalism was able to help the public assuage their fears of uncertainty.

- Recently *medyo* feeling *ko nabe* burnout *na ako*, *pagod na ako, parang ayoko na, parang gusto ko nang yumaman*. *Parang yung mga ibinibigay ko dito, hindi bumabalik sa akin*. *Pero,* I stayed *kasi sa tingin ko, walang ibang trabaho na kaya kong mahalin*. Journalism is one of a kind. This is the only job where you can serve the people, communicate to people, answer questions for the people, and be the void of the people. In this job you can stop the President just by asking pressing issues and concerns. You know you can serve the people by raising awareness, by giving them facts, and it's really fulfilling, and thrilling at the same time.

- *Yong istorya na madali na lang intindihin, yong hindi makakapag* cause *pa ng* confusion. Important *non kasi ang dami na nga nagpa*-panic, *ang dami pang* false information *na kumakalat* so for me *yon yong pinaka* important *talaga*.

- As to what kinds of stories should have been reported more, I think hindi po kasi lahat ng news orgs may free time to publish explainers, yong mga ganon po kasi, for example. *Nag dya*-jump kasi ang focus

- Important *sa akin non* not to make the story in a way *na nagkakaroon ng* stigma against them (patients)… to make sure na *hindi lalong ma* isolate *yong* patients. *Mahirap kasi noon na nagkakaroon ng* discrimination against them *lalo na nong sobrang bago pa ng* COVID. Important *sa akin*, that kind of ethic *na* to make sure your sources and the people in your stories feel safe, and of course accuracy and *pagiging* factual.

- It must be accurate… *kino* cross check ko *yong mga* quotes or *yong mga* explanations *ng* source with the transcript to make sure *na* I understood it correctly. Since this is related to science and health so you not just make everything has to be correct because people are reading it and they will make micro decisions that will lead to big decisions based on what they read or what they see *para, matulungan mga tao* not to confuse them or to make them lose trust in the media.

- We mainly focused on the news, the straight news, the facts, the statistics and then the policies. I think *yon din yong hinahanap ng mga tao* at that time. *Pupunta sila sa* news because they wanna know, next week *ba mag*-hoard *na ako ng* mga items *ko*, next week ba *ay may masasakyan ako*, next week *ba ay naka* lockdown *pa rin kami*. *Yong mga tao ay nagre*-rely *sa* news *kung paano din sila didiskarte sa mga susunod na araw*.

- Important yong facticity and accuracy … *nakatutok yong mga tao sa* facts and during that time *yon din yong isa sa mga* assignments *ko non na bantayan yong mga* facts *non, na bantayan yong* statistics *ng* COVID-19, and *bantayan yong mga* policies *ng* government for changes.

- They (newsrooms) should have given more focus on information from DOST non, aside, instead of yon sa DOH *dahil parang* political *na*. They focused more on DOH instead of DOST *kaya naging ganon…* information on the science of COVID should have been clearer.

- We're a multimedia platform and so you can't just give text. You also have to leave a photo and that's for the audience to understand the news better. Photos also provide a lot of contexts and information. And so sometimes, when you're talking about hospitals being packed, it's one thing for you to read about it but one thing for you to also see it. So, that, that's also why, yeah, like, when in terms of news packaging, that's that.

- An ideal science story would be …stories (that) really explain, like how COVID-19 really affected us as a society, and how long held practices, long health problems exacerbated, were exacerbated during COVID-19, etc. News that people can really use and that you must be the first to get it right.

- You don't just break for the sake of breaking news, you have to break, and you have to be sure that you're right especially because at a time where people were really confused, or searching for a lot of information, breaking incorrect or incomplete information will just add to like the chaos that was already what everyone was feeling. And I think it's the same way that, that's really something I took to heart and that I can, I think that's also how I made sure that my stories were ethical, responsible and like, yeah, factual. Whereas before we wouldn't really spell it out for you, I think in COVID, like more and more, we'd really be like, this is why versus before it'd be like just written into the story like this is why it's important.

APPENDIX P

Pandemic News Articles Analyzed

2020-01-30	GMA News Online	Bat species in Mindanao tests positive for a strain of coronavirus, study finds
2020-01-30	Rappler.com	LIST: What Filipinos in China can do amid coronavirus scare
2020-01-31	GMA News Online	New study details what nCoV does to human body
2020-02-01	GMA News Online	Philippine Genome Center ready to help in detecting nCoV in PHL
2020-02-02	Rappler.com	Robredo urges Filipinos to respect Chinese amid coronavirus spread
2020-02-03	GMA News Online	DOH to study if nCoV can be transmitted through human waste
2020-02-03	GMA News Online	Thailand's antiviral cocktail vs. nCoV still for WHO's validation —Duque
2020-02-03	Rappler.com	As coronavirus spreads, Duterte hits 'xenophobia' vs Chinese
2020-02-03	Rappler.com	Traveling amid coronavirus outbreak? Here's what you need to know
2020-02-04	Rappler.com	Sotto shows video on coronavirus conspiracy theory at Senate hearing
2020-02-04	Rappler.com	Duterte says gov't procuring face masks amid shortage due to coronavirus outbreak
2020-02-05	Inquirer.net	Metro Manila mayors prepare for possible nCoV cases
2020-02-05	PhilStar Global	DepEd task force vs nCoV created
2020-02-05	PhilStar Global	Senate nCoV inquiry: Cabinet men engage in finger-pointing
2020-02-07	ABS-CBNNews	DOLE chief nag-sorry sa UAE sa maling anunsiyo ng 'coronavirus' death
2020-02-10	Inquirer.net	Parañaque, Valenzuela cityhood events affected by nCoV threat
2020-02-10	Inquirer.net	UE: Student negative for coronavirus
2020-02-10	PhilStar Global	WHO: 6-month backlog in face mask stocks
2020-02-13	Rappler.com	Trust us, Duterte urges Filipinos amid coronavirus threat
2020-02-24	GMA News Online	Virgin coconut oil vs. COVID-19? Study in pipeline, says Nograles
2020-02-25	GMA News Online	Duque: DOH to study trials on virgin coconut oil as virus treatment
2020-03-02	Rappler.com	DOH won't 'let guard down' even as admitted PUIs for coronavirus down to 43

2020-03-04	Rappler.com	DOLE issues guidelines for employers amid coronavirus outbreak
2020-03-06	GMA News Online	UP Institute of Biology: No strong evidence that COVID-19 transmitted through money Online
2020-03-07	Rappler.com	DFA urges Filipinos to postpone Holy Land trips amid coronavirus outbreak
2020-03-08	Rappler.com	More women working with longer maternal leave, work-from-home option – NEDA
2020-03-09	Inquirer.net	No classes in Marikina, Navotas, San Juan over virus
2020-03-09	Rappler.com	Duterte rejects Metro Manila coronavirus lockdown for now
2020-03-09	Rappler.com	Duterte suspends classes in Metro Manila March 10-14 over coronavirus threat
2020-03-09	Rappler.com	Coronavirus outbreak not an excuse to fire workers – TUCP
2020-03-09	Rappler.com	Comelec suspends voter registration due to coronavirus threat
2020-03-09	Rappler.com	No touch:' PSG bans close contact with Duterte amid coronavirus outbreak
2020-03-09	Rappler.com	Duterte declares state of public health emergency amid rise in coronavirus cases
2020-03-10	GMA News Online	FDA OKs use of UP-developed COVID-19 test kits
2020-03-10	PhilStar Global	Classes in Metro Manila suspended until March 14
2020-03-10	Rappler.com	Ligo tayo': Amid coronavirus, Duterte jokes he'll swim in Boracay with Puyat
2020-03-11	Rappler.com	Duterte backs out of Boracay visit over coronavirus threat
2020-03-11	Rappler.com	PhilHealth to shoulder coronavirus test costs – Malacañang
2020-03-12	GMA News Online	How the UP-developed COVID-19 test kits will be used
2020-03-12	GMA News Online	Hundreds of UP-developed COVID-19 test kits sent out for field tests
2020-03-12	Rappler.com	Duterte suspends classes, work in gov't in Metro Manila until April 12
2020-03-12	Rappler.com	Duterte’s foreign trips suspended
2020-03-12	Rappler.com	Duterte Cabinet members in self-quarantine amid coronavirus fears
2020-03-12	Rappler.com	Duterte to get tested for coronavirus
2020-03-13	Inquirer.net	Camanava mayors under quarantine
2020-03-13	Rappler.com	Duterte tests negative for coronavirus
2020-03-13	Rappler.com	DFA advises Filipinos to avoid non-essential travel to Israel

2020-03-13	Rappler.com	DepEd to offer online exams during Metro Manila class suspension
2020-03-13	Rappler.com	Gov’t frontline services in Metro Manila to continue despite lockdown
2020-03-13	Rappler.com	Goods, necessities to be allowed in Metro Manila despite lockdown – Nograles
2020-03-13	Rappler.com	How does the U.P.-developed coronavirus detection kit work? (rappler.com)
2020-03-14	PhilStar Global	Children’s welfare through COVID-19 response a priority
2020-03-14	Rappler.com	What is 'enhanced community quarantine' and will it work?
2020-03-14	Rappler.com	DFA limits consular services to 'urgent needs' during Metro Manila lockdown
2020-03-14	Rappler.com	LIST: Who can cross into, exit Metro Manila during coronavirus lockdown
2020-03-15	Rappler.com	Lone health worker mans frontline in early hours of Metro lockdown
2020-03-15	Rappler.com	WATCH: Last-minute checkpoints put in place before Metro Manila lockdown
2020-03-16	Inquirer.net	Pagcor suspends casino operations in Metro Manila
2020-03-16	Inquirer.net	DILG: Mayors can’t enforce 8-to-5 curfew immediately
2020-03-16	PhilStar Global	PCSO allocates P4.2 million more for Malasakit in hospitals
2020-03-16	PhilStar Global	Pagcor suspends all gaming in casinos, bingo halls
2020-03-16	Rappler.com	Duterte places Luzon on lockdown to battle coronavirus
2020-03-17	GMA News Online	UP Diliman industrial designers, chemists, engineers develop sanitation tent design to help curb COVID-19
2020-03-17	GMA News Online	UP calls for PPE donations for scientists decoding COVID-19 samples
2020-03-17	Inquirer.net	More Metro cities declare state of calamity, enforce curfew
2020-03-17	PhilStar Global	DSWD suspends cash grants over COVID
2020-03-17	PhilStar Global	No more final exams for students
2020-03-18	Rappler.com	Duterte declares ceasefire with communists amid coronavirus outbreak
2020-03-18	Rappler.com	LIST: Who are allowed out during Luzon lockdown?
2020-03-18	Rappler.com	Filipino tourists not allowed to leave during Luzon lockdown
2020-03-18	Rappler.com	Filipinos abroad can return to PH despite Luzon lockdown

2020-03-18	Rappler.com	Metro Manila coronavirus cases could peak mid-April if not contained, math model shows
2020-03-19	Rappler.com	CHED asks private universities to delay tuition payments
2020-03-19	Rappler.com	PH considers suspending visa issuances worldwide due to coronavirus threat
2020-03-20	Inquirer.net	Valenzuela reports first COVID-19 case in city
2020-03-20	PhilStar Global	DSWD readies food packs for quarantine-affected families
2020-03-20	Rappler.com	Stand down': Duterte orders LGUs to follow IATF orders on Luzon lockdown
2020-03-21	GMA News Online	Creation of COVID-19 drugs, vaccines will take more than a year –FDA
2020-03-21	GMA News Online	Vaccines, antivirals vs. COVID-19 in development —PHAP
2020-03-22	Rappler.com	Duterte asks Congress for 'emergency powers' to address coronavirus outbreak
2020-03-23	Rappler.com	Gov’t workers to get hazard pay during Luzon lockdown
2020-03-23	Rappler.com	DOH not recommending use of rapid test kits for coronavirus
2020-03-23	Rappler.com	Health workers don’t need accreditation IDs during Luzon lockdown
2020-03-24	GMA News Online	Air pollution in Metro Manila lessened amid Luzon quarantine
2020-03-24	Inquirer.net	NGO, De La Salle provide shelter to homeless Manila residents during quarantine
2020-03-24	Rappler.com	DFA to donors: Ensure test kits, equipment are FDA-approved
2020-03-25	Rappler.com	PCSO turning over P420 million to PhilHealth for coronavirus response
2020-03-25	Rappler.com	Lahat bayani': Duterte thanks doctors who died treating coronavirus patients
2020-03-25	Rappler.com	Duterte signs law granting himself special powers to address coronavirus outbreak
2020-03-26	ABS-CBNNews	Pinay na na-quarantine sa cruise ship sa Japan ibinahagi ang kalagayan
2020-03-26	Rappler.com	PSG hits congressman Eric Yap for 'endangering' Malacañang officials, staff
2020-03-27	ABS-CBNNews	Bilang ng mga mabubuntis inaasahang dadami dahil sa Luzon quarantine: POPCOM
2020-03-27	Rappler.com	What we know so far: PH 'National Action Plan' on the coronavirus outbreak

2020-03-27	Rappler.com	PH science advisory body urges research-based approach to fight coronavirus
2020-03-29	ABS-CBNNews	370 Pinoy crew members repatriated from 3 cruise ships in Italy
2020-03-29	Rappler.com	Robredo taps local designers for PPEs, asks suppliers to provide fabric
2020-03-30	GMA News Online	COVID-19 isn't a bioweapon: Study debunks conspiracy theories
2020-03-30	Inquirer.net	Jail for Navotas curfew violators
2020-03-30	Rappler.com	PH seeks help of Chinese experts to aid coronavirus response
2020-03-31	Rappler.com	PH to import 300,000 metric tons of rice for 'contingency' during coronavirus outbreak
2020-03-31	Rappler.com	LGUs ordered to provide contact tracers in tracking coronavirus cases
2020-03-31	Rappler.com	Week 3 of lockdown: No national quarantine centers yet
2020-03-31	Rappler.com	Gov't to finalize guidelines on extension, expansion, or lifting of Luzon lockdown
2020-03-31	Rappler.com	Duterte draws flak after saying frontliners 'lucky to die' for PH
2020-03-31	Rappler.com	Duterte threatens to send to jail officials who fail to deliver coronavirus aid
2020-04-01	GMA News Online	DOST to study benefits of virgin coconut oil on COVID-19 patients
2020-04-01	ABS-CBNNews	Over 800 Filipino seafarers from cruise ships docked in US are back, quarantined
2020-04-01	Inquirer.net	Mayor’s son, 5 cops positive for COVID-19
2020-04-01	Inquirer.net	Locked-down Manila City Jail inmates connect with families through ‘e-Dalaw’
2020-04-01	Rappler.com	Shoot them dead': Duterte orders troops to kill quarantine violators
2020-04-02	PhilStar Global	‘No politics in P200 billion aid release’
2020-04-02	PhilStar Global	DOST backs study on coco oil vs virus
2020-04-02	Rappler.com	12 Chinese experts tapped to aid PH coronavirus response
2020-04-02	Rappler.com	Gov’t wants supermarkets, pharmacies to operate for 12 hours
2020-04-02	Rappler.com	Luzon residents now required to wear face masks when leaving homes
2020-04-03	Rappler.com	Gov’t using QR system to speed up passage of frontliners at checkpoints
2020-04-04	PhilStar Global	Cash aid distribution starts in NCR, 6 regions

2020-04-04	Rappler.com	Duterte orders Navy to convert presidential yacht into coronavirus hospital
2020-04-04	Rappler.com	Amid coronavirus outbreak, Duterte lashes out at Chel Diokno for 'causing disorder'
2020-04-06	Inquirer.net	Cops probe death of homeless man
2020-04-06	Rappler.com	Duterte 'inclined' to extend Luzon lockdown until April 30
2020-04-06	Rappler.com	PH to start producing 10,000 PPEs daily
2020-04-07	GMA News Online	QC doctors test out COVID-19 swab booth | GMA News Online
2020-04-07	Inquirer.net	568,000 Manila families to get P 1k each
2020-04-07	Rappler.com	Comelec suspends Palawan plebiscite due to coronavirus outbreak
2020-04-07	Rappler.com	PH aims to test 20,000 per day by April 27
2020-04-07	Rappler.com	Duterte extends Luzon lockdown until April 30
2020-04-07	Rappler.com	4 options for the Philippines' coronavirus lockdown
2020-04-07	Rappler.com	Duterte seeks more cash for gov't coronavirus response
2020-04-08	GMA News Online	DOST unveils 6 technologies being developed against COVID-19
2020-04-08	Inquirer.net	‘Pandesal’ price cut in Navotas as aid
2020-04-08	Rappler.com	Gov't studying aid for middle-class families during coronavirus outbreak
2020-04-09	PhilStar Global	TNVS drivers get cash assistance
2020-04-09	Rappler.com	Duterte says he'll sell gov't assets to pay coronavirus loans
2020-04-10	Rappler.com	Eastern Samar residents block entry of Panama vessel during coronavirus lockdown
2020-04-10	Rappler.com	Manila barangay officials return extra P2.4M in virus crisis fund
2020-04-10	Rappler.com	PH launches online platform for virus contact tracing
2020-04-13	PhilStar Global	DSWD supports early release of elderly, sick prisoners
2020-04-14	GMA News Online	COVID-19 quarantine effective: 9k to 44k cases seen by end-April —UP experts
2020-04-14	Inquirer.net	COVID-19 mass testing begins in QC, Manila
2020-04-14	PhilStar Global	DepEd’s Briones tests negative for COVID
2020-04-14	Rappler.com	Duterte warns hospitals: Accept coronavirus patients or face charges
2020-04-14	Rappler.com	Health workers with contracts as of March 8 can leave PH
2020-04-14	Rappler.com	Duterte: Gov’t to give aid to families not on DSWD emergency subsidy list

2020-04-14	Rappler.com	Duterte asks health workers to stay in PH during coronavirus outbreak
2020-04-14	Rappler.com	Despite lack of DOH guidelines, Duterte orders purchase of COVID-19 rapid test kits
2020-04-15	GMA News Online	UP med school develops 'telepresence computers' that let COVID-19 patients speak to loved ones
2020-04-16	Inquirer.net	Valenzuela City ‘borrows’ hotel to house homeless during lockdown
2020-04-16	Rappler.com	Duterte backs Duque amid resignation calls
2020-04-16	Rappler.com	Protect the President:' Palace screens all Duterte visitors with rapid virus tests
2020-04-17	GMA News Online	Duterte talked about 'horse antibodies' vs COVID-19. What's that about?
2020-04-17	GMA News Online	FDA says effectivity of PRODEX B, Fabunan injection vs. COVID-19 still unproven
2020-04-17	Inquirer.net	Priest tells Tiangco: Have pity on curfew violators
2020-04-17	Inquirer.net	Caloocan top health officer positive for coronavirus
2020-04-17	PhilStar Global	Go to LGUs: Solve issues on SAP distribution
2020-04-18	PhilStar Global	16,000 approved users of RapidPass — DOST
2020-04-20	GMA News Online	UP-NIH begins mass distribution of Pinoy-made COVID-19 test kits that can yield results within 2 hours
2020-04-20	Inquirer.net	Caloocan hospital temporarily shut after doctor gets coronavirus
2020-04-20	Rappler.com	DOH requests purchase of P1.3 billion worth of ventilators
2020-04-20	Rappler.com	Philippines coronavirus cases rise to 6,459, death toll hits 428
2020-04-20	Rappler.com	Malacañang: No Duterte order yet for martial law-like lockdown
2020-04-20	Rappler.com	Barangays ordered to publish names of residents eligible for DSWD cash aid
2020-04-20	Rappler.com	Returning Filipinos must undergo mandatory quarantine
2020-04-21	Inquirer.net	UST hazing suspect wants out of jail due to virus
2020-04-21	PhilStar Global	R&D on virgin coconut oil as anti-virus gets approval
2020-04-21	PhilStar Global	DSWD welcomes move to publish list of beneficiaries
2020-04-21	Rappler.com	U.S. adverse views against China peak during coronavirus pandemic
2020-04-22	GMA News Online	DOST eyeing virgin coconut oil as food supplement for COVID-19 patients
2020-04-22	GMA News Online	Philippines' healthcare overwhelmed if COVID-19 cases not controlled, UP experts say

2020-04-22	Rappler.com	EXPLAINER: What to expect from the Philippines' expanded coronavirus testing
2020-04-23	GMA News Online	Hyped fear making COVID-19 deadlier, expert claims
2020-04-24	GMA News Online	P50M reward? Study shows vaccine development costs $200M to $500M
2020-04-24	GMA News Online	What is convalescent plasma, and why is it yellow?
2020-04-24	Inquirer.net	Community service added to penalty for Valenzuela curfew violators
2020-04-25	PhilStar Global	DICT to lower spectrum user's fee for telcos
2020-04-26	GMA News Online	Purified antibodies' for COVID-19 prevention and treatment being developed
2020-04-26	GMA News Online	DOST finding designers of ventilators, respirators to aid fight vs. COVID-19
2020-04-27	GMA News Online	DOST to begin clinical trials on virgin coconut oil's efficacy vs COVID-19
2020-04-27	GMA News Online	DOST calls on manufacturers to donate specimen collection booths for COVID-19 testing
2020-04-27	Inquirer.net	Tiangco donates pay until June 2022 to non-SAP beneficiaries
2020-04-27	Rappler.com	How can the Philippines secure enough drugs or vaccines against coronavirus?
2020-04-27	Rappler.com	Duterte orders FDA, DOST to double workforce, operate 24 hours
2020-04-27	Rappler.com	WHO urges PH to start preparing coronavirus vaccine strategy
2020-04-27	Rappler.com	Number of PH health workers positive for coronavirus rises to 1,245
2020-04-27	Rappler.com	Philippines coronavirus cases climb to 7,777, death toll reaches 511
2020-04-28	GMA News Online	Gov't studying effects of local medicinal herbs against COVID-19
2020-04-28	Rappler.com	Difficult' to sue China over coronavirus pandemic, says Carpio
2020-04-29	GMA News Online	DOH: Fabunan may be held liable for use of unregistered drug vs. COVID-19
2020-04-29	GMA News Online	Experts maintain advise on physical distancing, strong immune system vs. COVID-19
2020-04-30	PhilStar Global	Government looking for other sources of SAP funds
2020-05-01	GMA News Online	4 SARS-CoV-2 sequences from Metro Manila cluster closely with samples from China
2020-05-01	GMA News Online	French scientist who discovered HIV insists COVID-19 is lab creation

2020-05-01	Inquirer.net	Malabon hospital limits admissions after virus infects 4 staffers
2020-05-01	PhilStar Global	DOST looking into anti-viral properties of lagundi, tawa-tawa
2020-05-01	PhilStar Global	Pfizer sees vaccine by September; Remdesivir proves effective
2020-05-02	PhilStar Global	Only 104 of 1,632 LGUs have completed SAP payout
2020-05-04	Inquirer.net	Project ARK taps more local governments in COVID-19 tests
2020-05-04	Inquirer.net	Tiangco places Navotas City on extreme ‘lockdown’ from May 6 to 15
2020-05-04	PhilStar Global	Private firms team up to provide VCO to medical frontliners
2020-05-04	Rappler.com	Vince Dizon named coronavirus testing czar
2020-05-04	Rappler.com	Albay, Zamboanga City to remain on lockdown until May 15
2020-05-04	Rappler.com	PH to open 4 'mega' coronavirus swabbing centers in Metro Manila, Bulacan
2020-05-04	Rappler.com	Philippines coronavirus cases rise to 9,485, death toll reaches 623
2020-05-04	Rappler.com	POGOs must pay taxes before resuming operations in lockdown – Pagcor
2020-05-04	Rappler.com	Año: Jinggoy Estrada violated lockdown rules
2020-05-05	Inquirer.net	UST Hospital puts on hold layoff of noncrucial staff
2020-05-05	PhilStar Global	CHED eyes ‘rolling’ opening of classes
2020-05-05	Rappler.com	Duterte tells local officials: Accept OFWs returning to hometowns
2020-05-05	Rappler.com	Guevarra contradicts Panelo: Coronavirus not grounds for martial law
2020-05-05	Rappler.com	Can Duterte stop health workers from leaving PH?
2020-05-05	Rappler.com	Duterte offers P30,000 reward for reporting officials who steal coronavirus aid
2020-05-05	Rappler.com	Duterte apologizes to Ayalas, MVP: Forgive me for the 'hurting words'
2020-05-06	PhilStar Global	Metro Manila LGUs among slowest to give cash aid – DSWD
2020-05-08	Inquirer.net	Hopeful P8K aid beneficiary in Caloocan City ends up with nothing after 14-hour wait
2020-05-08	PhilStar Global	196,378 get SAP aid in Quezon City
2020-05-10	GMA News Online	The development of COVID-19 vaccine explained
2020-05-10	PhilStar Global	PCSO: Apply online for medical assistance
2020-05-11	Inquirer.net	495 Manila residents test positive for virus

2020-05-11	Rappler.com	ADB eyes another $125-million project to strengthen PH health care during pandemic
2020-05-11	Rappler.com	Over 1,900 PH health workers positive for coronavirus
2020-05-11	Rappler.com	PH coronavirus cases breach 11,000, deaths now at 726
2020-05-11	Rappler.com	CSC sets 5 alternative work arrangements for gov't workers during quarantine
2020-05-11	Rappler.com	All arriving Filipinos and foreigners to undergo mandatory testing, quarantine
2020-05-15	Inquirer.net	94% of Caloocan police force undergo testing
2020-05-15	PhilStar Global	Extended work hours eyed in LTO
2020-05-18	Inquirer.net	Caloocan next to lift liquor ban after Pasay, Marikina and Quezon City
2020-05-18	Rappler.com	Coronavirus testing laboratories facing supply shortages – expert
2020-05-18	Rappler.com	Government to rely on private sector to boost coronavirus testing capacity
2020-05-18	Rappler.com	Number of PH health workers with coronavirus climbs to 2,314
2020-05-18	Rappler.com	PH coronavirus cases climb to 12,718, deaths now at 831
2020-05-18	Rappler.com	Palace warns Metro Manila to be on lockdown again if coronavirus cases rise
2020-05-18	Rappler.com	PUVs ordered to keep list of passengers for contact tracing
2020-05-19	Inquirer.net	Uson: Wrong post was an ‘honest mistake’
2020-05-19	PhilStar Global	Teachers ask DepEd for consultations
2020-05-20	GMA News Online	Philippines’ second COVID-19 wave is also its first major wave, says expert
2020-05-20	Inquirer.net	Tiangco wants Navotas back on ECQ
2020-05-20	Rappler.com	Traveling to PH during pandemic? Here's what to expect
2020-05-21	Inquirer.net	Caloocan shuts judicial complex after staffer tests positive
2020-05-22	Inquirer.net	Coronavirus jokes a no-no in Valenzuela
2020-05-25	GMA News Online	DOST offers P5-M grant for each innovative project that will equip businesses for 'new normal'
2020-05-25	Inquirer.net	No new cases, deaths in San Juan in 2 days
2020-05-25	PhilStar Global	3 hospitals get P5.2 million PPEs
2020-05-25	Rappler.com	PH coronavirus cases climb to 14,319, deaths at 873
2020-05-25	Rappler.com	PH's actual coronavirus tests far behind 'estimated capacity' of 32,000

2020-05-25	Rappler.com	Duterte orders OFWs stuck in Metro Manila to be brought home this week
2020-05-26	GMA News Online	How can 'asymptomatic' COVID-19 cases be contagious? Expert explains
2020-05-26	Inquirer.net	Locked down Caloocan residents ask for help
2020-05-26	Inquirer.net	Ospital ng Tondo resumes full operations
2020-05-26	Rappler.com	Duterte orders probe of company allegedly selling overpriced medical equipment
2020-05-26	Rappler.com	Bakuna muna': Duterte rejects August opening of classes
2020-05-27	GMA News Online	Can herd immunity end the coronavirus pandemic? Expert explains how
2020-05-27	Inquirer.net	Valenzuela’s elderly get P3,000 pension each
2020-05-27	Inquirer.net	Housing maintenance, other fees waived for cash-strapped Navoteños
2020-05-28	GMA News Online	Philippine Red Cross app can warn user of exposure to COVID-19
2020-05-30	GMA News Online	Facebook bans medical fake news site for using trolls from Philippines, North Macedonia
2020-06-01	Inquirer.net	Gearing up to meet challenges posed by ‘new normal’
2020-06-01	PhilStar Global	DepEd braces for remote enrollment
2020-06-01	Rappler.com	LTO to fine drivers who violate transportation guidelines during pandemic
2020-06-01	Rappler.com	PH coronavirus cases now at 18,638
2020-06-01	Rappler.com	‘Fresh’ or ‘late’ cases? DOH still validating 6,800 coronavirus tests
2020-06-01	Rappler.com	Where are the promised 30,000 tests a day? The government's moving targets
2020-06-02	GMA News Online	Proteins in COVID-19 patients' blood could predict severity of illness, study finds
2020-06-02	Inquirer.net	Chaos as thousands return to work in Metro Manila
2020-06-02	PhilStar Global	Remote enrollment off to good start — DepEd
2020-06-03	GMA News Online	DOST starts formulation of virgin coconut oil for initial testing vs. COVID-19
2020-06-03	GMA News Online	DOST starts studies on viruses for establishing Philippine virology institute
2020-06-03	Rappler.com	VFA termination suspended due to pandemic, geopolitics – Locsin
2020-06-04	GMA News Online	DOST exploring lagundi, tawa-tawa as potential treatment vs. COVID-19
2020-06-04	Inquirer.net	6 jeepney drivers protesting loss of livelihood face raps
2020-06-04	PhilStar Global	Use of locally made test kits suspended

2020-06-04	Rappler.com	Over 5,300 Filipinos abroad positive for coronavirus
2020-06-05	PhilStar Global	800 LGUs submit SAP liquidation reports
2020-06-07	ABS-CBNNews	Mga jeepney driver sa Maynila, nangangalakal ng basura at namamalimos na rin
2020-06-07	Rappler.com	Finally, more coronavirus-hit health workers receive gov't compensation
2020-06-07	Rappler.com	Finally, more coronavirus-hit health workers receive gov't compensation
2020-06-08	Inquirer.net	‘Piston 6’ may be freed today
2020-06-08	Rappler.com	NCMH records spike in mental health consults during coronavirus lockdown
2020-06-08	Rappler.com	After PNP doctor’s death, DOH repeats advice vs large-scale disinfectant spraying
2020-06-09	GMA News Online	Gov’t approves Sinovac Biotech as potential collaborating organization for COVID-19 vaccine trials
2020-06-09	Inquirer.net	Only 4 of ‘Piston 6’ released on bail
2020-06-09	PhilStar Global	Virgin coconut oil trials for COVID patients OK’d
2020-06-09	PhilStar Global	Philippine-made ventilators set for trials
2020-06-09	PhilStar Global	Face-to-face classes still possible – DepEd
2020-06-10	Inquirer.net	Piston 6 ‘lolo’ worried about getting virus in jail
2020-06-10	Rappler.com	FAST FACTS: How gov’t coronavirus labs manage test samples
2020-06-10	Rappler.com	PH coronavirus cases climb to 23,732, death toll rises to 1,027
2020-06-11	Rappler.com	‘Cause for concern’: Experts project 11,000 coronavirus cases in Cebu by June 30
2020-06-11	Rappler.com	Filipina cruise ship worker dies by suicide while awaiting repatriation
2020-06-11	Rappler.com	PH coronavirus cases projected to reach 40,000 by June 30 – experts
2020-06-12	Rappler.com	UP experts flag gaps in DOH coronavirus data
2020-06-13	PhilStar Global	11 DSWD workers get COVID; 964 on self-quarantine
2020-06-14	GMA News Online	Coronavirus causing COVID-19 is not weakening, San Lazaro Hospital doctor says
2020-06-14	Rappler.com	Robredo hits gaps in transport of stranded workers after Silvertino death
2020-06-15	GMA News Online	Trials of melatonin as COVID-19 supplementary treatment to run for 4 months -Duterte
2020-06-15	PhilStar Global	DOST pilot-testing contact tracing app
2020-06-15	Rappler.com	6 LGUs appeal for stricter quarantine protocols ahead of Duterte decision
2020-06-15	Rappler.com	PH coronavirus cases surpass 26,000

2020-06-16	Inquirer.net	Virus-positive prosecutor prompts court lockdown
2020-06-16	PhilStar Global	DOST wants local pharmas to make COVID vaccine
2020-06-16	PhilStar Global	DepEd introduces dropbox enrollment
2020-06-16	Rappler.com	Duterte eyes purchase of radios for students in far-flung areas during pandemic
2020-06-17	GMA News Online	DOH: Low dose steroid treatment dexamethasone no magic pill vs. COVID-19
2020-06-17	Inquirer.net	Manila hires jobless sewers to make 1M masks
2020-06-18	Inquirer.net	Valenzuela taps app to augment tricycle drivers' income
2020-06-18	Rappler.com	Locsin apologizes to U.K. for British man's death in Cebu City hospital
2020-06-19	Inquirer.net	Two of 'Piston 6' infected after days in detention
2020-06-19	PhilStar Global	22,000 duplicate SAP beneficiaries found
2020-06-21	Rappler.com	LIST: Which countries can Filipinos travel to during pandemic?
2020-06-21	Rappler.com	Coronavirus pandemic forces over 51,000 Filipinos to return to PH
2020-06-21	Rappler.com	Robredo to DOTr: Be 'compassionate,' help traditional jeepney drivers
2020-06-22	Inquirer.net	Party leads to hike in COVID-19 cases at Navotas village
2020-06-22	PhilStar Global	288 patients enrolled for WHO trials for COVID cure
2020-06-22	PhilStar Global	DOST to test telepsychiatry on OFWs
2020-06-22	Rappler.com	Philippines coronavirus cases climb to 30,682
2020-06-23	Rappler.com	As Ombudsman probes DOH, Duterte defends Duque anew
2020-06-25	Rappler.com	PH medical societies warn no evidence steam inhalation kills coronavirus
2020-06-26	Inquirer.net	DENR, some courts under lockdown
2020-06-26	PhilStar Global	DSWD sees smoother distribution of cash aid
2020-06-28	Rappler.com	DOH sends more doctors to Cebu City, but rural physicians hit 'lack of consultation'
2020-06-29	Inquirer.net	Sisters launch fundraiser for UP's Ikot, Toki drivers
2020-06-29	Inquirer.net	'Pride 20' to countersue Manila police
2020-06-29	PhilStar Global	Privacy body sets distance learning guidelines
2020-06-29	Rappler.com	Palace goes on defensive as PH leads in rise of virus cases in Western Pacific
2020-06-29	Rappler.com	Philippines coronavirus cases breach 36,000
2020-06-29	Rappler.com	PH coronavirus cases may reach at least 60,000 by July 31 – experts
2020-06-30	Rappler.com	DOH says deployment of more doctors to Cebu City voluntary for now

2020-06-30	Rappler.com	Comelec: Voter registration suspended until August 31
2020-07-01	GMA News Online	Continuous consumption, illegal trade of wildlife may cause more pandemics
2020-07-01	Inquirer.net	218 Navotas families on lockdown
2020-07-01	Rappler.com	Harry in a hurry? Roque claims ‘victory’ based on incomplete COVID-19 data
2020-07-02	Rappler.com	Expired Bayanihan Law stalls compensation for coronavirus-hit health workers
2020-07-03	Inquirer.net	9 nabbed in Caloocan bar for quarantine violations
2020-07-03	Inquirer.net	Navotas, Grab team up to provide jobs to trike drivers
2020-07-03	Rappler.com	SC urged: Compel Duterte gov’t to conduct ‘mass testing’
2020-07-04	PhilStar Global	2nd version of local test kit passes review
2020-07-05	GMA News Online	Malacañang welcomes start of gov't study on use of blood plasma as COVID-19 treatment
2020-07-05	Rappler.com	DOH to stop giving patients lopinavir, ritonavir following experts' advice
2020-07-06	Inquirer.net	Enrollment rate in Manila public schools hits 100.46%
2020-07-06	Rappler.com	11 Metro Manila hospitals report COVID-19 ICU beds now full
2020-07-06	Rappler.com	Philippine coronavirus cases surpass 46,000, as infections continue to increase
2020-07-06	Rappler.com	No alternative' but lockdown if rising coronavirus cases continue, says Roque
2020-07-06	Rappler.com	As coronavirus cases rise, DOH reiterates: Stay home, follow health protocols
2020-07-07	GMA News Online	Increase in COVID-19 cases may be partly due to mutated virus —UP expert
2020-07-07	Inquirer.net	3 Manila officials positive for coronavirus
2020-07-08	GMA News Online	UPLB alumna behind COVID-19 mass testing tech development in Switzerland
2020-07-08	Rappler.com	PH eyes start of COVID-19 vaccine trials by October 2020
2020-07-08	Rappler.com	DOH reminds hospitals: Refer mild COVID-19 cases to treatment centers
2020-07-09	Rappler.com	Searching for a coronavirus vaccine: What PH clinical trials will look like
2020-07-10	Inquirer.net	Malabon City shortens curfew hours
2020-07-10	PhilStar Global	Don’t collect excessive personal info, restaurants told
2020-07-10	Rappler.com	Why are coronavirus cases still increasing in the Philippines?

2020-07-13	Rappler.com	New Anti-COVID czar Magalong to 'radically' change PH contact tracing system
2020-07-13	Rappler.com	Philippines coronavirus cases climb further over 57,000
2020-07-13	Rappler.com	Malacañang names 3 more 'anti-COVID czars'
2020-07-13	Rappler.com	DOH: Expect reported deaths, recoveries to increase as more LGU data come
2020-07-13	Rappler.com	DOH clarifies home quarantine allowed, but stresses rules should be followed
2020-07-13	Rappler.com	Philippine coronavirus cases breach 56,000
2020-07-14	PhilStar Global	DepEd cites blended learning fund sources
2020-07-14	Rappler.com	Easing of Metro Manila quarantine restrictions after July 15 unlikely – Roque
2020-07-15	Inquirer.net	348 cops, soldiers to help enforce Navotas lockdown
2020-07-17	Inquirer.net	245 arrested on Day 1 of Navotas lockdown
2020-07-18	PhilStar Global	Lagundi being tested vs COVID-19
2020-07-19	GMA News Online	DOST exploring lagundi as a treatment for COVID-19
2020-07-20	PhilStar Global	Barangays to help ensure physical distancing in classrooms
2020-07-20	PhilStar Global	Coconut oil credited for making provincial jail COVID-free
2020-07-21	GMA News Online	What is the difference between droplets and aerosols?
2020-07-21	GMA News Online	Clinical trials for lagundi as supplemental treatment for COVID to start Aug. 1 —DOST
2020-07-21	Inquirer.net	Manila opens third COVID-19 testing center
2020-07-22	Inquirer.net	Navotas residents air gripes midway into 14-day lockdown
2020-07-23	Inquirer.net	Navotas eyes 1,000 swab tests a day to halt virus spread
2020-07-24	PhilStar Global	28 summas lead UP's first virtual graduation
2020-07-25	PhilStar Global	Airline, Go mount charity flights
2020-07-26	PhilStar Global	VCO manufacturer seeks government support for R&D
2020-07-27	PhilStar Global	CHR calls for transparency on Bilibid COVID-19 details
2020-07-27	PhilStar Global	UP holds first virtual graduation exercises
2020-07-28	GMA News Online	What is infodemic and what you can do to fight against it
2020-07-28	Inquirer.net	SONA protesters decry drivers' arrest, Quiapo Mass disruption
2020-07-29	Inquirer.net	'Pasaway' bus fined P462,000
2020-07-30	Inquirer.net	Hospital hit for allotting fewer beds for virus patients

2020-08-03	Inquirer.net	Physician recounts hard choices, conditions facing health workers
2020-08-03	PhilStar Global	VCO maker urges research on pellet vs COVID-19
2020-08-03	PhilStar Global	IATF to decide on opening of classes
2020-08-04	GMA News Online	Philippines commits to initial 3 million anti-COVID vaccines —DOST chief
2020-08-04	Inquirer.net	Manileños told: Use old quarantine passes
2020-08-06	Inquirer.net	Vets hit discrimination: We're frontliners too
2020-08-07	GMA News Online	Pinoy team wins NASA award for Space App COVID-19 challenge
2020-08-07	PhilStar Global	3rd tranche of cash aid up to Congress — DSWD
2020-08-07	PhilStar Global	DICT supports proposed e-governance act
2020-08-08	PhilStar Global	PCSO rolls back lotto ticket price
2020-08-10	Inquirer.net	Separate trash bins for used masks, protective gear sought
2020-08-10	PhilStar Global	TESDA to produce 50 million reusable masks
2020-08-11	Inquirer.net	Hospital turns away virus-free pregnant moms
2020-08-11	PhilStar Global	'No stopping August 24 opening of classes'
2020-08-12	GMA News Online	DOST officials meet with Russian vaccine manufacturers for Phase 3 trial
2020-08-12	Inquirer.net	Caloocan residents get color-coded quarantine passes
2020-08-13	GMA News Online	Around 1,000 Pinoys to join Phase 3 trials of Russian COVID-19 vaccine
2020-08-16	GMA News Online	More infectious, dominant novel coronavirus strain detected in Philippines
2020-08-16	ABS-CBNNews	Metro Manila bike lane network, balak itayo ng DOTr
2020-08-17	GMA News Online	No solid evidence' yet that recently detected coronavirus strain more infectious —DOH
2020-08-17	Inquirer.net	QC to open virus testing lab
2020-08-19	GMA News Online	Multiple SARS-CoV-2 lineages have entered Philippines since January —RITM
2020-08-19	GMA News Online	COVID-19 vaccine likely available to public by 2nd quarter of 2021 —DOST
2020-08-19	GMA News Online	DOH still studying if G strain of virus caused spike in COVID-19 cases
2020-08-19	Inquirer.net	Navotas City turns freight containers into isolation rooms
2020-08-22	PhilStar Global	Use of coconut levy fund for R&D on VCO pushed
2020-08-23	ABS-CBNNews	Paglalagay ng pinto sa kaliwang bahagi ng bus isinusulong
2020-08-24	Inquirer.net	QC pushes village-based quarantine facilities
2020-08-24	Inquirer.net	PGH doctor dies after contracting COVID-19 a second time

2020-08-26	Inquirer.net	9 Valenzuela City Hall employees suspended over quarantine violation
2020-08-27	Inquirer.net	Valenzuela honors city's lone neonatologist who died of COVID-19
2020-08-28	Inquirer.net	Tiangco asks market, store vendors to undergo testing
2020-08-29	GMA News Online	FDA OKs clinical trials for lagundi as supplemental treatment for COVID-19
2020-08-29	ABS-CBNNews	Clinical trials ng lagundi para sa COVID-19 symptoms aprubado na ng FDA
2020-08-31	Inquirer.net	Dr. Kharen Abat-Senen: 'You have touched so many lives with your light'
2020-09-01	Inquirer.net	DepEd: Enrollees reach 24M or 86% of last year's total
2020-09-03	ABS-CBNNews	Mga gustong umuwi sa probinsiya nananatili sa 'Libingan'
2020-09-04	PhilStar Global	Laguna VCO clinical trials show promising results
2020-09-06	PhilStar Global	Group launches pandemic aid program
2020-09-08	PhilStar Global	DepEd focus: School children's mental wellbeing during pandemic
2020-09-09	GMA News Online	DOST execs worried about P76-M budget cut for R&D institutes
2020-09-12	PhilStar Global	Philippines signs confidentiality deals with 5 countries
2020-09-12	PhilStar Global	VCO shows high recovery rate for COVID-19 patients
2020-09-14	Inquirer.net	Metro Manila cemeteries closed during 'Undas'
2020-09-14	Inquirer.net	Gov't reduces physical distancing on PUVs
2020-09-15	Inquirer.net	Wakes, burials, cremations still allowed in Metro Manila
2020-09-18	PhilStar Global	Metro LGUs lament delay in 2nd SAP distribution
2020-09-19	PhilStar Global	Nutrition survey focuses on lockdown diet
2020-09-21	Inquirer.net	Distance cheating rears ugly head in remote learning
2020-09-21	PhilStar Global	Fil-Am prof's COVID-19 test bags US award
2020-09-27	Inquirer.net	More than ever, teachers need to be a class act for DepEd TV
2020-09-28	Inquirer.net	Provincial buses to roll sans stopovers, fare hikes
2020-09-29	PhilStar Global	DepEd to hire LSAs for public school teachers
2020-10-03	PhilStar Global	Vaccine trials may start this month — DOST
2020-10-05	Inquirer.net	Teachers, parents brace for double workload, unfamiliar tools
2020-10-06	Inquirer.net	Challenges hound online opening of classes
2020-10-07	Inquirer.net	Briones vows prompt action on complaints as classes open

2020-10-09	GMA News Online	Clinical trial for lagundi as COVID-19 medicine starts, says DOST exec
2020-10-09	PhilStar Global	No more third SAP tranche — DSWD
2020-10-12	Inquirer.net	Students overwhelmed by tasks under 'new normal' way of learning
2020-10-12	Inquirer.net	There's less exposure to virus for those using bikes, motorbikes – study
2020-10-15	Inquirer.net	Groups dismayed at politicking in House
2020-10-16	Inquirer.net	DepEd needs P137B more, mentors say
2020-10-16	Inquirer.net	Teachers: We didn't make modules
2020-10-17	GMA News Online	DOST expects VCO trial results will be released 2nd week of November
2020-10-19	GMA News Online	VCO shows potential vs. COVID-19 —DOST
2020-10-19	Inquirer.net	Metro Manila trains to transport more passengers
2020-10-19	PhilStar Global	DOST study bolsters VCO capacity vs COVID-19
2020-10-20	GMA News Online	Lacson laments lack of funding for research and development amid COVID-19 pandemic
2020-10-20	Inquirer.net	Metro Manila mayors want quarantine until end of 2020
2020-10-20	Inquirer.net	Metro Manila mayors open to shorter curfew for 'Simbang Gabi'
2020-10-22	PhilStar Global	Sinopharma drops Phase 3 vaccine trial in Philippines
2020-10-26	Inquirer.net	Teachers give kids with special needs 'special attention'
2020-10-27	Inquirer.net	Want to ride Angkas? Buy your own helmet
2020-10-27	Inquirer.net	DepEd's P 370-million vehicle purchases questioned
2020-10-27	PhilStar Global	Palace: Unnamed vaccine czar appointed 2 months ago
2020-10-28	GMA News Online	DOH: Not all potential COVID-19 vaccines will need ultra-cold storage
2020-10-29	Inquirer.net	Teachers to DepEd: Can we use some of 437 vehicles?
2020-11-02	PhilStar Global	CWC to LGUs: Prioritize stress management for children
2020-11-03	Inquirer.net	DepEd urges schools to ease burden of teachers, students
2020-11-09	PhilStar Global	Study underway for lagundi vs COVID-19 cure
2020-11-13	Inquirer.net	Typhoon Ulysses: Like 'Ondoy' all over again
2020-11-16	GMA News Online	Pinoy analytics firm earns recognition at 2020 GEO SDG Awards
2020-11-16	PhilStar Global	DOH approves DOST-funded study on tawa-tawa for COVID-19

2020-11-20	GMA News Online	India institute COVID-19 vaccine only needs standard cold system
2020-11-23	PhilStar Global	Hospitals recruiting participants for study on melatonin vs COVID-19
2020-11-28	GMA News Online	DOH looks into COVID-19's impact on male fertility
2020-11-28	PhilStar Global	Realistic timeline for COVID-19 vaccination by Q2 2021
2020-11-30	GMA News Online	Community trial of virgin coconut oil as COVID-19 treatment completed —DOST exec
2020-12-05	GMA News Online	DOST exec allays fears of having COVID-19 vaccine sans clinical trials in Philippines
2020-12-07	PhilStar Global	PCA drawing up standard for VCO products
2020-12-10	Inquirer.net	Manila raising P1B for vaccines; San Juan also bares plans
2020-12-11	GMA News Online	AstraZeneca withdraws bid for COVID-19 vaccine trials in Philippines
2020-12-11	PhilStar Global	Philippines seeks to spearhead international trials on VCO vs COVID-19
2020-12-14	GMA News Online	A South Korean study shows how a student became infected with COVID-19 after 5 minutes of exposure from 20 feet away
2020-12-15	PhilStar Global	Duterte OKs pilot testing of face-to-face classes
2020-12-16	Inquirer.net	Students won't be forced to attend in-person class
2020-12-17	Inquirer.net	DepEd studies in-person classes in 1,000 schools
2020-12-18	Inquirer.net	ADB: In-person classes may hike deaths by 8%
2020-12-18	PhilStar Global	Distribution of cash subsidy ongoing – DSWD
2020-12-19	Inquirer.net	Survival steps get steeper for Marikina shoemakers
2020-12-24	GMA News Online	DOST monitoring for UK COVID variant
2020-12-28	Inquirer.net	Cancellation of in-person classes best 'New Year's gift' to students
2020-12-29	Inquirer.net	Educator warns more private schools face shutdown amid pandemic
2020-12-29	PhilStar Global	Promote VCO vs COVID-19, government urged
2020-12-30	GMA News Online	China's Sinopharm says its COVID-19 vaccine has 79.34% protection rate
2020-12-30	Inquirer.net	Manila prosecutor junks raps vs 17 in Pride March
2021-01-03	GMA News Online	Mixing of COVID-19 vaccines not recommended – Public Health England
2021-01-04	Inquirer.net	Catholics urged to practice faith through formation
2021-01-08	GMA News Online	DOST continues study on virgin coconut oil vs. COVID-19
2021-01-09	PhilStar Global	DOST keen on starting WHO Solidarity Trials
2021-01-11	Inquirer.net	Isko, police: Health rules observed during Feast
2021-01-16	PhilStar Global	Janssen, Clover pushing through with Philippine trials

2021-01-18	Inquirer.net	New image of Child Jesus offers hope
2021-01-19	Inquirer.net	Tracing app pesters MRT commuters
2021-01-23	GMA News Online	Epidemiologist floats possibility of a Philippine COVID-19 variant
2021-01-23	GMA News Online	Data on UK coronavirus variant is very preliminary –expert
2021-01-25	GMA News Online	COVID-19 saliva test as accurate as swab test – Red Cross
2021-01-26	Inquirer.net	PRC: Saliva test as accurate as nasal swab test
2021-01-28	Inquirer.net	Red Cross eyes saliva tests by Feb. 1
2021-01-30	ABS-CBNNews	Bilang ng mga nagpositibo sa COVID-19 sa Passi City lumobo sa higit 200
2021-02-02	Inquirer.net	DOTr urged to suspend child car seat law
2021-02-02	PhilStar Global	CHED to inspect schools for limited face-to-face classes
2021-02-04	PhilStar Global	DepEd won't adopt pass or drop grading system
2021-02-05	Inquirer.net	Marikina to pay residents with vaccine side effects
2021-02-05	PhilStar Global	'Duterte, pols should be first to receive Chinese vaccine'
2021-02-08	Inquirer.net	Church surviving on faith, not fees
2021-02-14	GMA News Online	Inquiries looking into COVID-19 vaccine blood disorder reports
2021-02-16	GMA News Online	Experts: Adverse effects from COVID-19 vaccines very rare
2021-02-17	GMA News Online	Vaccines not always the cause of adverse effects after inoculation, says expert
2021-02-19	Inquirer.net	DepEd renews call for school opening
2021-02-20	GMA News Online	Virus mutations in Cebu not surprising, but further study needed, says expert
2021-02-23	GMA News Online	Can people with allergies still get a COVID-19 vaccine? Expert answers
2021-02-23	PhilStar Global	Vaccine suppliers with EUA may start phase 3 trials
2021-02-24	Inquirer.net	Delay in resumption of in-person classes a way of 'abandoning' youth
2021-02-26	Inquirer.net	Lawmaker decries risks of resuming in-person classes
2021-03-08	PhilStar Global	NCR cases surge at July 2020 rates
2021-03-13	PhilStar Global	DSWD backs senior discount for online transactions
2021-03-15	Inquirer.net	Pope Francis hails Filipinos for 'smuggling' faith
2021-03-15	Inquirer.net	'Whispering Flowerbeds' installed at PGH to honor fallen frontliners, inspire hope
2021-03-16	PhilStar Global	DepEd sets early registration schedule for 2021-2022

2021-03-22	Inquirer.net	Off-cam, thorny pay issue stalls DepEd TV production
2021-03-22	PhilStar Global	OCTA: COVID-19 cases to overwhelm Metro Manila hospitals by Easter
2021-03-23	GMA News Online	Variant first seen in Philippines has UK, Africa, Brazil mutations
2021-03-23	Inquirer.net	Hospitals asked to hike COVID beds, but PHAPi notes shortage of nurses
2021-03-24	GMA News Online	UPLB ‘virus hunters’ study bats in hopes of stopping next pandemic
2021-03-25	GMA News Online	DOST to launch travel management system 'S-PaSS' amid restrictions
2021-03-29	GMA News Online	Filipino priest developing oral COVID-19 vaccine effective vs. new variants
2021-03-29	Inquirer.net	ECQ 2021: Been there, done that but commuters still suffer
2021-03-29	Inquirer.net	Lenten rites to go online again
2021-03-29	Inquirer.net	Jeepneys, taxis, trikes can operate in Metro Manila, 4 provinces under GCQ
2021-04-05	Inquirer.net	Extended lockdown not enough – Marikina Mayor Teodoro
2021-04-06	PhilStar Global	1 million COVID-19 cases seen by end-April
2021-04-10	GMA News Online	DOST won't conduct trials for ivermectin, will wait for test results from abroad
2021-04-11	GMA News Online	Doctors continue debate over ivermectin for COVID-19
2021-04-11	ABS-CBNNews	DOH ipinaliwanag ang mataas na bilang ng mga namamatay sa mild COVID-19 cases
2021-04-12	Inquirer.net	Flaws aside, online learning takes toll on students’ mental health
2021-04-13	Inquirer.net	PH lags behind in acting on remote learning problems amid pandemic
2021-04-13	Inquirer.net	Schools as vaccination sites proof of failed gov’t response – national students’ group
2021-04-14	GMA News Online	COVID-19 hunter' bats for ivermectin use, but says it needs doctors' supervision
2021-04-14	Inquirer.net	Prosecutors, seafarers on jab priority list
2021-04-15	GMA News Online	DOST eyes more Filipino virologists
2021-04-15	Inquirer.net	Teachers demand OT pay in pandemic-hit school year
2021-04-16	PhilStar Global	More clinical trials sought for VCO as COVID-19 cure
2021-04-16	PhilStar Global	4 firms seek vaccine manufacturing in Philippines – DOST

2021-04-17	PhilStar Global	Local pharmaceutical firm eyes vaccine manufacturing next year
2021-04-19	GMA News Online	Why and how do coronavirus variants develop?
2021-04-22	Inquirer.net	Makers of first PH-made RT-PCR test kit open swab station
2021-04-26	PhilStar Global	Virus spread slowing in Metro Manila bubble – OCTA
2021-04-27	PhilStar Global	Moderna applies for EUA
2021-04-28	GMA News Online	Pfizer begins Phase 1 trial for anti-COVID pill
2021-04-29	GMA News Online	DOST exec: Benefits of virgin coconut oil, melatonin vs. COVID-19 still being studied
2021-05-03	PhilStar Global	Daily average down by 11% – OCTA
2021-05-04	PhilStar Global	Ivermectin clinical trial protocol being drawn up
2021-05-06	PhilStar Global	DOST shells out P22 million for Ivermectin clinical trials
2021-05-07	PhilStar Global	Online counseling services launched for COVID-19 hit Pinoys
2021-05-08	PhilStar Global	DOST extends clinical study on VCO as COVID-19 cure
2021-05-10	PhilStar Global	7,174 new cases; OCTA sees downward trend
2021-05-17	Inquirer.net	Infants bundled off; no one hurt in PGH fire
2021-05-18	Inquirer.net	Red Cross to charge P3,500 for Moderna shot
2021-05-18	PhilStar Global	DOST eyes R&D on COVID-19 vaccinated people
2021-05-21	PhilStar Global	Pandemic slashes OFW deployment by 75%
2021-05-24	GMA News Online	DOST: Study on COVID-19 vaccine mixing seen to start in June
2021-05-24	PhilStar Global	DepEd pushes post-pandemic online learning in public schools
2021-05-24	PhilStar Global	DOST OKs 2 research projects on COVID-19 vaccines
2021-05-25	Inquirer.net	PNP identifies suspect in sale of vaccine slots
2021-05-29	PhilStar Global	Philippines to launch 6 virus and vaccine R&D projects
2021-05-31	PhilStar Global	Former DICT official blasts ‘anomalous’ free WiFi deals
2021-05-31	PhilStar Global	International journal publishes results on VCO vs COVID-19
2021-06-04	PhilStar Global	Vaccine mix study anchors on Sinovac as first dose
2021-06-07	Inquirer.net	Fiestas survive pandemic albeit on socially distanced, masked or virtual scale
2021-06-07	Inquirer.net	Robredo worried over 113,000 who missed 2nd dose of COVID vaccine
2021-06-10	GMA News Online	DOST says minors still not included in vaccine trials
2021-06-11	GMA News Online	Filipino MIT graduate who got perfect 5.0 GPA shares pandemic challenges

2021-06-15	PhilStar Global	DepEd awaits IATF, DOH call on school kids' vaccination
2021-06-21	PhilStar Global	3 cities reach full ICU utilization rates
2021-06-21	PhilStar Global	WHO to cover 3 vaccines in Philippines trials
2021-06-24	Inquirer.net	Probe sought on deal for teachers' laptops
2021-06-27	GMA News Online	Initial analyses for lagundi, VCO as COVID-19 cure out by July
2021-07-02	PhilStar Global	DOST waiting for WHO protocol on vaccine trials
2021-07-03	GMA News Online	COVID-19 Delta variant stays airborne longer, experts say
2021-07-03	GMA News Online	DOH still looking into mixing of COVID-19 vaccines
2021-07-13	GMA News Online	Philippines, WHO sign agreement for COVID-19 vaccine solidarity trial —DOST
2021-07-13	GMA News Online	DOH, DOST to discuss 'mix and match' of COVID-19 vaccine brands on July 15 —official
2021-07-13	GMA News Online	Dr. Fauci bats for more gov't support for RITM, other Philippine science institutions
2021-07-20	GMA News Online	Sinovac COVID-19 approved for emergency use among children aged 3 to 17 in China
2021-07-20	PhilStar Global	No face-to-face classes yet in school opening
2021-07-23	Inquirer.net	DepEd launches tracer app for mentors
2021-08-04	Inquirer.net	Anxiety over paltry lockdown aid: 'We will die of hunger'
2021-08-06	GMA News Online	Antiviral drug molnupiravir shows promise vs. COVID-19 —Lung Center exec
2021-08-09	Inquirer.net	Enrollment in public schools starts Aug. 16
2021-08-09	PhilStar Global	DOST-funded clinical trials on VCO vs COVID-19 underway
2021-08-10	PhilStar Global	Enrollment for 2021-2022 set August 16-September 13
2021-08-15	Inquirer.net	QC sues 2 for getting booster shots, cites violation of ordinance
2021-08-19	Inquirer.net	Comelec: Delaying voter registration would cause other problems
2021-08-23	PhilStar Global	FDA approval sought for VCO nasal spray
2021-08-24	ABS-CBNNews	Hawahan ng COVID-19 sa Cavite, nakita sa magkakapamilya
2021-08-24	PhilStar Global	Sinopharm vaccine gets EUA from FDA
2021-08-26	Inquirer.net	Unicef points out effects of missing in-person classes on Filipino kids
2021-08-30	GMA News Online	Are face shields effective against COVID-19? Wind engineer explains
2021-08-30	Inquirer.net	Comelec's election year budget slashed by 37%
2021-08-30	PhilStar Global	Philippines ready for WHO trials of 3 vaccines

2021-08-31	ABS-CBNNews	ER, COVID-19 ward ng Pagamutan ng Dasmariñas puno na
2021-08-31	PhilStar Global	Teachers hit DepEd over one-week virtual training
2021-09-01	GMA News Online	Philippines aims to start ivermectin clinical trials for COVID-19 use this month —DOST
2021-09-01	GMA News Online	Philippine vaccine experts to study when COVID-19 booster shots may be given
2021-09-05	PhilStar Global	Coconut industry renews calls to tap VCO vs COVID-19
2021-09-06	PhilStar Global	DOH has final say on vaccine booster shots – DOST
2021-09-07	GMA News Online	DOST prepares for vaccine trials; unveils major research programs
2021-09-07	ABS-CBNNews	Turista dagsa: Kaso ng COVID-19 sa Tagaytay tumaas
2021-09-11	GMA News Online	Ivermectin trial results possible by December 2021 –DOST
2021-09-13	Inquirer.net	Yet another challenging year for public school teachers
2021-09-14	Inquirer.net	Learning still best in classrooms, parents, education experts say
2021-09-19	GMA News Online	PGH COVID-19 clinical trials on virgin coconut oil finished by end of September —DOST
2021-09-27	PhilStar Global	Successful clinical trial on VCO vs COVID-19 goes international
2021-09-28	GMA News Online	DOST sees virgin coconut oil as adjunct therapy for COVID-19 patients
2021-09-28	PhilStar Global	DepEd, DOH to roll out pilot of in-person classes
2021-10-02	PhilStar Global	New S-PASS border control system portal launched
2021-10-04	PhilStar Global	Doctor develops VCO-lagundi spray vs COVID-19
2021-10-14	ABS-CBNNews	Ilang Pinoy maagang bumisita sa mga sementeryo
2021-10-15	PhilStar Global	DSWD explains Starpay task in ayuda distribution
2021-10-17	GMA News Online	VCO trials show big drop in virus count of mild COVID-19 cases
2021-10-17	GMA News Online	DOST exec bares positive results of lagundi, tawa-tawa trials
2021-10-18	PhilStar Global	Tawa-tawa, lagundi shown to ease mild COVID-19 symptoms
2021-10-20	GMA News Online	DOST: Philippines will conduct study if VCO can stop COVID-19
2021-10-23	GMA News Online	DOST receives foreign queries on COVID-19 symptom relief from VCO, herbal meds
2021-10-24	PhilStar Global	Philippine's vaccine mix-and-match study awaits FDA nod

2021-10-25	GMA News Online	DOST: Around 3,000 to participate in COVID-19 vaccine 'mix and match' trials
2021-10-31	GMA News Online	DOST eyes starting ivermectin clinical trials on November 15
2021-11-01	PhilStar Global	VCO nasal spray vs COVID-19 eyed
2021-11-05	PhilStar Global	Vax certificates now issued to local travelers
2021-11-15	PhilStar Global	CHED: Nursing, medical students to serve as vaccinators
2021-11-20	GMA News Online	Mix-and-match COVID-19 vaccine clinical trial underway —DOST exec
2021-11-23	PhilStar Global	18 private schools start face-to-face class pilot implementation
2021-11-27	GMA News Online	QMMC calls on unvaccinated close contacts of COVID-19 cases to join molnupiravir trial
2021-11-29	GMA News Online	No evidence yet that Omicron is 'deadlier' — infectious disease expert
2021-12-04	GMA News Online	HK scientists claim they have isolated Omicron from samples
2021-12-06	PhilStar Global	Group wants research on VCO as prophylaxis vs COVID-19
2021-12-19	PhilStar Global	‘No scientific claim vaccines can lead to herd immunity’
2021-12-20	GMA News Online	Flashlight and net: How detecting COVID-19 variants helps in pandemic response
2021-12-27	PhilStar Global	Fewer plastic barriers reduce chance of COVID-19 transmission
2022-01-01	PhilStar Global	DOST, stakeholders seek FDA approval of VCO vs COVID-19
2022-01-07	PhilStar Global	UP researchers recommend lagundi for COVID-19 patients
2022-01-10	PhilStar Global	DOST-funded COVID-19 vaccine mix-and-match study underway
2022-01-14	ABS-CBNNews	Alfonso, Cavite closes municipal hall, health center as COVID-19 cases spike
2022-01-18	GMA News Online	Heterologous booster generates more antibodies for Sinovac recipients –preprint study
2022-01-18	PhilStar.Com	DepEd recommends 'progressive' expansion of limited face-to-face classes
2022-01-19	PhilStar.Com	Senator calls to bar unvaccinated PAO chief from work
2022-01-19	PhilStar.Com	Senate bill seeks to protect rest hours, prevent 'unli-work from home'
2022-01-20	PhilStar.Com	DepEd: Mandatory vax policy not meant to discriminate against unvaxxed employees

2022-01-20	PhilStar.Com	Acosta's refusal to get COVID-19 jab contributes to vaccine hesitancy — Drilon
2022-01-21	PhilStar Global	MMDA gets donation of P50 million cash, test kits
2022-01-22	GMA News Online	Virgin coconut oil, lagundi can help patients with mild COVID-19 — study
2022-01-23	PhilStar.Com	Presidential bets on COVID-19 response: No sense of urgency, mass vaccination not prioritized
2022-01-24	GMA News Online	Sputnik V COVID-19 vaccine recipients retain more antibodies vs. Omicron —study
2022-01-24	PhilStar.Com	Gordon pushes for more COVID-19 saliva tests in the countryside | Philstar.com
2022-01-25	GMA News Online	Expert urges single COVID-19 booster shot for now
2022-01-29	ABS-CBNNews	Metro Manila naabot ang pre-surge levels'
2022-02-01	PhilStar Global	VCO trials vs COVID-19 yield positive results, says DOST
2022-02-02	GMA News Online	Not too late for Philippines to develop COVID-19 vaccines —DOH, DOST
2022-02-08	PhilStar Global	‘Collaboration among agencies key to push for expanded F2F’
2022-02-09	ABS-CBNNews	Bakunahan ng mga edad 5-11 vs. COVID sa Tagaytay, nagmistulang kid's party
2022-02-18	PhilStar Global	DICT adds security features in vax certificate
2022-03-27	ABS-CBNNews	DOH: 4th COVID vaccine dose posibleng simulan sa Abril
2022-04-05	GMA News Online	AstraZeneca: New study shows anti-body drug effective vs. Omicron variants
2022-04-15	GMA News Online	COVID-19 to stay but pandemic may end soon, says vaccinologist
2022-05-30	PhilStar Global	DOST funds COVID-19 vaccine immune response study
2022-06-04	ABS-CBNNews	ALAMIN: Bakit di puwedeng alisin ang 'state of calamity' dahil sa COVID?
2022-06-23	ABS-CBNNews	Mga mag-aaral sa Rizal, binakunahan vs COVID-19
2022-07-16	ABS-CBNNews	COVID-19 2nd booster, kailangan na ba?
2022-07-17	ABS-CBNNews	5 provinces report 'very high' COVID positivity rate
2022-07-19	PhilStar Global	Tulfo: P1.7 billion SAP returned to Treasury
2022-07-31	ABS-CBNNews	Philippines still 'low risk' for COVID-19: DOH
2022-08-08	PhilStar Global	Coconut processors push VCO in fight vs COVID-19
2022-08-14	ABS-CBNNews	PH must boost immunity before lifting COVID restrictions: DOH
2022-09-03	ABS-CBNNews	Uptick in COVID hospitalizations, deaths 'reasonable to expect': WHO
2022-10-08	ABS-CBNNews	Publiko hinimok na magpa-flu vaccine

2022-10-11	ABS-CBNNews	Pilipinas malapit na sa endemic state ng COVID: eksperto
2022-10-15	ABS-CBNNews	Wakas ng 'global health emergency' vs. COVID, napapanahon na?
2022-10-18	Rappler.com	Philippines detects first cases of COVID-19 XBB subvariant
2022-10-25	Rappler.com	Philippines to make indoor masking voluntary
2022-10-26	ABS-CBNNews	WHO eyes end of COVID health emergency by end of 2022
2022-10-27	ABS-CBNNews	Malalaking sementeryo sa Kamaynilaan puspusan na ang paghahanda
2022-10-27	Rappler.com	Health expert urges gov't: Slow down on easing pandemic restrictions
2022-11-05	ABS-CBNNews	Mga nagsisimba, nagma-mall mas pinipiling mag-face mask
2022-12-09	PhilStar Global	DOST backs study on VCO health benefits
2022-12-16	ABS-CBNNews	COVID pandemic led to surge of medical waste: DOH
2022-12-31	ABS-CBNNews	Sapat na suplay na Gamot, bakuna pinatitiyak sa 2023