

# Government Support During Pandemic in Developing Countries: A Case Study from Central Sulawesi Province, Indonesia

Irwan Waris<sup>1</sup>, Ani Susanti<sup>1</sup>, Muhammad Ahsan Samad<sup>1,2</sup>

## Abstract

*The problem of this research is how effective is the government support provided by developing countries, with special emphasis on Central Sulawesi Province in Indonesia, during the COVID-19 pandemic. This study aims to analyze various aspects of government preparedness in Central Sulawesi, assess the impact of this preparedness on community resilience, and identify key factors influencing the effectiveness of government support. Research sample consisted of employees of the Central Sulawesi Provincial Health Office bureaucracy who took part in a questionnaire survey. A questionnaire survey was conducted on a sample of 162 public service employees during the pandemic to identify respondents' perceptions of the importance of the proposed indicators. This study uses quantitative research methods, using regression analysis with SPSS software and structural equation model (SEM) to determine a significant relationship between government support, bureaucracy, and resilience. Data analysis techniques include descriptive analysis, bivariate correlation, confirmatory factor analysis (CFA), and regression. The findings show a significant relationship between government support, resilience, and bureaucracy. While the bureaucracy in Central Sulawesi demonstrated the ability to make quick and informed decisions during the pandemic crisis, this study highlights the need for better coordination and collaboration among employees. The novelty of this study lies in its comprehensive analysis of city government preparedness levels and an innovative approach to examining the relationship between government preparedness and community resilience using regression analysis and SEM.*

**Keywords:** *Bureaucracy, Developing Countries, Pandemic Covid-19, Public Services*

## Introduction

The pandemic began on December 31, 2019, when 27 cases of pneumonia of unknown cause were identified in the Hubei provincial capital, Wuhan City, the most populous city in central China with a population exceeding 11 million. (Centorrino 2020). The status of COVID was declared a global pandemic because positive cases spread outside China which reached a 13-fold increase in infected countries (Abdou 2021). Various policies have been taken by the government, including one of which is instructing people to work, study and worship at home, otherwise known as Work From Home. (Taufik and Warsono 2020). The Covid-19 pandemic has brought a new order of change in almost all aspects of life in all countries in the world, including Indonesia (Hinson, LaPrairie, and Heroman 2006; Muhyiddin and Nugroho 2021). Admittedly, the Covid-19 pandemic which also claimed lives in Small city from Indonesia had an impact that was not conducive to the socio-economic life of residents (Kasim et al. 2021) also had an impact on the economic

---

<sup>1</sup> Faculty Sains Social and Politics Universitas Tadulako. Indonesia

<sup>2</sup> Centre for Research in Development, Social and Environment (SEEDS),

<sup>3</sup> Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia. Malaysia  
Email: irwanwarisfisip@gmail.com

downturn (Nugraha, Liow, and Evly 2021; Putra, Liriwati, and Tahrim 2020; Shangguan, Wang, and Sun 2020). The problem at hand is to assess the impact and implications of the COVID-19 pandemic on various aspects of life in Indonesia, particularly in small cities, with a focus on socio-economic conditions and the resulting economic downturn

Covid-19 has clearly demonstrated the importance of the public sector to society: without it, there would be no healthcare, education, income security and basic needs (De Beer and Keune 2022). This also affects the process of bureaucratic public services to the community, both administrative, social, health, education, and others (Arfan, Mayarni, and Nasution 2021a). Researchers have long been interested in the COVID-19 pandemic, and those interested in public service organizations are no exception. Especially those who pay attention to the availability of public services in the midst of the COVID-19 Epidemic (Arfan, Mayarni, and Nasution 2021b; Aspan 2021; Situmeang and Tan 2021). COVID-19 pandemic has had an impact on the delivery of public services by the bureaucratic sector which includes administrative, social, health and educational services.

The government is the main actor who must adapt to be able to solve various problems caused by the spread of Covid-19 (Dorni et al. 2020). Although the world is still in the midst of a crisis marked by radical uncertainty, one thing is clear: the coronavirus (COVID-19) will be one of the defining policy challenges of an era. (Dunlop, Ongaro, and Baker 2020). This has an impact on the accessibility of public services (Kossasy et al. 2021). Public services provided by the bureaucracy are a manifestation of the function of the bureaucratic apparatus as public servants. The purpose of public service is for the welfare of society (Firdausjiah and Muliawaty 2020). The level of public satisfaction with public services is very important because it will have an impact on public trust (Yuniati 2022). Executors of public services are the government, employees, officials, and everyone who works in implementing organizations who are responsible for an action or a series of public service actions. (Lamidi 2022).

The shift in people's demands for more effective public services during the Covid-19 Pandemic gave rise to a public service system with the concept of serving as an obligation (Merta et al. 2022). The Covid-19 pandemic is like a trigger to change bad habits in various aspects of life, including the government bureaucracy (Ramadhan and Tamaya 2021; Sutrisna 2021). Government organizations are increasingly required to create quality services (Hartoko 2020). Provision of access to public services adapted to the conditions of the Covid-19 pandemic not only in the field of structuring the bureaucratic order but also in various fields that concern the livelihoods of many people (Rohmat and Elisanti 2021). The form of employee accountability to the public can be in the form of excellent administrative services, which are characterized by good behavior and adequate administrative service facilities, as well as satisfactory administrative service results. (Al-Hamid 2021).

The Covid-19 outbreak in Indonesia demands a change in the public service system (Rohman and Larasati 2020). This condition forces all parties to adapt to these changes (Rafsanjani and Handayani 2021). One of the most obvious impacts of the COVID-19 pandemic has been the adjustment in service delivery (Herman, Lestari, and Sunardi 2022). So far, public services are still using the manual method. As a result, once there is Covid-19 which forces the situation to become abnormal, public services are often left behind. As a result, follow-up services that will be felt by the community are not optimal (Podungge and Solihin 2020). However, in the midst of the Covid-19 pandemic, there is a transition of public services from previously using manual methods to transform into virtual spaces (Herman 2022). In addition, services will still be carried out in the office but must implement health protocols (Rohman and Larasati 2020). This change greatly affects the readiness of human resources (HR) and infrastructure (Firdaus, Tursina, and Roziqin 2021). The impact of public services is rather rigid and complicated (Ifdil et al. 2020). The

problem faced is the need to transform the public service system in Indonesia due to the Covid-19 outbreak. The pandemic necessitated changes in service delivery methods, moving from manual processes to virtual platforms while also implementing health protocols for operations in offices. This transition has significant implications for the readiness of human resources and infrastructure in the public sector.

With limited bureaucratic knowledge of technology and supporting facilities for carrying out services and the public's ignorance of the online service system, this service system is paralyzed (Asri 2020). This situation lasted for about 2 years, since Covid-19 entered Indonesia (Rorong 2020). Another problem also arises in the public service process, where the bureaucracy shows an attitude of wanting to be served and not serving (Rafi et al. 2022).

To evaluate changes in work practices in the bureaucracy, this paradigm is taken from a number of academic perspectives. In the midst of COVID-19, the idea of a new work culture demands a complete overhaul of the services offered. In order for the service to be unusual, it requires a very competitive speed of service and innovation to adapt to existing changes (Chaniago 2021). The government provides clear information regarding service standards and improves online service delivery systems supported by local governments to prevent transmission of this disease. One of them is that the government of Central Sulawesi issued a policy on a study and work system from home, implementing health protocols and social distancing for services that require face-to-face meetings and requires all people to vaccinate. This is intended so that the Covid-19 case in Central Sulawesi is increasingly sloping while still prioritizing serving the needs of the community (Rahman, Syamsidar, and Royfandi 2023)..

This research article aims to provide a comprehensive picture of the level of preparedness shown by city governments in Central Sulawesi, Indonesia in the midst of an ongoing pandemic. The main objective of this research is to identify and analyze various aspects of government preparedness, as well as examine the impact of this preparedness on community resilience. In addition, this article seeks to provide practical recommendations to the government by proposing a preparedness model that can be adopted for similar disasters in the future.

## **Methods**

### **Research Sample**

The sample in this study is the city government bureaucracy apparatus using quantitative methods to explain a comprehensive picture of the level of preparedness of city governments in Central Sulawesi, Indonesia, and the resilience of communities in facing pandemic conditions. The analysis process uses the Regression technique by using SPSS and SEM pls software to analyze and determine the model. The participants in this study were the bureaucratic apparatus of the Central Sulawesi Provincial Health Office. Recruitment of research participants through an online survey using Google Form, from 19 February 2023 to 29 March 2023, and the total population of Central Sulawesi Health Service employees obtained from the Central Sulawesi Province staffing distribution totaled 287 people.

This sample was selected taking into account that health service personnel in Indonesia serve as bureaucratic entities who play a crucial role in managing the Covid-19 pandemic, particularly in the Central Sulawesi Province. In taking the sample the researcher used the formula introduced by Krejcie & Morgan (1970) in the figure below, the formula for determining the number of samples is as follows:

$$s = \frac{x^2 \cdot N \cdot P(1 - P)}{(N - 1) \cdot d^2 + x^2 \cdot P(1 - P)}$$

S = sample

X<sup>2</sup> = chi-square table values for the desired (3.841)

N = population size

P = population rationing (0.50)

d = level of accuracy is expressed as a degree (0.05)

Number of samples developed by Krejcie & Morgan (1970):

Referring to the table developed by Krejcie & Morgan (1970) it can be concluded that the number of samples needed if the population is 287, the sample for this study is 162 with an error rate of 5%. With the condition that Participants are required to read the consent section before participating in this research and can stop at any time.

### Research Method

The research method uses a quantitative research design (Arora et al. 2000). Involve a comprehensive literature review and performance adjustment indicators to measure government support during a pandemic.

The present study employs two data collection methods to ensure comprehensive and objective results. The data collection methods employed include primary data and secondary data (Omta 1995). Primary data is obtained through direct data collection from participants or sources specifically for this research (Polkinghorne 2005). On the other hand, secondary data is gathered from existing sources such as published literature, reports, or databases.

To ensure validity and reliability, the data and information obtained undergo a rigorous data analysis process (Morse et al. 2002). This analysis enables the researchers to examine and interpret the collected data, thereby yielding meaningful results. To enhance the presentation and clarity of the findings, the results are presented in tabular form (Braun and Clarke 2006). The inclusion of tables serves to reinforce the research outcomes and facilitates a better understanding of the study's findings.

Primary data refers to the data source wherein data is collected directly by the researchers themselves from the original or firsthand sources (Ajayi 2017). This data collection method involves researchers directly interacting with the subjects or locations being studied to gather the necessary information. By directly engaging with the primary source, researchers have the opportunity to obtain firsthand and specific data that is relevant to their research objectives (Decrop 2004). This approach ensures that the collected data is directly aligned with the research focus and provides a reliable foundation for analysis and interpretation. The primary data collection method employed in this study primarily utilizes a survey form as the main instrument (Creswell 2009). This survey form is designed to gather essential information directly from the research participants.

In addition to surveys, observations and document as a secondary data analysis are supplementary techniques utilized to obtain a more comprehensive understanding of complex issues, as well as to clarify any difficult-to-answer questions (Bowe 2009). These additional methods contribute to the richness of the data collected and provide a deeper insight into the research topic (Creswell and Creswell 2017). By combining survey responses, observations, and document analysis, researchers can obtain a more nuanced understanding of the subject matter and address any potential limitations of relying solely on survey data.

Utilizing online questionnaires, specifically through platforms like Google Forms, enables researchers to streamline the collection of field data, ensuring convenience for respondents and efficient time management. This methodology significantly enhances the effectiveness of data collection processes, allowing researchers to dedicate more time and resources to data analysis and interpretation (Cooper et al. 2006). By adopting this approach, researchers can maximize the quality and depth of their analysis, leading to valuable insights and meaningful research outcomes.

The questionnaire comprises four primary sections. Section (A) collects demographic data from the informants, aiming to gather relevant background information based on the predetermined criteria. Specifically, the informants are government employees working in the community service division during the pandemic. Section (B) focuses on assessing the informants' perception of Government Support. The questions in this section revolve around identifying the key areas in which government support (Wahid et al. 2021) is crucial for effectively addressing the COVID-19 crisis in Central Sulawesi Province. These areas encompass mitigating the health, economic, and social impacts of the pandemic (Allain-Dupré et al. 2020). While part (C) is a statement about Resilience, which is about the toughness of the bureaucratic structure in handling Covid 19 (Pfaff et al. 2021) and in part (D) is a statement about Bureaucracy about the percentage of apparatus attention during a pandemic (Gofen and Lotta 2021).

#### Research Instrument

The measuring instrument used in this study refers to the measuring instrument developed by "Onjewu, A. K. E., Olan, F., Paul, S., & Nguyen, H. T. T. (2023). The effect of government support on Bureaucracy, COVID-19 resilience and export intensity: Evidence from North Africa. *Journal of Business Research*". This research develops 5 measurement tools namely; Government Support, Bureaucracy, Resilience, Direct Exports and Indirect Exports to measure, government organizations and profit organizations (Onjewu et al. 2022)

However, in this study the researchers only focused on 3 measuring instruments namely Government Support, Bureaucracy, and Resilience, namely by considering this research only saw a significant relationship between Government Support, Bureaucracy, and Resilience for public organizations during the covid pandemic in Central Sulawesi Province bureaucrats. All measuring instruments in this study have gone through a process of adaptation to Indonesian.

Government Support, namely as an indicator (X1) is used to measure support from local government. This measuring instrument uses a 5-point Likert scale. The reliability coefficient value of Cronbach's alpha is 0.89 which indicates that all the results of the scale analysis are valid and reliable for use in measurement. Example item "Did this establishment receive central or local government support in response to the crisis?"

Bureaucracy, namely as an indicator (Y), is used to measure how present management is during a pandemic. This measuring instrument uses a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The reliability coefficient value of Cronbach's alpha is 0.93 which indicates that all the results of the scale analysis are valid and reliable for use in measurement. Example item "Organizational structure response on resilience in handling Covid-19".

Resilience, namely as an indicator (X2) is used to measure the toughness of the structure in handling Covid. This measuring instrument uses a five-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). The reliability coefficient value of Cronbach's alpha is 0.93 which indicates that all the results of the scale analysis are valid and reliable for use in measurement. An example of the item "Resilience in handling Covid 19".

#### Bureaucratic Service Quality Measuring Tool

<b>Variable</b>	<b>Indicator</b>	<b>Statement</b>
<i>Government Support</i>	Identifying the key areas in which government support.	Does this policy get support from the central government or the regional governments under it during the handling process
<i>Bureaucracy</i>	Pay attention to the apparatus during a pandemic	Since the outbreak of COVID-19, has the bureaucratic leaders' attention been spent on implementing the policies that have been enacted by the government?
<i>Resilience</i>	The toughness of the bureaucratic structure in handling Covid 19	Is the bureaucratic structure still able to carry out all government policies regarding the process of public services to the community during the pandemic?

\*the processing results of the researchers refer to the measuring tool developed by Onjewu, A. K. E., Olan, F., Paul, S., & Nguyen, H. T. T. (2023). The effect of government support on Bureaucracy, COVID-19 resilience and export intensity: Evidence from North Africa. *Journal of Business Research*

### Research Analysis

This study uses regression data analysis with SPSS software and structural equation model (SEM) (Hsu 2010). To provide valuable insights into the significant relationship between government support, bureaucracy, and resilience in the context of city government preparedness in Central Sulawesi, Indonesia, and community resilience during a pandemic.

Regression analysis using SPSS allows testing the relationship between variables and can be applied to assess the impact of government and bureaucratic support on community resilience (Cohen et al. 2017). By conducting regression analysis, researchers can determine the strength, direction, and importance of these relationships, providing quantitative evidence for understanding how government and bureaucratic support affect societal resilience. This analysis helps identify the specific contribution and importance of each variable (Rios and Gianmoena 2020) in predicting resilience.

Structural equation modeling (SEM) is a powerful statistical technique that allows examining complex relationships between several variables simultaneously (Maccallum and Austin 2000). This can be used to build a comprehensive model that incorporates government support, bureaucracy, and resilience as latent variables. SEM allows estimation of direct and indirect effects, enabling researchers to assess the mediating role (Adillah Ismail et al. 2019) of bureaucracy in the relationship between government support and resilience. This technique provides a deeper understanding of the mechanisms and pathways underlying the interactions of these variables (Baurley et al. 2010).

By using regression analysis with SPSS and SEM, researchers can analyze and determine the model of a significant relationship (Stein, Morris, and Nock 2012) between government support, bureaucracy, and resilience. This approach allows a comprehensive examination of the individual contributions of government and bureaucratic support to societal resilience, as well as their combined influence (Lebel et al. 2006). The results obtained from this analysis can inform policy makers and stakeholders about specific areas that need attention and improvement in increasing city government preparedness and promoting community resilience during a pandemic.

## Results and Discussion

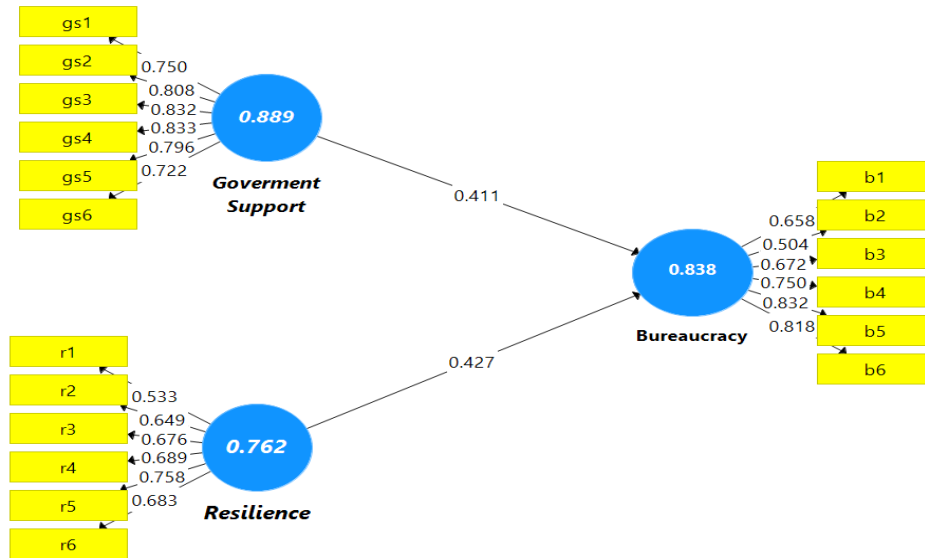
Description of Biographical Data

Demographic Background	Item	Frekuensi	Presentase
Gender	Man	90	58%
	Woman	75	42%
Age	18-20	2	1%
	21-25	31	26%
	26-30	29	22%
	31-35	31	26%
	36-40	22	15%
	41-45	6	6%
	Others	4	5%
	Ethnic group	Bugis-Makassar	48
Kaili		89	49%
Jawa		22	15%
Bali		2	3%
Others		4	8%
Education	Senior High School	89	49%
	Bachelor	54	38%
	Master	22	13%
Status	Not married yet	50	34%
	Married	115	66%

From the biographical data it can be seen that this research was conducted in Central Sulawesi with the result that the respondents in this study were men with a total percentage of 58% of the results of SMA and S1 graduates who dominated with presentations of 49% and 38% as research respondents, the tribe studied the dominance of the kaili tribe which has a presentation of 49%. Data is also dominated by productive age, namely age 21-25 with a total presentation of 26%, which has the same presentation rate, namely age 31-35 years, with self-employed work with a percentage rate of 51%.

Data analysis

Based on the results of the measurement model analysis, it is known that there are several indicators with a value below 0.5, so they must be excluded from the analysis, namely X2. The six indicators have a loading factor value below 0.50. The next step is retesting to see if all indicators meet the standard value > 0.5. Convergent validity in PLS is also assessed by AVE (Average Variance Extracted). The rule of thumb used for convergent validity is  $AVE \geq 0.50$  (Hair et al., 1998). After repeated testing, the results of the convergent validity test revealed that the AVE value was greater than 0.50 for all Government support, resilience, and bureaucracy variables, so it was concluded that the convergent variable was valid.



Based on the figure above, it shows that all indicators have an outer loading greater than 0.5, so it is concluded that it is valid in reflecting the variables of government support, resilience and bureaucracy.

**Composite Reliability Test**

Based on the composite reliability test shows that the value of all variables > 0.5. Therefore, it can be concluded that the variables tested are valid and also reliable (Ghozali, 2005).

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AV)
Bureaucracy	0.804	0.838	0.859	0.511
Government Support	0.881	0.889	0.909	0.626
Resilience	0.751	0.762	0.827	0.447

**Inner Model Collinearity Test Analysis (Structural Model)**

The results of the collinearity test show that on the path of the influence of government support (X1) and toughness (X2) on the bureaucracy (Y) it is known that the collinearity values for the Government Support, Resilience and Bureaucracy variables have VIF all below 5, so it is said that water is said to be free from linearity.

independent Variable	VIF	Conclusion
Bureaucracy	2.692	Valid
Government Support	1.992	Valid
Resilience	1.792	Valid

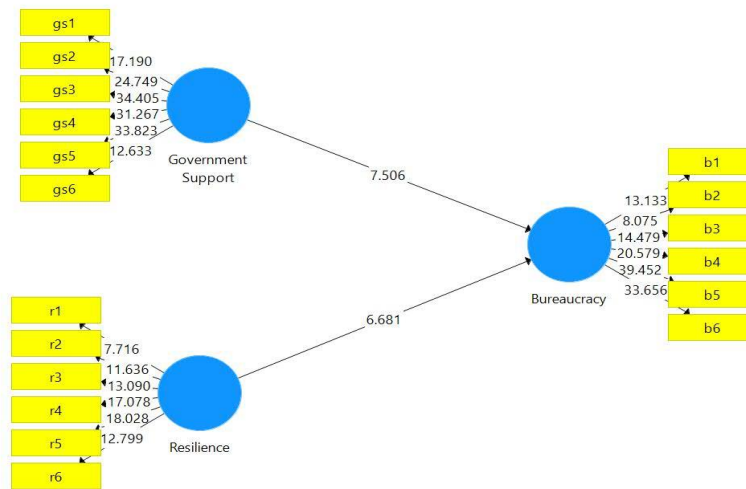
**Determination Coefficient Test (R-Square)**

The R2 value for Bureaucracy (Y) is 0.823, meaning that the percentage of government support (X1) and Toughness (X2) on Bureaucracy (Y) is 57%, while the remaining 43% is explained by other variables.

Indicator	R Square	R Square Adjusted
Bureaucracy	0.576	0.573



Path coefficient test



	Original Sample (O)	Sample Mean (M)	Standard Deviation (Stdev)	T Statistics ( O/Stdev )	P Values
Government Support - > Bureaucracy	0.411	0.422	0.058	7.038	0.000
Resilience -> Bureaucracy	0.427	0.426	0.069	6.182	0.000

The test results show that the beta coefficient value of government support for the bureaucracy is 0.422 and the t-statistic is 7,038. From this result, the t-statistic is significant. because  $>1.96$  with a pvalue  $<0.05$  so that government support is received. While the test results show that the beta coefficient value of toughness on bureaucracy is 0.426 and the t-statistic is 6,182. From this result, the t-statistic is significant. because  $>1.96$  with a p value  $<0.05$  so the bureaucracy is accepted.

Model Fit Test (Model Fit)

The SRMR value limit below 0.08 indicates a fit or good model, and if the SRMR value is more than 0.08 but still smaller than 0.12 it indicates the model is still acceptable (marginal fit), whereas if the SRMR value is greater than 0, 12 shows the model is not fit (lack of fit or poor fit). The results of the evaluation of the fit model with SRMR were 0.098, this value was greater than 0.08 but still within the limits of 0.12, so it can be concluded that this research model has a marginal fit level or is called marginal fit.

Government support and bureaucratic efficiency play a very important role in handling Covid-19 in Indonesia (Djalante et al. 2020), especially the Central Sulawesi region (Central Sulawesi). The most significant relationship can be seen from several things, including; Provision of Resources, The Central Sulawesi Government of Indonesia has a key role in providing the resources needed to deal with the pandemic, such as funds, medical facilities, test kits, personal protective equipment, medicines, and vaccines. An efficient bureaucracy can ensure timely and effective distribution and use of these resources (Rahardiansah, Wahid, and M. Asror 2022). In practice, the Government of Central Sulawesi has been responsible for developing policies and regulations that affect the handling of Covid-19, such as travel restrictions, quarantine regulations, health protocols, and other mitigation measures. An efficient bureaucracy can assist in the formulation, implementation and enforcement of these policies in a consistent and coherent manner (Telaumbanua 2020).

The process of effective communication and education between the Government of Central Sulawesi and the public to disseminate accurate information about Covid-19 is considered quite good, preventive measures, tests and vaccinations, as well as relevant policy changes. An efficient bureaucracy can support these communication and education efforts through mass media, online platforms, public campaigns and other approaches (Nasrullah and Rusdin 2021).

Weaknesses in the process of handling Covid-19 in Central Sulawesi are in the process of coordination and collaboration because it involves many government agencies, departments and institutions that must work together and coordinate. Bureaucratic hierarchies are considered to be inefficient (Suwarno and Rahayu 2021) in facilitating effective collaboration between various government entities, including ministries, health agencies, police services, and others, as well as facilitating collaboration with the private sector, international organizations, and civil society (Bryson, Crosby, and Stone 2006). Speed in responding to a pandemic is critical to limiting the spread of the virus and protecting society. Government support and bureaucratic efficiency can enable rapid decision-making, prompt implementation of policies, and effective coordination between various stakeholders (Tung 2021).

However, it should be noted that the success of handling Covid-19 does not solely depend on government support and bureaucratic efficiency. Active participation from the community, compliance with health protocols, support from medical personnel, scientific research, and global cooperation are also important factors in overcoming this pandemic.

Indicators of state support, ie. support of state or local authorities in responding to emergencies, good coordination between state and local authorities is essential in emergency response. This requires effective communication, information sharing and cooperation in decision-making and coordination of activities between state and local governments (Chen et al. 2008). Good coordination can ensure coordinated and effective emergency management actions (Grunwald and Bearman 2017).

National or local governments can provide clear lines of action and guidelines for emergency response. This includes emergency management practices, medical protocol guidelines and operational instructions for concerned parties (Perry and Lindell 2003). Consistent and coordinated policies and guidelines can facilitate emergency management efforts at the local level. Local government support can be in the form of allocating resources needed during a crisis, such as medical personnel, logistics, medical equipment and emergency funds (Palm and Ramsell 2007). The assistance of these resources can help increase emergency management capacity at the local level and speed emergency response.

The government has an important role in managing and coordinating activities related to the COVID-19 pandemic (Duckett 2022). This includes developing public policies that influence the response to COVID-19 and coordinating with the health services and other public sectors to ensure a coordinated and structured response. Governments play a key role in ensuring that the healthcare system can cope with the burden caused by the COVID-19 pandemic (Rathnayake, Clarke, and Jayasinghe 2021). Government involvement by providing personal protective equipment (PPE) and other medical equipment, building new health facilities and providing support to increase health system capacity (Newbrander, Waldman, and Shepherd-Banigan 2011). The government also plays an important role in providing accurate and reliable information about COVID-19.

The link between communication, regulation, and government coordination with the health system is important for managing the health of the COVID-19 pandemic. The government is expected to be able to regulate and coordinate the response to the COVID-19 pandemic. Issuing public policies affecting the response to COVID-19 and coordinating with the health services and other public sectors to ensure a coordinated and structured response

(Whitelaw et al. 2020). Patterns of coordination and cooperation with health workers, pharmaceutical companies, NGOs, and other public sectors to manage the COVID-19 control program effectively.

Central Sulawesi bureaucracy must make quick and appropriate decisions in a rapidly changing situation during the COVID-19 crisis. Effective and wise decisions are required when organizing pandemic management measures such as; social restrictions, regional quarantine, distribution of aid supplies and restrictions on social and economic activities (Chua et al. 2020). The bureaucracy must play an active role in formulating and implementing the necessary steps to stem the spread of the virus and protect the population (Dwirara Anggraini 2021).

Along with the bureaucratic revolution in Central Sulawesi by technological changes, demographic changes, and changing situations, bureaucracy has become a necessity for providing quality services in difficult times. Analysis of the robustness of the bureaucracy has significant value for the bureaucracy with a higher convergence score (Nasuhi, Saputra, and Mufidah 2022). From this it can be concluded that service quality requires innovation depending on the situation.

Innovation has extraordinary power in improving the quality of Covid-19 handling services (Jha 2020). The Central Sulawesi bureaucracy is still lacking in terms of strong leadership capable of coordinating all relevant units and agencies in dealing with COVID-19. Strong leadership fosters synergy and collaboration between entities and institutions, ensuring effective planning and decision-making to respond to pandemic challenges (Wilson 2020). Innovation in the use of new technologies, methods or approaches to service delivery can help increase the effectiveness and efficiency of pandemic management (Whitelaw et al. 2020). The resilience of the quality of bureaucratic services in dealing with COVID-19 refers to the bureaucracy's ability to face challenges and overcome obstacles that may arise in efforts to deal with the COVID-19 pandemic in order to provide the best possible service to the community.

The availability of personal protective equipment such as masks and protective clothing is very important to protect medical personnel who treat patients with COVID-19. When personal protective equipment is not available, the risk of infection increases and affects the recovery of patients with COVID-19 (Bartoszko et al. 2020). The lack of personal protective equipment during the emergency response period affected the number of new positive cases, because the lack of protection for health workers could lead to further spread of the virus. Several factors can influence the rate of recovery from the COVID-19 pandemic, such as level of patient care, access to personal protective equipment, and adherence to health practices (Baniamin, Rahman, and Hasan 2020). The higher the cure rate, the better the treatment and care for patients with COVID-19.

High recovery rates may also indicate the availability of adequate personal protective equipment and good public understanding of health practices (Visentin et al. 2009). The number of new positive cases during the COVID-19 pandemic is influenced by many factors, such as: adherence to health practices, government guidelines and the level of availability of personal protective equipment (Pradhan, Biswasroy, Naik, et al. 2020). When adequate personal protective equipment is available and health practices are properly followed, the chances of spreading the virus can be reduced and the number of new positive cases can be controlled (Bartoszko et al. 2020). However, in reality the availability of personal protective equipment is not sufficient for needs during a crisis coupled with health instructions not being followed properly by the public so that the virus can spread further and the number of new positive cases increases.

Availability of adequate personal protective equipment can help increase the cure rate and reduce the number of new positive cases (Griswold et al. 2021). Adhering to health

practices can also help reduce the number of new positive cases and ensure the protection of health workers through the availability of appropriate personal protective equipment. Community involvement in efforts to prevent COVID-19 can be an indicator of resilience against COVID-19 (Pradhan, Biswasroy, Kumar Naik, et al. 2020). The more people comply with health guidelines and social distancing, the better the precautions will be to contain the spread of the virus (Wirz et al. 2020). The main indicator of resilience against COVID-19 is the capacity of the health system.

This capacity includes the number of health workers, health facilities, and medical equipment needed to treat COVID-19 patients. Countries with strong health systems that can handle the burden of COVID-19 patients can show greater resilience in the face of the pandemic (Adams and Walls 2020). Community compliance in implementing health practices such as social distancing, wearing masks and washing hands regularly is also a key indicator of resilience in the face of COVID-19.

Countries or communities that are able to raise public awareness and encourage adherence to healthy practices can demonstrate greater resilience to pandemics (Pradhan, Biswasroy, Kumar Naik, et al. 2020). The level of community involvement is very important in handling a pandemic because the community is the unit that has the most potential to contract and spread the virus. High levels of participation, such as adherence to health practices and vaccinations, can help contain the spread of the virus (Kushwaha, A.S., Banerjee and Bandyopadhyay 2022). Actively engaged communities can also support health systems, for example by enforcing quarantine and isolation guidelines (Galiatsatos et al. 2020).

The capacity of the health system is very important in handling the COVID-19 pandemic because it affects the ability of the health system to treat COVID-19 patients. Adequate health system capacity, such as hospital capacity, medical equipment, and medical personnel can help improve the health system's ability to handle COVID-19 patients (Wu et al. 2022). This can affect the level of adherence to health practices which is very important in handling the COVID-19 pandemic because it can affect the speed of the spread of the virus. People following healthy practices such as social distancing, wearing masks and washing their hands regularly can help limit the spread of the virus (Harper et al. 2021). This can also help relieve the health system by reducing the number of COVID-19 patients admitted to hospital, so that these three factors are closely related in dealing with a pandemic like COVID-19.

High community participation can help improve the health system's ability to treat COVID-19 patients and stem the spread of the virus (Adams and Walls 2020). Adhering to public health practices can also help relieve the burden on the healthcare system and ensure that COVID-19 patients receive appropriate care (Kretchy, Asiedu-Danso, and Kretchy 2021). Adequate health system capacity can also influence the level of community involvement and adherence to health practices, as people feel more safe and secure in an adequate health system.

## Conclusions

This study aimed to analyze the level of preparedness shown by city governments in Central Sulawesi, Indonesia during the COVID-19 pandemic and its impact on community resilience. The findings suggest that government support and bureaucracy are crucial factors in determining community resilience during a pandemic. The study also proposed a preparedness model that can be adopted for similar disasters in the future. Overall, this study provides valuable insights into effective disaster management strategies in Central Sulawesi, Indonesia and contributes to the existing literature on government preparedness during a pandemic.

Use of indicator analysis to assess government support, resilience, and bureaucracy in Central Sulawesi's response to the COVID-19 pandemic. The analysis resulted in a final list of 17 indicators, categorized into six sets for each category. It is important to note that the proposed indicators are broad and subjective, aligning with Central Sulawesi's specific policies and measures implemented to combat COVID-19. The measurability of these indicators poses challenges, as data availability may vary. The study focuses on three indicators, considering the significant correlation between government support, resilience, and bureaucracy in Central Sulawesi. By examining these indicators, the study aims to provide valuable insights into the effectiveness of government support, the resilience of the community, and the functioning of the bureaucratic system in the face of the pandemic. However, it is essential to acknowledge the limitations of the study due to the subjective nature of the indicators and the availability of data. The findings from this study contribute to the understanding of the interplay between government support, resilience, and bureaucracy, guiding future strategies and policies for pandemic response and preparedness in Central Sulawesi.

The limitations of this study provide recommendations for future research to improve understanding of bureaucratic resilience. To overcome these limitations, it is suggested that future studies prioritize the development of more objective measures of bureaucratic resilience from time to time. In addition, a larger sample size is needed to thoroughly examine the quality level of each service within the bureaucracy. Future research can also narrow the focus on certain aspects of the bureaucracy, such as organizational structure, policies and regulations, organizational culture, employee behavior, or the interaction between the bureaucracy and society. By discussing these recommendations, future studies can further explore the intricacies of bureaucratic resilience and their impact on effective governance. This research effort will contribute to the advancement of knowledge in the field and assist in the development of strategies to strengthen bureaucratic resilience in facing future challenges.

## References

- Abdou, A. M. (2021). Good Governance and COVID-19: The Digital Bureaucracy to Response the Pandemic (Singapore as a Model). *Journal of Public Affairs*, 21(4), 1–10.
- Adams, J. G., & Walls, R. M. (2020). Supporting the Health Care Workforce during the COVID-19 Global Epidemic. *JAMA - Journal of the American Medical Association*, 323(15), 1439–1440.
- Adillah Ismail, N. A., et al. (2019). The Mediating Effects of Cost Estimates Reliability on BIM Adoption: SEM Model Analysis. *IOP Conference Series: Earth and Environmental Science*, 385(1).
- Ajayi, O. S. (2017). The Importance of Primary Data in Research. *International Journal of Academic Research in Business and Social Sciences*, 7(6), 156–163.
- Al-Hamid, R. (2021). Bureaucracy Culture Change of Administrative Services on COVID-19 Pandemic Era. *International Journal of Social Sciences and Humanities*, 5(3), 192–202.
- Allain-Dupré, D., Chatry, I., Michalun, V., & Moisisio, A. (2020). The Territorial Impact of COVID-19: Managing the Crisis across Levels of Government. *OECD Policy Responses to Coronavirus (COVID-19)*, 10, 1620846020–535.
- Arfan, S., Mayarni, M., & Nasution, M. S. (2021a). Responsivity of Public Services in Indonesia during the Covid-19 Pandemic. *Budapest International Research and Critics Institute (BIRCI-Journal): Humanities and Social Sciences*, 4(1), 552–562.
- Arora, N. K., et al. (2000). Quantitative vs Qualitative Research Methods. *Indian Journal of Pediatrics*, 67(5), 369–377.
- Aspan, H. (2021). Legal Basis for the Implementation of Work from Home amid the COVID-19 Pandemic in Indonesia. *Saudi J. Humanit. Soc. Sci*, 6(4), 116–121.

- Asri, B. (2020). Implementasi Kebijakan Pelayanan Publik Berbasis Aplikasi Pada Era Covid-19 Di Kota Cimahi Provinsi Jawa Barat. *VISIONER: Jurnal Pemerintahan Daerah di Indonesia*, 12(4), 695–712.
- Baniamin, H. M., Rahman, M., & Hasan, M. T. (2020). The COVID-19 Pandemic: Why Are Some Countries Coping More Successfully than Others? *Asia Pacific Journal of Public Administration*, 42(3), 153–169. doi:10.1080/23276665.2020.1784769.
- Bartoszko, J. J., Farooqi, M. A. M., Alhazzani, W., & Loeb, M. (2020). Medical Masks vs N95 Respirators for Preventing COVID-19 in Healthcare Workers: A Systematic Review and Meta-Analysis of Randomized Trials. *Influenza and other Respiratory Viruses*, 14(4), 365–373.
- Baurley, J. W., Conti, D. V., Gauderman, W. J., & Thomas, D. C. (2010). Discovery of Complex Pathways from Observational Data. *Statistics in Medicine*, 29(19), 1998–2011.
- De Beer, P. T., & Keune, M. (2022). COVID-19: A Prelude to a Reevaluation of the Public Sector? *Transfer*, 28(1), 135–140.
- Bowe, G. A. (2009). Document Analysis as a Qualitative Research Method. *Qualitative Research Journal*, 9(2), 27–40. doi:10.3316/qrj0902027.
- Braun, V., & Clarke, V. (2006). Qualitative Research in Psychology Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Bryson, J. M., Crosby, B. C., & Stone, M. M. (2006). The Design and Implementation of Cross-Sector Collaborations: Propositions from the Literature. *Public Administration Review*, 66(SUPPL. 1), 44–55.
- Centorrino, G. (2020). Covid-19 and the Search for the Common Good: The Case of Parmon Spa (Italy). *Sustainability*, 12(16).
- Chaniago, W. F. (2021). Work Culture of the Government of Teluk Ambon District in Providing Administrative Services to the Community in the Era of COVID-19. *International Research Journal of Management, IT, and Social Sciences*, 8(6), 661–668.
- Chen, R., Sharman, R., Rao, H. R., & Upadhyaya, S. J. (2008). Coordination in Emergency Response Management. *Communications of the ACM*, 51(5), 66–73.
- Chua, A. Q., et al. (2020). Health System Resilience in Managing the COVID-19 Pandemic: Lessons from Singapore. *BMJ Global Health*, 5(9), e003317.
- Cohen, O., Goldberg, A., Lahad, M., & Aharonson-Daniel, L. (2017). Building Resilience: The Relationship between Information Provided by Municipal Authorities during Emergency Situations and Community Resilience. *Technological Forecasting and Social Change*, 121, 119–125. <http://dx.doi.org/10.1016/j.techfore.2016.11.008>.
- Cooper, C. J., et al. (2006). Web-Based Data Collection: Detailed Methods of a Questionnaire and Data Gathering Tool. *Epidemiologic Perspectives and Innovations*, 3, 1–11.
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (3rd Ed.). Sage.
- Creswell, J. W., & Creswell, J. D. (2017). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage publications.
- Decrop, A. (2004). BIBLIOGRAPHIE: Qualitative Research Practice: A Guide for Social Science Students and Researchers. *Recherche et Applications en Marketing (French Edition)*, 19(2), 2–3.
- Djalante, R., et al. (2020). Review and Analysis of Current Responses to COVID-19 in Indonesia: Period of January to March 2020. *Progress in Disaster Science*, 6.
- Dorni, H., Larasati, E., Afrizal, T., & Astuti, R. S. (2020). Marriage Services at The Office of Religious In The Pandemic Era Of Covid-19. *Jurnal Ilmiah Ilmu Administrasi Publik*, 10(2), 307.
- Duckett, S. (2022). Public Health Management of the COVID-19 Pandemic in Australia: The Role of the Morrison Government. *International Journal of Environmental Research and Public Health*, 19(16).

- Dunlop, C. A., Ongaro, E., & Baker, K. (2020). Researching COVID-19: A Research Agenda for Public Policy and Administration Scholars. *Public Policy and Administration*, 35(4), 365–383.
- Dwirara Anggraini, T. (2021). Implementation of Government Policies to Handling The Covid-19 Pandemic in Indonesia. *Muhammadiyah International Public Health and Medicine Proceeding*, 1(1), 73–78.
- Firdaus, I. T., Tursina, M. D., & Roziqin, A. (2021). Transformasi Birokrasi Digital Di Masa Pandemi Covid-19 Untuk Mewujudkan Digitalisasi Pemerintahan Indonesia. *Kybernan: Jurnal Studi Kepemerintahan*, 4(2), 226–239.
- Galiatsatos, P., et al. (2020). Community Calls: Lessons and Insights Gained from a Medical–Religious Community Engagement During the COVID-19 Pandemic. *Journal of Religion and Health*, 59(5), 2256–2262. <https://doi.org/10.1007/s10943-020-01057-w>.
- Gofen, A., & Lotta, G. (2021). Street-Level Bureaucrats at the Forefront of Pandemic Response: A Comparative Perspective. *Journal of Comparative Policy Analysis: Research and Practice*, 23(1), 3–15. <https://doi.org/10.1080/13876988.2020.1861421>.
- Griswold, D. P., et al. (2021). Personal Protective Equipment for Reducing the Risk of COVID-19 Infection among Health Care Workers Involved in Emergency Trauma Surgery during the Pandemic: An Umbrella Review. *The Journal of Trauma and Acute Care Surgery*, 90(e72-e80).
- Grunwald, J. A., & Bearman, C. (2017). Identifying and Resolving Coordinated Decision Making Breakdowns in Emergency Management. *International Journal of Emergency Management*, 13(1), 68–86.
- Harper, C. A., et al. (2021). Functional Fear Predicts Public Health Compliance in the COVID-19 Pandemic. *International Journal of Mental Health and Addiction*, 19(5), 1875–1888.
- Hartoko, S. (2020). Condition of the Bureaucracy Public Services Before and During Covid -19 at The Districts Pujon Malang. *International Journal of Innovative Science and Research Technology*, 5(11), 140.
- Herman, S. R. W. (2022). Covid-19 Dan Adaptasi Layanan Publik Di Indonesia: Sebuah Studi Awal Tentang Layanan Publik Berbasis Virtual. *Vox Populi*, 5(1), 1–14.
- Herman, S. R. W., Lestari, Y. S., & Sunardi. (2022). Budaya Kerja Baru Selama Pandemi Yang Problematis Di Pedesaan Sigi. *Jurnal Administrasi Publik*, 18(2), 155–171.
- Hinson, J., LaPrairie, K., & Heroman, D. (2006). A Failed Effort to Overcome Tech Barriers in a K-12 Setting: What Went Wrong and Why. *International Journal of Technology in Teaching and Learning*, 2(2), 148–158.
- Hsu, M. (2010). Structural Equation Modeling with IBM SPSS Amos. A Methodology for Predicting Behavioral Intentions in the Services Sector. *IBM Software Business Analyst*.
- Ifdil, I., et al. (2020). Online Mental Health Services in Indonesia during the COVID-19 Outbreak. *Asian Journal of Psychiatry*, 51, 102153.
- Jha, P. (2020). Innovations: Not the Magic Wand for COVID-19. *BMJ Innovations*, 6(3), 83–84.
- Kasim, A., et al. (2021). Responsive Law Ideas in Protecting the Rights and Interests of Creative Street Vendors Post Covid-19 Pandemic. *International Journal of Business, Economics and Law*, 24(3), 16–22.
- Kossasy, S. O., et al. (2021). Public Services in Covid-19 Pandemic. In *The First International Conference on Government Education Management and Tourism (ICoGEMT)*, 495–499.
- Kretchy, I. A., Asiedu-Danso, M., & Kretchy, J. P. (2021). Medication Management and Adherence during the COVID-19 Pandemic: Perspectives and Experiences from Low-and Middle-Income Countries. *Research in Social and Administrative Pharmacy*, 17(1), 2023–2026. <https://doi.org/10.1016/j.sapharm.2020.04.007>.
- Kushwaha, A. S., Banerjee, S., & Bandyopadhyay, K. (2022). Community Involvement in Controlling COVID-19 Pandemic in Maharashtra, India: Best Practices and Missed Opportunities. *Medical Journal of Dr. D.Y. Patil Vidyapeeth*, 15, 309–312.

- Lamidi, L. (2022). Analysis of Employee Performance at the Regional Secretariat of the Riau Islands Province During the Covid-19 Pandemic. *KEMUDI: Jurnal Ilmu Pemerintahan*, 7(1), 77–84.
- Lebel, L., et al. (2006). Governance and the Capacity to Manage Resilience in Regional Social-Ecological Systems. *Ecology and Society*, 11(1).
- Maccallum, R. C., & Austin, J. T. (2000). Applications of Structural Equation Modeling in Psychological Research. *Annual Review of Psychology*, 51, 201–226.
- Merta, I. N., et al. (2022). Sewaka Dharma Spirit of Effective Public Service Bureaucratic Culture during the Covid-19 Pandemic. *International Journal of Social Science and Business*, 6(3), 432–437.
- Morse, J. M., et al. (2002). Verification Strategies for Establishing Reliability and Validity in Qualitative Research. *International Journal of Qualitative Methods*, 1(2), 13–22.
- Muhyiddin, M., & Nugroho, H. (2021). A Year of Covid-19: A Long Road to Recovery and Acceleration of Indonesia's Development. *Jurnal Perencanaan Pembangunan: The Indonesian Journal of Development Planning*, 5(1), 1–19.
- Nasrullah, N., & Rusdin, R. (2021). Government Strategies In The Covid-19 Vaccination Program (A Study On The Health Policy Model For Covid-19 Vaccination In Palu). *Political Science*.
- Nasuhi, M., Didin Hadi Saputra, & Mufidah, M. (2022). SWOT Analysis in a Healthy Bureaucracy for Advanced Indonesia. *PINISI Discretion Review*, 5(2), 463.
- Newbrander, W., Waldman, R., & Shepherd-Banigan, M. (2011). Rebuilding and Strengthening Health Systems and Providing Basic Health Services in Fragile States. *Disasters*, 35(4), 639–660.
- Nugraha, M. S., et al. (2021). The Identification of Online Strategy Learning Results While Students Learn from Home During the Disruption of the COVID-19 Pandemic in Indonesia. *Journal of Contemporary Issues in Business and Government*, 27(2), 1950–1956.
- Omta, S. W. F. (1995). Methods of Data Collection and Data Analysis. In *Critical Success Factors in Biomedical Research and Pharmaceutical Innovation*. Dordrecht: Springer.
- Onjewu, A. K. E., et al. (2022). The Effect of Government Support on Bureaucracy, COVID-19 Resilience and Export Intensity: Evidence from North Africa. *Journal of Business Research*, 156(November 2022), 113468.
- Palm, J., & Ramsell, E. (2007). Developing Local Emergency Management by Co-Ordination Between Municipalities in Policy Networks: Experiences from Sweden. *Journal of Contingencies and Crisis Management*, 15(4).
- Perry, R. W., & Lindell, M. K. (2003). Preparedness for Emergency Response: Guidelines for the Emergency Planning Process. *Disasters*, 27(4), 336–350.
- Pfaff, S., et al. (2021). Do Street-Level Bureaucrats Discriminate Based on Religion? A Large-Scale Correspondence Experiment among American Public School Principals. *Public Administration Review*, 81(2), 244–259.
- Podungge, A. W., & Solihin, D. I. Y. (2020). Posisi Tawar Pelanggan Terhadap Akurasi Pelayanan Publik Untuk Mewujudkan SDG Di Era Pandemic COVID-19 Pada Samsat Kota Gorontalo. *Public Administration Journal of Research*, 2(4).
- Polkinghorne, D. E. (2005). Language and Meaning: Data Collection in Qualitative Research. *Journal of Counseling Psychology*, 52(2), 137–145.
- Pradhan, D., et al. (2020). A Review of Current Interventions for COVID-19 Prevention. *Archives of Medical Research*, 51(January), 363–374.
- Pradhan, D., et al. (2020). A Review of Current Interventions for COVID-19 Prevention. *Archives of Medical Research*, 51(5), 363–374. <https://doi.org/10.1016/j.arcmed.2020.04.020>.
- Putra, P., et al. (2020). The Students Learning from Home Experience during Covid-19 School Closures Policy in Indonesia. 5(2), 30–42.



- Rafi, M., et al. (2022). Transformation of Public Services through Digital Services in the Covid-19 Era: Efforts Towards Good Governance in Indonesia. In *International Conference on Public Organization (ICONPO 2021)*, 168–176.
- Rafsanjani, J. I., & Handayani, S. N. (2021). The Adaptation of Public Service During the Covid-19 Pandemic. In *2nd International Conference on Law and Human Rights 2021 (ICLHR 2021)*, 360–365.
- Rahman, A., Syamsidar, & Royfandi, M. (2023). Dynamics of Public Service Implementation Before, During and Post Pandemic Covid-19 in Palu City. *Technium Social Sciences Journal*, 40, 23–30.
- Ramadhan, R. F., & Tamaya, V. (2021). Standar Pelayanan Publik Di Masa Pandemi Covid-19: Studi Pelayanan Perpustakaan ITERA. *Jurnal Studi Ilmu Sosial Dan Politik*, 1(1), 57–66.
- Rathnayake, D., Clarke, M., & Jayasinghe, V. I. (2021). Health System Performance and Health System Preparedness for the Post-Pandemic Impact of COVID-19: A Review. *International Journal of Healthcare Management*, 14(1), 250–254. <https://doi.org/10.1080/20479700.2020.1836732>.
- Rios, V., & Gianmoena, L. (2020). The Link between Quality of Government and Regional Resilience in Europe. *Journal of Policy Modeling*, 42(5), 1064–1084.
- Rohman, A., & Larasati, D. C. (2020). Standar Pelayanan Publik Di Era Transisi New Normal
- Rohmat, A., & Evi Elisanti. (2021). Analysis of Public Services to Bureaucracy Changes in the Covid-19 Pandemic Era. *Spirit Publik: Jurnal Administrasi Publik*, 16(2), 161–172.
- Rorong, M. (2020). Evaluasi Kinerja Pelayanan Publik Pada Masa Pandemi Covid 19 Di Kecamatan Ratahan Kabupaten Minahasa Tenggara. *Jurnal Politico*, 9(1).
- Shangguan, Z., Wang, M. Y., & Sun, W. (2020). What Caused the Outbreak of COVID-19 in China: From the Perspective of Crisis Management. *International Journal of Environmental Research and Public Health*, 17(9), 3279.
- Situmeang, A., & Tan, W. (2021). Fulfillment of Human Rights in Public Services During the Covid-19 Pandemic in Indonesia. In *1st International Conference on Law and Human Rights 2020 (ICLHR 2020)*, 70–77.
- Stein, C. M., Morris, N. J., & Nock, N. L. (2012). Structural Equation Modeling Catherine. *Statistical Human Genetics*, 850, 411–421. <http://www.springerlink.com/index/10.1007/978-1-61779-555-8>.
- Sutrisna, I. W. (2021). Penyelenggaraan Pelayanan Publik Yang Inovatif Di Masa Pandemi Covid-19. *Jurnal Ilmiah Cakrawarti*, 4(2), 21–29.
- Suwarno, Y., & Rahayu, N. S. (2021). Ls Policy Integration Real in Policy Practice? Critical Review on How Government of Indonesia Respond to Covid-19 Pandemic. *IOP Conference Series: Earth and Environmental Science*, 717(1).
- Taufik, & Hardi Warsono. (2020). Birokrasi Baru Untuk New Normal: Tinjauan Model Perubahan Birokrasi Dalam Pelayanan Publik Di Era Covid-19. *Dialogue: Jurnal Ilmu Administrasi Publik*, 2(1), 1–18. <https://ejournal2.undip.ac.id/index.php/dialogue/article/view/8182>.
- Telaumbanua, D. (2020). Urgensi Pembentukan Aturan Terkait Pencegahan Covid-19 Di Indonesia. *QALAMUNA: Jurnal Pendidikan, Sosial, dan Agama*, 12(01), 59–70.
- Tung, L. T. (2021). Success in Combating a Pandemic: Role of Fast Policy Responses. *World Development Perspectives*, 21(November 2020), 100285. <https://doi.org/10.1016/j.wdp.2020.100285>.
- Visentin, L. M., Bondy, S. J., Schwartz, B., & Morrison, L. J. (2009). Use of Personal Protective Equipment during Infectious Disease Outbreak and Nonoutbreak Conditions: A Survey of Emergency Medical Technicians. *Canadian Journal of Emergency Medicine*, 11(1), 44–56.
- Wahid, S. D. M., Amin, S. H. M., Ali, A. J. M., & Abdullah, A. (2021). Formation of Citizen-Centric Public Service Satisfaction Model during Pandemic Crisis in Malaysia: An Ideology. *AIP Conference Proceedings*, 2347(Icamet), 2016–2020.

- Whitelaw, S., Mamas, A. M., Topol, E., & Van Spall, H. G. C. (2020). Applications of Digital Technology in COVID-19 Pandemic Planning and Response. *The Lancet Digital Health*, 2(8), e435–440. [http://dx.doi.org/10.1016/S2589-7500\(20\)30142-4](http://dx.doi.org/10.1016/S2589-7500(20)30142-4).
- Wilson, S. (2020). Pandemic Leadership: Lessons from New Zealand's Approach to COVID-19. *Leadership*, 16(3), 279–293.
- Wirz, C. D., et al. (2020). Self-Reported Compliance and Attitudes about Social Distancing during the COVID-19 Outbreak. *Sociology*, 1–6.
- Wu, H., et al. (2022). Hospital Capacities and Shortages of Healthcare Resources among US Hospitals during the Coronavirus Disease 2019 (COVID-19) Pandemic, National Healthcare Safety Network (NHSN), March 27-July 14, 2020. *Infection Control and Hospital Epidemiology*, 43(10), 1473–1476.
- Yuniati, T. (2022). The Effect of Public Satisfaction in Public Services with Variables Mediated By Perceptions of Uu No.33 and 34 of 1964 (Case Research at Pt.Jasa Raharja as the Represent of Surabaya). *Journal of Economics, Finance And Management Studies*, 05(07), 1844–1856.