



Communication of Central and Regional Governments on Social Media in Handling Covid in Indonesia

Suswanta¹(✉) and Anang Setiawan²

¹ Government Science, University Muhammadiyah Yogyakarta, Yogyakarta, Indonesia
Suswanta@umy.ac.id

² Islamic Politics-Political Science, University Muhammadiyah Yogyakarta, Yogyakarta, Indonesia

Abstract. This article aims to find out how Communication Of Central And Regional Governments On Social Media In Handling Covid In Indonesia In analyzing data using qualitative descriptive methods and processed using NVIVO 12 Plus is a data processing application to analyze online data and social media so that researchers can use these applications to manage data until there is no specified time limit. The results show that the communication and coordination spearheaded by the Indonesian Ministry of Health is a strategic crisis management strategy that encourages local governments to work together to implement these policies appropriately and quickly. However, online media statistics, government initiatives and white papers, interviews, opinion polls, and observations overturn Twitter's limitations. Further studies are needed by utilizing Twitter triangulation techniques and other data to thoroughly assess the current communication and coordination performance of the Indonesian government in dealing with Covid-19.

Keywords: Communication · Central Government · Regional Government · Covid-19

1 Introduction

Coronavirus disease-2019 poses a significant threat to the population and sustainability of the world's cities. In reducing the surge in positive numbers, it is quite complicated and is related to many factors that become aspects, one of which includes the status of the pandemic, policy making, socio-economic conditions (Jiang et al. 2021). The spread of Covid-19 in Indonesia not only affects the health sector but also affects the socio-political and economic fields, this will have a bad impact on economic growth and national development. To overcome Covid-19, until now no effective drug has been found, so prevention and handling efforts are very important. Dependence on policies issued by the government has increased during the pandemic to reduce the spread of the disease (Sanjaya et al. 2021). Policies related to important outcomes other than the death toll are still unknown (Pasdara et al. 2021).

The Indonesian government's goal or plan to minimize the rate of COVID-19 transmission is to publish Government Regulation Number 21 of 2020 about Large-Scale Social Restrictions in the Context of Accelerating the Handling of Corona Virus Disease 2019, which is the initial policy taken by the Indonesian government in covering each subsequent policy step (Pana et al. 2021). On July 20, 2021, President Jokowi announced an official explanation of the Policy of Enforcing Restrictions on Community Activities (PPKM) (Mahadewi 2020). This strategy is intended to be avoided in order to limit the rate of Covid-19 transmission and to manage the capacity of hospitals that treat Covid-19 patients in order to avoid overcapacity (Zulfikar 2020).

The PPKM policy is supported by the issuance of two Minister of Home Affairs Instructions, namely the Minister of Home Affairs Instruction No. 22 of 2021 related to the Implementation of PPKM Level 4 for Regencies/Cities in the Java and Bali Regions, and the Minister of Home Affairs Instruction No. 23 of 2021 concerning the Implementation of Micro PPKM (Level 4 and Level 3 for Regencies/Cities in Regions Other Than Java and Bali). The two Minister of Home Affairs Instructions are in effect from July 21 to July 25, 2021 (Almaida & Djamdjuri, n.d.). This is coupled with the lack of coordination between the Central Government and Regional Governments in terms of the PPKM policy (Ekopriyono 2021). During concerns about COVID-19 cases needed by the community is the government to provide protection to its citizens in accordance with the mandate of the 1945 Constitution of the Republic of Indonesia, one of which is the policy in responding to this COVID-19 case.

Although the implementation of autonomy in policy-making by the ministry in suppressing the transmission of covid-19, the policies or rules set by the ministry always coincide or are in harmony and support each other (Nofrima et al. 2020). The policies taken by the ministries sometimes overlap. This is reflected in the implementation of the policy to limit The Ministry of Health utilizes public transportation to promote social separation, whereas the Ministry of Transit promotes economic recovery, causing public transportation to run normally without social distancing (Setiati and Azwar 2020). Other examples are the Ministry of Social Affairs' implementation of social assistance policies for refugees as a result of the epidemic, and the inclination to shift funding towards outbreak mitigation measures by the Ministry of Villages and Disadvantaged Regions, while there are guidelines for disbursement of resources delayed by the Ministry of Finance (Machmud 2020). In addition, there are differences of opinion between these technical ministries causing public chaos and public confusion in receiving policy information in the midst of the Covid-19 pandemic (Abidah et al. 2020). In addition, there was miscommunication and disinformation taken by the government, both the central government and local governments, which led to disagreements on the rules for handling the COVID-19 pandemic, therefore the central government forbade the implementation of the lockdown policy.

based on the background results above which show the condition of the Indonesian government in handling the covid-19 pandemic. This needs to be considered in the preparation aspect where during the pandemic the Indonesian government has not socialized clearly and the lack of tools used in disseminating a policy through social media, especially twitter. In the crisis management process, the use of social media platforms has proven to be quite effective in disseminating information in times of crisis. The

tendency to use social media in providing solutions to the Covid-19 problems that occur in Indonesia becomes effective if delivered with interactive technology. Therefore, a gap was obtained by researchers which aims to coordinate and communicate the central and regional governments during the covid-19 pandemic. The research method used to see the intensity of @kemenkesRI in preparing for A qualitative study of @kemenkesRI's twitter material using the NVivo 12 plus software explains the epidemic and the intensity of attention exhibited throughout illness management.

2 Literature Review

2.1 Social Media as a Means of Public Communication

Social media, which is utilized as the most common method of communication and interaction, is a product of the phenomena of information technology becoming an integral component of modern human existence (Azer and Alexander 2020). Through the influence on the establishment of social networks, social media encourages simple contact and the attainment of common goals and interests (KIRIK 2022). Furthermore, social media users can disseminate information to the wider public via text messages, photos, or posters and get comments that may be challenged by many parties (Xia et al. 2019). This platform allows audiences from multiple viewpoints to access and respond to information transfer (Ewing et al. 2019). These recipients may express favorable views and consider the news being circulated to be noteworthy, or they may express negative sentiments and become the subject of public debate and disagreement (Salahudin 2020).

The use of social media makes a communicative and interactive information tool that can be used to provide public information in times of crisis so that information is conveyed quickly and accurately to the wider community, so that hoaxes do not occur several factors that are quite important in the use of social media in a positive way as a form of information dissemination that produces good quality content and produces beneficial value for the community (Raamkumar et al. 2020). Furthermore, earlier study demonstrated that when social platforms are employed, businesses become inseparable from the work environment and gain from the development of human resources' strengths and skills (Benis et al. 2021). Interactive technologies are used by institutions to promote communication, coordination, and cooperation, to stimulate the implementation of responsibilities and duties, and to advance the attainment of the organization's goal (Dhar et al. 2021).

In this day and age of globalization Kimmel Furthermore, the goal of using social media as a governance platform is to speed up the movement of information and communication pertinent to the attainment of company objectives, both private and public firms are attempting to shift corporate management from an offline to an online-centered model (Alam et al. 2020). Furthermore, Kimmel, explained the purpose of using social media as a governance platform, namely so that the mobility of an organization and communication related to the achievement of goals (Panagiotopoulos et al. 2014). In addition, the company generates profitable benefits, including prompt and precise policy formulation, Through the use of this technology, you may save time and money while also responding quickly to internal and external issues (Raza Naqvi et al. 2020).

2.2 Social Media in Disaster Management

The research entitled *Best Practices: The Use of Social Media in Emergency and Disaster Relief* was conducted by Erica Gold fine from American University in 2011 (Rus and Sandu 2020). The research was conducted with the aim of knowing how to use social media during a disaster emergency. This research takes disaster care social institutions as research subjects, including Direct Relief International, the Catholic Medical Mission Board, Humanitarian Information Unit, Office of the Assistant Secretary for Preparedness and Response, and World Vision Program. The research method used is a qualitative approach with unstructured in-depth interviews. The informants interviewed were communication operators as many as six people from each institution. This communication operator was chosen because they are considered to have an understanding and experience in the use of social media in their institutions during emergencies and disaster recovery.

This study concludes that learning from existing experiences, the use of social media can maximize emergency response and disaster recovery activities. Then the social media used in disaster management is good media that is popular and relevant to the use of the community. Furthermore, the use of social media can also facilitate mapping and knowing the location of the disaster. Finally, the proper use of social media will be beneficial for disaster recovery (Georgiev and Angelov 2020).

3 Research Methods

This study will use descriptive qualitative research methods that aim to answer questions between variables obtained from the results of literature review and data processing so that conclusions can be drawn from the descriptions of the variables (Schwaiger et al. 2022). The descriptive qualitative approach was employed in this study, with searches conducted on news, journals, and media from June 2021 to September 2021. The technique goes through five stages in the analysis process: literature study, finding models in journals, collecting data from social media, NVivo 12 Plus analysis, drawing conclusions, then analysis through the NVivo 12 Plus software, coding data, testing validity and reliability, and visualizing the results of data analysis. The NVivo 12 Plus analysis is designed to provide more professional findings when analyzing qualitative data.

4 Result and Discussion

Figure 1 depicts the level of contact between the DKI Government and Twitter @kemenkesRI. Jakarta, the Government of West Java, and the Government of Central Java are all involved in dealing with the COVID-19 epidemic their respective regions. Furthermore, the analysis from the picture below is interpreted as the consistency of the Indonesian Ministry of Health in continuous communication and coordination with local governments, as well as existing efforts to foster synergy between the ranks of the central and regional governments as the main solution to pandemic control in Indonesia. This collaboration is outlined in a structured and one-stop policy issued by the central

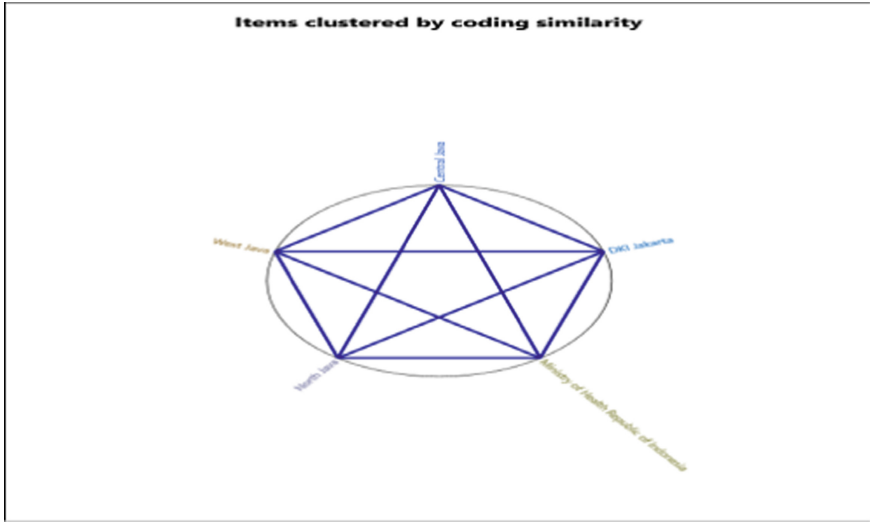


Fig. 1. Intensity of communication and coordination of the Ministry of Health of the Republic of Indonesia and Local Government (**Source:** Cluster Analysis with NVivo 12 Plus)

government, which is carried out strictly to facilitate different operational methods in each region according to the number of active cases. Furthermore, measures that are consistent across the national and local governments to keep COVID-19 from spreading virus and to reduce socioeconomic consequences in society.

The Ministry of Health of the Republic of Indonesia is one of the ministries designated by the president to limit COVID-19 transmission and account for the effects of the virus. His work to the president which aims to conduct fast, accurate, integrated, and synergized interactions by other ministries in charge of carrying out business affairs. Technical handling of the covid pandemic. The Twitter account of the Ministry of Health is the official government account that represents the president in delivering public information on the COVID-19 epidemic in Indonesia.

Figure 2 displays the efforts of the Ministry of Health of the Republic of Indonesia to strengthen national unity during the COVID-19 pandemic in Indonesia. “INDONESIA” and “COVID” are the most often conveyed terms to the Governor and Duty officer to underline the nature of viral infections as a “purely national concern” that requires broad coordination across all levels of government. “These announcements also represent crisis management activities aimed at increasing key stakeholders’ trust in the government as a champion of the people’s interests. Furthermore, collaboration is suggested as a significant measure, particularly in multispectral emergencies such as epidemics. The repeated term “WE” indicates that all stakeholders collaborate in the national interest while letting go of sectoral egos caused by hurdles to disaster relief effectiveness. These impediments are political or economic products, and they create impediments to the efficacy of disaster management in Indonesia.

Figure 3 depicts the intensity of communication and coordination carried out by the Ministry of Health of the Republic of Indonesia in providing an understanding

According to the data described above, there are several local governments using the same communication materials as the central government, in providing information on the COVID-19 pandemic in their respective areas. However, not all local governments in Indonesia have the same priorities as well as measures enacted by the central government, this is due to the different conditions of Covid transmission in each region. The provincial government of the Jakarta capital area, for example, has issues and policies related to Covid-19 that are different from the central government. Miscommunication and disinformation are a concern because they are impacted by President Joko Widodo's poor communication and coordination, the Covid-19 Task Force, and the provincial government of the Jakarta capital area, in this case the governor of DKI Jakarta. In the early days of Covid-19 which became the attention of the public The DKI Jakarta Regional Government and the Central Government in Indonesia held differing viewpoints on the Covid-19 issue. The DKI Jakarta Regional Government announced and implemented a lockdown strategy at the local level only specifically for the DKI Jakarta province (Pickard G. Picard, 2017).

However, the central government stopped this policy because according to the central government's view, Covid has not and will not become a pandemic in Indonesia (Salahudin 2020). As a result, the DKI Jakarta Provincial Government no longer needs to implement the Lockdown policy that causes noise and fear among the people of DKI Jakarta (Begum et al. 2022). The central government then stressed the importance of local administrations, such as DKI Jakarta, did not have the authority to enforce and enforce the lockdown law (Moneter and Susanto 2020). The Covid-19 problem, according to the federal government, is a national one that must be a central and regional business only to carry out the results of the decisions of the central government because this is related to defense, state security and state stability, which is the authority of the central government (Lilleker and Stoeckle 2021). The disinformation and miscommunication that occurred between the central government and the DKI Jakarta government caused the handling of covid-19 in DKI Jakarta to be ineffective and became a boomerang for the government which did not gain public trust in the successful handling of the covid pandemic in DKI Jakarta or in Indonesia (Hassankhani et al. 2021).

Stakeholders are any group or people who can impact or is influenced by the attainment of organizational goals, which necessitates the development of procedures and strategies to enhance the organization's strategic management skills (Santos and Laureano 2021). In terms of assessing stakeholders, the most acknowledged and crucial feature that stakeholders must possess to be granted the position of stakeholder power inherent in legitimacy is the element of legitimacy. Even if stakeholders lack authority, they will still be considered stakeholders if they have legitimacy. Furthermore, authority is not necessary to identify or define a person as a stakeholder in stakeholders. Power may be obtained, but it cannot be entirely lost if there is legitimacy (Vanapalli et al. 2021). In terms of the Covid-19 pandemic situation in Indonesia, there are several stakeholders that have been touched, both positively and negatively. Economic actors involved in medical and health areas are among those who have profited. The expansion of Covid-19, of course, increases the need for medical equipment. As a result of the advent of Covid-19, for example, the need for tools and Personal Protective Equipment (PPE)

has skyrocketed. As a location most vulnerable to the spread of Covid-19, Area Special Capital City (DKI) Jakarta need more than 1,000 units every day.

During the management of the Covid-19 problem, the Indonesian government also used social media as a tactic. The Indonesian government, through the Covid-19 Task Force, is aggressively disseminating information via the National Disaster Management Agency's (BNPB) social media platforms like as Facebook, Twitter, Instagram, and Youtube. The government also makes advantage of these platforms by providing varied material that informs the public in the form of images and videos. The usage of social media is undoubtedly extremely valuable in the government's current crisis scenario since it can be utilized to broadcast official information so that the public and stakeholders have access to reputable information.

Situational Crisis Communication Theory may be used to develop a crisis plan for the Indonesian government. The rebuilding stance is the optimum choice in reacting to this problem, according to this plan. According to Booms (2021) rebuilding posture aims to enhance the organization's reputation. The words and actions are intended to assist stakeholders and mitigate the negative impacts of the crisis. This posture entails actions for restitution and apologies. Because the government is totally accountable for the Covid-19 situation, the government should offer compensation as well as transmit full responsibility for its treatment. Furthermore, this is justified because the administration initially gave the impression of denial, which exacerbated the problem and left the public with an unfavorable image. So now is the moment for the government to adopt a rebuilding stance to lessen public upheaval, regulate the crisis, and avoid the formation of additional problems because of dealing with the Covid-19 situation. The efforts that have been implemented include compensating the community by preparing 405.1 trillion rupiah to deal with the epidemic.

5 Conclusion

This study indicates that the communication and coordination pioneered by the Indonesian Ministry of Health is a strategic crisis management strategy that has led to local governments working together to implement these policies promptly and correctly. However, online media statistics, government initiatives and white papers, interviews, polls, and observations reversed Twitter limitations. Further study utilizing the Twitter triangulation technique and other data is required to thoroughly assess the present Indonesian government's communication and coordination performance in dealing with Covid-19.

References

- Abidah, A., Hidaayatullah, H. N., Simamora, R. M., Fehabutar, D., & Mutakinati, L. (2020). The Impact of Covid-19 to Indonesian Education and Its Relation to the Philosophy of "Merdeka Belajar." *Studies in Philosophy of Science and Education*, 1(1), 38–49. <https://doi.org/10.46627/sipose.v1i1.9>
- Alam, F., Shaar, S., Dalvi, F., Sajjad, H., Nikolov, A., & ... (2020). Fighting the COVID-19 infodemic: modeling the perspective of journalists, fact-checkers, social media platforms, policy makers, and the society. *ArXiv Preprint ArXiv* <https://arxiv.org/abs/2005.00033>

- Almaida, H. G., & Djamdjuri, D. S. (n.d.). COLLABORATE BETWEEN DIGITAL PLATFORM AND STUDENTS' CREATIVITY IN LEARNING DURING COVID. In *Universitas*. pkm.uika-bogor.ac.id. <http://pkm.uika-bogor.ac.id/index.php/pkm-p/article/download/891/741>
- Azer, J., & Alexander, M. (2020). Negative customer engagement behaviour: the interplay of intensity and valence in online networks. *Journal of Marketing Management*, 36(3–4), 361–383. <https://doi.org/10.1080/0267257X.2020.1735488>
- Begum, H., Abbas, K., Alam, A. S. A. F., Song, H., Chowdhury, M. T., & Abdul Ghani, A. B. (2022). Impact of the COVID-19 pandemic on the environment and socioeconomic viability: a sustainable production chain alternative. *Foresight*, 24(3–4), 456–475. <https://doi.org/10.1108/FS-02-2021-0053>
- Benis, A., Nelke, S. A., & Winokur, M. (2021). Training the next industrial engineers and managers about industry 4.0: A case study about challenges and opportunities in the covid-19 era. *Sensors*, 21(9). <https://doi.org/10.3390/s21092905>
- Dhar, R., Jee, B., & Karmakar, S. (2021). Balancing healthcare and economy amidst the covid-19 pandemic: An Indian experience. *Risk Management and Healthcare Policy*, 14, 827–833. <https://doi.org/10.2147/RMHP.S291084>
- Ekopriyono, A. (2021). Semarang City's Resilient Strategy Facing Covid-19. *JURNAL SOSIAL HUMANIORA (JSH)*. <http://iipetek.its.ac.id/index.php/jsh/article/view/8693>
- Georgiev, T., & Angelov, A. K. (2020). Complexities of diagnosis and management of COVID-19 in autoimmune diseases: Potential benefits and detriments of immunosuppression. *World Journal of Clinical Cases*, 8(17), 3669–3678. <https://doi.org/10.12998/wjcc.v8.i17.3669>
- Hassankhani, M., Alidadi, M., Sharifi, A., & Azhdari, A. (2021). Smart city and crisis management: Lessons for the covid-19 pandemic. *International Journal of Environmental Research and Public Health*, 18(15). <https://doi.org/10.3390/ijerph18157736>
- Im, J., Kim, H., & Miao, L. (2021). CEO letters: Hospitality corporate narratives during the COVID-19 pandemic. *International Journal of Hospitality Management*, 92. <https://doi.org/10.1016/j.ijhm.2020.102701>
- Jiang, P., Fu, X., Fan, Y., Van, Klemeš, J. J., Chen, P., & ... (2021). Spatial-temporal potential exposure risk analytics and urban sustainability impacts related to COVID-19 mitigation: A perspective from car mobility behaviour. *Journal of Cleaner ...* <https://www.sciencedirect.com/science/article/pii/S0959652620337185>
- KIRIK, A. M. (2022). Sosial Medya Araştırmalarında Yerli Verilerin Rolü ve Önemi: Sosyal Ağ Haritası Örneği. *TRT Akademi*, 312–323. <https://doi.org/10.37679/trta.1064041>
- Lilleker, D. G., & Stoeckle, T. (2021). The challenges of providing certainty in the face of wicked problems: Analysing the UK government's handling of the COVID-19 pandemic. *Journal of Public Affairs*, 21(4). <https://doi.org/10.1002/pa.2733>
- Machmud, A. N. (2020). Hipertensi : Faktor Determinan Hipertensi Pasien Rawat Jalan. *Jurnal Fenomena Kesehatan*, 03(1), 365–377.
- Mahadewi, K. J. (2020). KEBIJAKAN PELAKSANAAN PPKM DARURAT UNTUK PENANGANAN COVID-19 DALAM TATANAN KEHIDUPAN ERA BARU DI PROVINSI BALI. In *Jurnal Program Studi Magister Hukum*. ojs.unud.ac.id. <https://ojs.unud.ac.id/index.php/kerthasemaya/article/download/77089/41012>
- Mihaela Rus, Mihaela Luminița Sandu, T. T. (2020). A new decade for social changes. *Technium: Social Science Journal*, 6(6), 69–87.
- Moneter, B. A. H., & Susanto, E. H. (2020). Strategi Komunikasi Politik Partai Baru (Studi Kasus Perolehan Suara Partai Solidaritas Indonesia di DPRD DKI Jakarta Pada Pemilu 2019). *Koneksi*. <http://journal.untar.ac.id/index.php/koneksi/article/view/6508>
- Nofrima, S., Nurmandi, A., Kusuma Dewi, D., & Salahudin, S. (2020). Cyber-activism on the dissemination of #Gejayanmemanggil: Yogyakarta's student movement. *Jurnal Studi Komunikasi*

- (*Indonesian Journal of Communications Studies*), 4(1), 103. <https://doi.org/10.25139/jsk.v4i1.2091>
- Pana, T. A., Bhattacharya, S., Gamble, D. T., Pasdar, Z., & ... (2021). Country-level determinants of the severity of the first global wave of the COVID-19 pandemic: an ecological study. In *BMJ open*. [bmjopen.bmj.com](https://bmjopen.bmj.com/content/11/2/e042034.abstract). <https://bmjopen.bmj.com/content/11/2/e042034.abstract>
- Panagiotopoulos, P., Bigdeli, A. Z., & Sams, S. (2014). Citizen-government collaboration on social media: The case of Twitter in the 2011 riots in England. *Government Information Quarterly*, 31(3), 349–357. <https://doi.org/10.1016/j.giq.2013.10.014>
- Pasdar, Z., Pana, T. A., Ewers, K. D., Szlachetka, W. A., & ... (2021). An ecological study assessing the relationship between Public Health Policies and Severity of the COVID-19 Pandemic. *Healthcare*. <https://www.mdpi.com/1274544>
- Raamkumar, A. S., Tan, S. G., & Wee, H. L. (2020). Measuring the outreach efforts of public health authorities and the public response on Facebook during the COVID-19 pandemic in early 2020: cross-country *Journal of Medical Internet Research*. <https://www.jmir.org/2020/5/e19334>
- Raza Naqvi, S. H., Fatima, M., Gerges, F., Moscatelli, S., Oz, T. K., Kotlar, I., Babazade, N., Hashemi, A., & Almaghraby, A. M. (2020). Coronavirus disease 2019 and catheterisation laboratory considerations: “Looking for essentials.” *European Cardiology Review*, 15. <https://doi.org/10.15420/ecr.2020.29>
- Salahudin, S. et al. (2020). Analysis of Government Official Twitters during Covid-19 Crisis in Indonesia Analysis of Government Official Twitters during Covid-19 Crisis in Indonesia. *Talent Development & Excellence*, 12(June), 3899–3915.
- Sanjaya, R., Lativa, L., Nurmono, N., & ... (2021). Learning Strategies Implementation For Educators during the Covid-19 Pandemic. *Jurnal Abdi* <http://www.openjournal.unpam.ac.id/index.php/JAMH/article/view/8825>
- Santos, M. R. C., & Laureano, R. M. S. (2021). COVID-19-Related Studies of Nonprofit Management: A Critical Review and Research Agenda. *Voluntas*. <https://doi.org/10.1007/s11266-021-00432-9>
- Schwaiger, K., Zehrer, A., & Braun, B. (2022). Organizational resilience in hospitality family businesses during the COVID-19 pandemic: a qualitative approach. *Tourism Review*, 77(1), 163–176. <https://doi.org/10.1108/TR-01-2021-0035>
- Setiati, S., & Azwar, M. K. (2020). Dilemma of Prioritising Health and the Economy During COVID-19 Pandemic in Indonesia. *Acta Medica Indonesiana*, 52(3), 196–198.
- Vanapalli, K. R., Sharma, H. B., Ranjan, V. P., Samal, B., Bhattacharya, J., Dubey, B. K., & Goel, S. (2021). Challenges and strategies for effective plastic waste management during and post COVID-19 pandemic. *Science of the Total Environment*, 750. <https://doi.org/10.1016/j.scitotenv.2020.141514>
- Xia, R., Zhang, M., & Ding, Z. (2019). RTHN: A RNN-transformer hierarchical network for emotion cause extraction. *IJCAI International Joint Conference on Artificial Intelligence, 2019-Augus*, 5285–5291. <https://doi.org/10.24963/ijcai.2019/734>
- Zulfikar, R. (2020). *ACHIEVING ORGANIZATIONAL COMPETITIVE ADVANTAGES THROUGH COLLABORATION DURING COVID-19 PANDEMIC*. <http://eprints.uniska-bjm.ac.id/806/>

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

