

THE ONE MILLION TUMBLER MOVEMENT: STATE CIVIL SERVANTS' PERCEPTION ON TUMBLER USE AND PLASTIC WASTE REDUCTION

*(Gerakan Satu Juta Tumbler: Persepsi Aparatur Sipil Negara Terhadap Penggunaan
Tumbler dan Pengurangan Sampah Plastik)*

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ABSTRACT

One of the Indonesian government's steps to overcome the plastic waste problem is by initiating The One Million Tumbler Movement campaign. Civil Servants as government agents must have good knowledge and apply this policy in their lives and their environment. This is a case study approach through in-depth interviews, field observation, and literature study. The informant of this study was The Center for Standardization of Disaster and Climate Change Instruments (PUSAT-SIKBPI) civil servants with structural and functional career backgrounds. The result showed that the civil servants have knowledge about plastic waste reduction and have a supportive perception of tumbler use. The Center for Standardization of Disaster and Climate Change Instruments' management supports the tumbler's use as a new habit related to The One Million Tumbler Movement campaign. The family values on environment characterize the tumbler and plastic bag uses in general. However, although civil servants' environmental awareness has formed, the Covid-19 pandemic has made plastic consumption unavoidable. Support from the environment (The management and the family environment) is essential to help civil servants continue habitual implementation of tumbler use and the plastic awareness movement in general.

Keywords: The plastic waste, civil servant, environment communication, the one million tumbler movement.

ABSTRAK

Salah satu langkah pemerintah Indonesia untuk mengatasi masalah sampah plastik adalah melalui kampanye Gerakan Sejuta Tumbler. Pegawai Negeri Sipil (PNS) sebagai agen pemerintah harus memiliki pengetahuan yang baik serta mendukung penerapannya. Hasil penelitian menunjukkan bahwa PNS memiliki pengetahuan tentang pengurangan sampah plastik dan memiliki persepsi yang mendukung penggunaan tumbler. Manajemen PUSAT-SIKBPI mendukung penggunaan tumbler sebagai kebiasaan baru terkait kampanye Gerakan Sejuta Tumbler. Nilai keluarga terhadap lingkungan mengkarakterisasikan penggunaan tumbler dan kantong plastik. Namun, meski kesadaran lingkungan PNS sudah terbentuk, pandemi Covid-19 membuat konsumsi plastik tak terhindarkan. Dukungan dari manajemen dan lingkungan keluarga sangat penting untuk melestarikan penerapan kebiasaan baik ini.

Kata kunci: Sampah plastik, PNS (Pegawai Negeri sipil), Komunikasi lingkungan, gerakan satu juta tumbler.

I. INTRODUCTION

A study from the University of Leeds led by Dr. Velis predicted that as much as 1.3 billion tons of plastic waste will pollute the world's land and oceans by 2040 (Gill, 2020). Meanwhile, in Indonesia, the Minister of Environment and Forestry said that the waste dump in Indonesia is estimated at 67.8 million tons in 2020 and is likely to continue to grow (Azzahra, 2020).

This plastic waste is hazardous for humans and other living things. Plastic waste that ends up in the sea can accidentally be eaten or harm marine animals, so it is not surprising if there is plastic content found in the fish stomach (Mc. Inturf & Savoca, 2019).

Handling plastic waste is also a problem. Plastic as a non-natural material takes a very long time to decompose, even hundreds of years. If it is left unchecked since its nature is difficult to decompose, it can compress waterways which can cause flooding. If it was burned, plastic waste can release harmful substances into the air that brought damage if inhaled by humans (Kumar *et al.*, 2021). Therefore, the government realizes that plastic use control is something that must be done.

The government has imposed a reduction in the use of plastic to protect the environment through Law Nu. 32 of 2009 concerning environmental protection and environmental management and Law Nu. 18 of 2008 concerning waste management. Then, it was passed down to a regional mayor's regulation on reducing the use of plastic bags. But of course, the regulations need to be supported by public awareness to support the policy.

To control the problem, the government also realizes that awareness is needed from the community to reduce and manage daily waste wisely through their participation. Community participation can be interpreted as community involvement in determining direction, and strategy in implementing activities and emphasizing the results and benefits of activities equally (Nugraha *et al.*, 2018)

Therefore, the community habituation movement's efforts are outlined through The Clean Indonesia National Movement (CINM), launched in 2019. It is hoped that it will become the culture of Indonesian society in the future in line with the mental revolution program by The President. This movement, which is part of the National Mental Revolution Program, is coordinated by the Coordinating Ministry for Maritime Affairs. According to The Coordinating Ministry of Maritime Affairs, this movement was declared a national movement and involved almost all ministries in an integrated manner because the President had conveyed this (waste problem) as an acute problem (Gatra.com, 2019)

The CINM, among others, focuses on improving the behavior of a clean and healthy living environment for families, education units, workplaces, and communities. Then synergy improves by providing the facilities and infrastructure that support a clean and healthy lifestyle (Winata, 2019). In connection with the CINM, The One Million Tumbler Movement, which was initiated by the Ministry of Communication and Information, The Ministry of Environment and Forestry, and The Coordinating Ministry of Maritime Affairs, was launched in 2019 to increase public awareness of tumbler use (Indonesiabaik. id, 2020).

As part of the government's work unit, The Agency for Standardization of Environment and Forestry Instrument (BSILHK), PUSAT-SIKBPI should make this movement a success. Therefore, PUSAT-SIKBPI commits to participate in this program by socializing the tumbler use through circular letters and distributing free tumblers to PUSAT-SIKBPI employees and in seminars/exposures. However, not much research has been done about this, especially in the government agency. Meanwhile, making a policy program effective requires a series of formulations, including the knowledge and perceptions of individuals related to the implemented policy.

So, this study aims to describe the environmental knowledge and perception of Civil servants regarding their knowledge of plastic waste and the one million tumbler movement.

II. RESEARCH METHODS

This study was conducted at PUSAT-SIKBPI, located in Jalan Gunung Batu No. 5 Bogor. The study was conducted in February 2021. This study uses a qualitative approach with Interpretative Phenomenological Analysis (IPA) because it aims to obtain opinions and knowledge from participants based on their experiences. The participants were four (4) people taken from PUSAT-SIKBPI employees who are civil servants with structural and functional backgrounds. The sample size is considered adequate as the IPA protocol allows for smaller sample sizes (Smith *et al.*, 2009).

An in-depth interview was conducted with each participant to obtain information and we replaced all names of participants with a number (ex: Participant Nu.1-4) to protect the participant’s privacy. Observations were also made to support primary data.

Secondary data was obtained through reviews of related documents. Using Miles and Huberman’s qualitative data analysis, we reduced data from in-depth interviews and documents related to, serves, and conclude.

III. HASIL DAN PEMBAHASAN

A. Result

The informant's environmental knowledge of plastic waste and The One Million Tumbler Movement

Based on in-depth interview results, it is known that some of the informants already know about The Plastic Wisdom Movement, but some do not. Informant number one stated that she heard it from the women's organization for civil servant employees, namely Dharma Wanita. But even though she is not familiar with this movement as when we are asked what she has done related to plastic wisdom reduction, she is explained that she has carried a lunch box and tumbler with her for a long time. She also stated her attitude toward a green office environment by implementing an eco-office program which is mandatory from the headquarters office

Table 1. List of Informant’s answers related to the environmental knowledge towards The One Million Tumbler Movement

Informant knowledge of The One Million Tumbler Movement	Informant
“I heard because there was an invitation from Dharma Wanita. There is none from our agency. But Dharma Wanita had this activity and I was invited...”	1
“...as daily activities, we have waste management implemented in this office, such as collecting waste based on its types, distributing tumblers for employees so they can use it many times in-office meetings or their daily outdoor activities, and we also use both side paper to reduce office waste..., I also implemented a plastic waste reduction in my family such as the tumbler use, carrying lunch box whenever I am not fasting, since long time ago...”	
“Recently (don't know)”	2
“Yes, there used to be rules stated from The Ministry of Environment and Forestry that were not allowed to use plastic bags, right... but I didn't know that it was a plastic wisdom movement”	
“Yes, I have already known about it.”	3
“Now, the problem of plastic waste is that we have targets to reduce plastic waste. I know it long before when I was the head of the public relations bureau, it was in February when we commemorate waste care day, and then there were some events related to waste care. Of course, We, together with the Coordinating Minister of Maritime Affairs, echoed how to make waste management better.”	

Table 1. Continued

Informant knowledge of The One Million Tumbler Movement	Informant
<p>“Not yet. but I have heard about the eco office movement which is the official program (Ministry of Environment and Forestry) with an environmental approach. For example, creating a green environment with vegetation in the office environment, there is a garbage issue concern in it too, and yes... it means having environmental-friendly infrastructure buildings, for example implementing <i>biopori</i> technology and so on. Also, this program includes a restriction on smoking in unallowed places because it may cause air pollution. This program is also related to smart energy use such as electricity, air conditioning, etc. When it is not in use it better be turned off. I guess that's what I caught in the eco office program.”</p>	4

Source: Primary Data 2021 (processed)

(Ministry of Environment and Forestry). Still, besides that, she also said that she is not objected to implementing this policy at the office or home because she is supporting this action.

Informant number two understood the concept of reducing plastic waste but was unaware of the movement’s name. Informant number three stated that he had known about this movement, and he related this movement to his previous job responsibility as the head of the public relations bureau. His job responsibility demands he coordinates, promote, and inform all activities and policies of the government. Related to this movement, he said he used to carry tumblers and reusable shopping bags in his outdoor activities to reduce plastic waste. He added that childhood experiences and the surrounding environment formed his Environmental awareness. Similar to informant number two, informant number four stated that he did not know the movement. Nevertheless, he can explain the eco office program as one of the environmental programs in office activities.

To deepen the research, we interviewed an informant with a financial budgeting authority. He states that there is no specific budget related to the activities of the Plastic Wisdom Movement, so the actions taken by the office regarding the socialization of tumbler use are through other activity funds, such as seminar activities for purchasing merchandise/goody bags projected in tumblers.

Based on data in Table 2, it is also known that all the informants correctly understand the purpose of limiting plastic use. The informants agreed that plastic waste needs to be reduced because they all understand the difficulties in recycling plastic waste. Some informants can analyze plastic use problems and develop some alternative solutions.

The Informant's perception of tumblers' use in daily activities

Based on the interview, it can be said that all the informants have a positive perception of tumbler use in daily activities.

According to informant number one, she has formed an action in using environmental-friendly products in the office and at home and did not find any obstacles in using tumblers because she has been accustomed to them long before. She also said that she is choosing to leave packaging over plastic packaging in snacks and serving buffets for office meetings instead of serving rice boxes like before.

However, these actions apparently cannot be continued due to the covid pandemic where people need high sanitation, so the snacks or foods must be served individually and wrapped well.

Based on the field observation, the office’s management routinely provided drinking water using refill gallons and located at several places on each floor so that the employee easily refills their tumbler. The management also uses non-plastic wrap food to serve

snacks and lunch in-office meetings, but this habit was stopped during the pandemic.

Similar to informant number one, informant number two also stated that he agrees with

the tumbler’s use in his daily activities. He finds benefits in using it aside from reducing plastic waste. The tumbler is also able to keep the coffee temperatures hot. Furthermore, he

Table 2. List of Informant’s answers related to Environmental knowledge towards plastic use’s limitation

Informant’s Environmental knowledge of Plastic Use’s Limitation	Informant
“...because it is difficult to recycle”.	1
“Yes, that's because it's hard to destroy, if you can recycle it, it's hard to decompose”.	2
“At that time there was a paid plastic campaign, but it was only a 3-month trial, and the results were good and showing results. People who shop with plastic have to pay. Then some want to pay, but the problem is related to the plastic bag manufacturing industry. Because the authority to make plastic bags lies with the Ministry of Industry, then the one who sells them is at the Ministry of Trade, and the management of buying plastic bags does not yet exist. First, there is still no BPD LH. Now it's there, maybe it can be accommodated there, but we were still asked at that time when plastic was paid for, maybe not paid plastic but not free plastic. It's just that how to handle it in the environment has not been considered. Now the burden is on the environment. If you use single-use plastic that cannot be recycled or used heavily. The waste that we produce per person is 0.7 kg including those containing plastic elements”.	3
“It is everyone's responsibility, including the community. Understanding of the use of plastic is still lacking, although several provinces and cities have implemented it, such as in Bogor, retail is no longer using it...but in traditional markets, it is still... these are some obstacles. If one person goes to the market, how many plastic bags have been produced and brought home?”	4
“...Yes, just manage it, don't discriminate against plastic. Why are plastic bags discriminated against?? While another plastic packaging is not being discriminated against? if this plan of action implemented on a large scale, it is should be applied to all packaging, including the magazine’s cover wrapping and books packaging, it must be expanded, not just only for shopping bags. Or if it is necessary, the policy can be turned like only the use of shopping bags is allowed, but the packaging bag is prohibited. Over time, the behavior will change, if the policy management is improved gradually”.	
“...Implementing this radical change does take time. Changing the behavior of producers instead of the behavior of consumers. So, if the government only limits consumer behavior by prohibiting the use of plastic, then providing economic instruments with more expensive plastic prices, etc., is not enough, it should be accompanied by the producer approach. Like if producers continue to use plastic, they will be charged with more expensive tax instruments or something like that, so it's balanced..., the producers change the packaging, and the consumers also change their behavior. If one-sided then it will be like cigarettes case, the consumers still buy the product”.	

Source: Primary Data 2021 (processed)

Table 3. List of Informant’s answers related to perception towards tumbler’s use in daily activities

Informant’s Perception of Tumbler’s Use in daily activities	Informant
“Agree because tumblers can be reused and to adapt to new habits of reducing plastic waste...”	1
“...agreed it can be used again and make coffee so it's warm.”	2
“...I carry it everywhere; it was always on my backpack....”	3
"Since the tumbler was distributed by the office, I have used (the tumbler), but it often has problems in implementation..."	4

Source: Primary Data 2021 (processed)

said that he always carries a tumbler in his car, especially during this covid time; his wife always reminds him to bring a tumbler with him. The obstacle in using a tumbler is that while doing family time, he sometimes forgets to carry it, so he must buy a one-time-use plastic drink.

Informant number three has already formed an action because he always has a tumbler and a reusable shopping bag everywhere. He found no obstacle in using a tumbler. He said that it was already a family habit a long time ago. He also explains that his children influenced these good habits by using the environment-friendly product as his children have experienced living abroad.

While informant number four also formed an action based on his perception of tumbler's use. He uses the tumbler in daily activities, both in-office and family activities. However, he found the obstacle in implementing this as a new habit because sometimes he forgets to bring it. His wife considered using the tumbler unpractical because she had to wash it to reuse it. Nevertheless, he commits to using it due to the benefit of using tumblers which reduce plastic waste, keeping the temperature hot much longer compared to the one-time-use plastic drink, and the need for individual accommodation due to pandemic conditions.

B. Discussion

The informant's environmental knowledge of plastic waste and The One Million Tumbler Movement

Some factors that form people's knowledge are study and experience. The studying and experiencing form material processed by people to perceive something. Lee describes Environmental knowledge as a person's perception of the extent to which they know about environmental problems (Lee, 2017).

In this research, we explore the informant's environmental knowledge primarily related to The One Million Tumbler Movement and the impact of plastic waste. Based on in-depth interview results, it is known that

some of the informants already know about The Plastic Wisdom Movement, but some do not. Mikalauskiene & Atkociuniene, (2019) believed that knowledge is made from organizational relationships or networks. Informant number one stated that she heard it from the women's organization for civil servant employees, namely Dharma Wanita. However, even though she is unfamiliar with this movement, what she has shown in her daily activities supports the movement to reduce plastic waste. Kim *et al.* (2018) discovered that people with greater emotional empathy for nature are more likely to participate in pro-environmental behavior.

From Informant number three, we learn that his childhood experience and positive supporting family & environmental knowledge that he has, have formed his pro-environmental behavior. Some conditions support the action toward pro-environmental behavior engagement, like situational conditions (10), current behavioral patterns (Geiger *et al.*, 2018), and current behavioral patterns (Klößner, 2013). The determinants of pro-environmental behavior must be identified for formulating the most appropriate and effective policies for improving the public's behavior toward protecting the natural environment (Li *et al.*, 2019).

This condition is what the government is trying to set up in society now. This kind of awareness in the plastic wisdom movement starts with changing the consumption of disposable drinks with tumblers used in outdoor activities. This awareness can shape behavior in line with pro-environmental behavior.

In this research, there is also a finding related to informant number two, that he understands the concept of plastic waste reduction but is not aware of the movement's name. This condition makes sense because, based on field observations, socialization in the internal scope of the PUSAT-SIKBPI office related to the Plastic Wisdom Movement has not been carried out optimally. The tumblers

distribution to PUSAT-SIKBPI employees has been carried out several times. However, the office has not officially stated (in the form of an official letter) that these activities are within the framework of the Plastic Wisdom Movement.

Like informant number two, informant number four stated that he did not know the movement. Nevertheless, he can explain the eco-office program as one of the environmental programs in office activities. This condition can be explained because he is handling some work related to environmental issues. As Suryaningrum *et al.* said that a person's level of knowledge is influenced by information and the environment (Suryaningrum *et al.*, 2021). For all informants, it seems as if they already know about it as a program implemented by the Ministry of Environment and Forestry to create environment-friendly office activities. However, it is interesting that although some informants stated that they did not know about the movement of the plastic wisdom generation, their attitude was already towards it.

Based on data in Table 2, it is also known that all the informants correctly understand the purpose of limiting plastic use. The informants agreed that plastic waste needs to be reduced because they all understand the difficulties in recycling plastic waste. Some informants can analyze plastic use problems and develop some alternative solutions. This fact can be explained through their knowledge's characteristics of job responsibility. All the informants are working at the agency that focused on environmental and forestry issues. So, it is natural for them to have good knowledge related to plastic use limitations because it was also one of the main concerns for their agency (PUSAT-SIKBPI and Ministry of Environment and Forestry) to manage.

The Informant's perception of tumblers' use in daily activities

To address global environmental challenges, it is critically important to understand how humans make decisions about environmentally relevant behavior, as shifting to alternative behaviors can make a relevant difference (Klößner, 2013). One way to know the human decision is through their Perception. In simple terms, Perception can be interpreted as giving meaning to an event. In a more specific description, Perception can be understood as a process that starts from sight to form a response that occurs within the individual so that the individual is aware of everything in his environment through his senses (Jayanti & Arista, 2018).

Based on the interview, it can be said that all informants have a positive perception of tumblers' use in daily activities. Even some informants already have formed this action and used environmental-friendly products before. They also stated that they did not find any obstacles in using tumblers because they were already accustomed. This finding conforms to de Lange *et al.* (2018) opinion that perception and perceptual decision-making are greatly facilitated by prior knowledge.

The office management also helps build a good habit by routinely providing drinking water using refill gallons and located at several places on each floor so that the employee can easily refill their tumbler. From the research, it is also known that good habits in reducing plastic waste need to be backed up by policy implementers so that can be implemented. With the proper authority which supports the policy, it will support building the new habit of reducing plastic waste.

From this, we can conclude that the four informants already have a positive perception of tumbler use daily because, from their positive perception towards this, it makes an

action. The positive perception comes from the environmental knowledge that they have. This research result, when associated with the theory of perception formation, shows that although functional factors such as an individual's experience and needs can become perceptual stimuli, it is the characteristics of the person who responds to these stimuli that determines perception (Rakhmat, 2005).

IV. CONCLUSION AND SUGGESTION

The research presented here has outlined why we need a better understanding of perceptions from civil servants as policy implementers related to government policies to know the achievements and strategies needed to make these policies more successful.

We have gained knowledge of the civil servant towards The One Million Tumbler Movement as part of the Plastic Wisdom Generation. We have also gained information related to their perception of it.

From this research and observation, we learn that the civil servants in this research have positive perceptions of tumbler use. The positive perception comes from the environmental knowledge that they have. They also have environmental knowledge about the urge to reduce plastic waste and understand the eco-office implementation in the PUSAT-SIKBPI's environment.

From this research, it is known that the PUSAT-SIKBPI management supports the habituation of using tumblers and the plastic wisdom movement. It helps civil servants to continue this good habit. In addition, in this study, it is also known that the family environment provides color on habitual implementation of tumbler use and the plastic awareness movement in general.

If the environmental basis of this family element is strengthened, it is not impossible to further strengthen the environmental awareness of individuals to always move in an environmentally friendly manner; hopefully, it will form pro-environmental behavior.

Another finding in this study is that although the Environmental awareness of civil servants has formed, the conditions of the covid pandemic have made using plastic and single-use packaging for consumption unavoidable.

These findings need further investigation using different research methods to obtain more comprehensive results, so it may enrich the strategies made by the policymakers to create efficient government policies.

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DAFTAR PUSTAKA

- Azzahra, T. A. (2020). *Menteri LHK: Timbunan Sampah di Indonesia Tahun 2020 Capai 67,8 Juta Ton*. <https://News.Detik.Com/Berita/d-5046558/Menteri-Lhk-Timbunan-Sampah-Di-Indonesia-Tahun-2020-Capai-678-Juta-Ton>.
- de Lange, F. P., Heilbron, M., & Kok, P. (2018). How Do Expectations Shape Perception? *Trends in Cognitive Sciences*, 22(9), 764–779.
- Gatra.com. (2019, March 21). *Peluncuran "Gerakan Indonesia Bersih" Sebagai Identitas Nasional*. <https://Www.Gatra.Com/Detail/News/412712/Gaya-Hidup/Peluncuran-Gerakan-Indonesia-Bersih-Sebagai-Identitas-Nasional>.
- Geiger, S., Dombois, C., & Funke, J. (2018). The role of environmental knowledge and attitude: Predictors for ecological behavior across cultures? An analysis of Argentinean and German students. *Umweltpsychologie*, 22, 69–87. https://www.researchgate.net/publication/329127430_The_Role_of_Environmental_Knowledge_and_Attitude_Predictors_for_Ecological_Behavior_Across_Cultures/link/5bf6dae9299bf1a0202c2528/download
- Indonesiabaik.id. (2020, March 3). *Kurangi Sampah Plastik! Gerakan Satu Juta Tumbler*. <http://Indonesiabaik.Id/Infografis/Kurangi-Sampah-Plastik-Gerakan-Satu-Juta-Tumbler>.
- Jayanti, F., & Arista, N. T. (2018). Persepsi Mahasiswa Terhadap Pelayanan Perpustakaan Universitas Trunojoyo Madura. *Kompetensi*, 12(2).

- Kim, M. S., Kim, J., & Thapa, B. (2018). Influence of Environmental Knowledge on Effect, Nature Affiliation and Pro-Environmental Behaviors among Tourists. *Sustainability*, *10*(9), 1–16. doi://10.3390/su10093109.
- Klößner, C. A. (2013). A comprehensive model of the psychology of environmental behavior—A meta-analysis. *Global Environmental Change*, *23*(5), 1028–1038. doi://10.1016/j.gloenvcha.2013.05.014.
- Kumar, R., Verma, A., Shome, A., Sinha, R., Sinha, S., Jha, P. K., Kumar, R., Kumar, P., Shubham, Das, S., Sharma, P., & Prasad, P. V. V. (2021). Impacts of Plastic Pollution on Ecosystem Services, Sustainable Development Goals, and the Need to Focus on Circular Economy and Policy Interventions. *Sustainability*, *13*(17), 9963. doi://10.3390/su13179963.
- Lee, Y. K. (2017). A Comparative Study of Green Purchase Intention between Korean and Chinese Consumers: The Moderating Role of Collectivism. *Sustainability*, *9*(10), 1930. doi://10.3390/su9101930.
- Li, D., Zhao, L., Ma, S., Shao, S., & Zhang, L. (2019). What influences an individual's pro-environmental behavior? A literature review. *Resources, Conservation and Recycling*, *146*, 28–34. doi://10.1016/j.resconrec.2019.03.024.
- McInturf, A., & Savoca, M. (2019). *Hundreds of fish species, including many that humans eat, are consuming plastic*. Theconversation.Com. <https://theconversation.com/hundreds-of-fish-species-including-many-that-humans-eat-are-consuming-plastic-154634>.
- Mikalauskiene, A., & Atkociuniene, Z. (2019). Knowledge Management Impact on Sustainable Development. *Montenegrin Journal of Economics*, *15*(4), 149–160. doi://10.14254/1800-5845/2019.154.11.
- Nugraha, A., Sutjahjob, S. H., & Amin, A. A. (2018). Persepsi dan Partisipasi Masyarakat Terhadap Pengelolaan Sampah Rumah Tangga Melalui Bank Sampah di Jakarta Selatan. *Jurnal Pengelolaan Sumberdaya Alam dan Lingkungan*, *8*(1), 7–14. <https://media.neliti.com/media/publications/229284-none-580dab23.pdf>
- Rakhmat, J. (2005). *Psikologi Komunikasi*. PT. Remaja Rosdakarya.
- Smith, J. A., Flower, P., & Larkin, M. (2009). *Interpretative phenomenological analysis: Theory, method, and research*. Sage Publishing.
- Suryaningrum, F. N., Nurjazuli, & Rahardjo, M. (2021). Hubungan Pengetahuan dan Persepsi Masyarakat Dengan Upaya Pencegahan Covid-19 Di Kelurahan Sronol Wetan, Semarang. *Jurnal Kesehatan Masyarakat*, *9*(2), 257–263.
- Winata, D. K. (2019, March 3). *Gerakan Indonesia Bersih Merupakan Bagian Revolusi Mental*. <https://MediaIndonesia.Com/Politik-Dan-Hukum/218457/Gerakan-Indonesia-Bersih-Merupakan-Bagian-Revolusi-Mental>.