

# ANALYZING STUDENTS' PERCEPTION OF JAKARTA'S GOVERNOR REGULATIONS ON REDUCING PLASTIC WASTE

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#### ABSTRACT

Plastic is a serious danger to the environment as a whole. There are several reasons that people choose plastic over other materials as their packaging. In terms of cost, availability, and comfort, plastic has become the primary source of food packaging because of its versatility. The use of plastic has been an inseparable part of many sectors, including school fields. For instance, to keep up with the demands of academic life, schools and universities, where students spend most of their waking hours, can generate large quantities of plastic waste. Therefore, increasing awareness and fostering a sense of guilt may help reduce plastic waste. Previous investigations mainly focused on how certain campaigns could increase students' awareness of the harmful effects of plastic waste and what to do about it. On the other hand, this research attempted to dig deeper into students' perceptions of Jakarta Major Governor Regulation Number 142 of 2019 concerning the Obligation to Use Eco-Friendly Shopping Bags in Shopping Centers, Supermarkets and Traditional Markets and how it affects their decision-making in using a plastic bag. Selected University students participated in the research by interview. The result of this study revealed that they have sufficient knowledge about the main idea of the regulations. The obtained data showed that students who did not lack information about the importance of protecting the environment from plastic waste have the urge to take action by bringing their own shopping bags or other ecofriendly stuff.

Keywords: plastic waste, campaign, university students, eco-friendly stuff

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#### Introduction

Recent research indicates that plastic fiber has contaminated the stomachs of deep-sea animals. The research was done at Newcastle University by Dr. Alan Jamieson, who said the results were surprising and showed that plastic pollution can be found everywhere on Earth (Jamieson et al., 2019). This proves that plastic is a serious danger to the environment as a whole. Moreover, plastic waste is one of the most significant challenges associated with global warming. When the temperature of the Earth rises, the plastic breaks down into methane and ethylene, which in turn accelerates the warming trend. However, many people still insist on using plastic daily, regardless of the dangers that threaten it. Plastic is used in many different ways, but some industries are identical to the use of plastic, which is the food industry. There are several reasons that people choose plastic over other materials as their packaging. In terms of cost, availability, and comfort, plastic has become the primary source of food packaging because of its versatility (Chandegaar et al., 2015). There are so many plastic items, but the most commonly used almost around the world is disposable plastic or single-use plastic. Single-use plastic is an inexpensive and convenient option for on-the-go eating, requiring minimal preparation and cleanup. There is no denying that every instant thing will be a comfortable choice for people to prioritize since it benefits the most from ease of life. However, this type of habit can potentially harm not only humans but many other living things. Each year, plastic pollution kills more than 1 million seabirds and 100,000 marine animals (Condor Ferries, 2021). People are also affected by the fact that they have made more than 380 million tons of plastic (Azoulay et al., 2019).

For instance, to keep up with the demands of academic life, schools and universities, where students spend most of their waking hours, can generate large quantities of plastic waste. Canteens, online food shops, and vending machines are also significant sources of plastic waste. For example, crisp packets, candy wrappers, and drink bottles are just some of the things that come from these places. Daily, nearly 30 million students are served lunch in public schools in the United States, with many using Styrofoam trays and other single-use plasticware. In one middle school's lunchroom, more than 30,000 pounds of trash are produced yearly (Fortune, 2022). When multiplied by the nearly 100,000 public schools in the United States, the problem becomes alarmingly big. Since the effect of plastic waste and its enormous production is undoubtedly harmful for every living creature's life, there is a need for everyone to start taking action.

Mirosa et al. (2016) said increasing awareness and fostering a sense of guilt may also reduce food waste. John Charles Meyer, the executive director of Plastic Free Restaurants, a nonprofit that helps restaurants and schools stop using single-use plastics, said that changing the attitudes and behaviors of 6-year-olds is much more effective and worthwhile than changing the containers adults use because of their bad habits (Fortune, 2022). As was said before, becoming more aware can be the first step toward making better decisions in life. There are many advantages everyone can obtain from shifting the use of plastic to eco-friendly containers or cutlery, and one of them is definitely reducing the plastic waste.

Several studies have also discussed topics related to plastic waste reduction campaigns at the university level; one of the studies conducted by Abd Hamid, I. and Wan Yahaya, W. A. (2020) which aims to assess the behavior and awareness of students who use plastic products and the impact from the zero-waste campus campaign at the Universiti Putra Malaysia Bintulu Sarawak (UPMKB) Campus. This research wants to increase students' awareness of the surrounding environment by reducing the use of PP and educating students about the dangers of plastic through campaigns. Approximately 249 respondents were interviewed face-to-face using a designed survey form a year after launching the campaign. The results of the study show that respondents still depend on plastic products. However, respondents began to have a reasonably vigilant awareness, namely 46.79%, about plastic products that are difficult to decompose. Moreover, this study found that imposing a MYR0.50 (USD0.12) levy at UPMKB significantly impacted reducing plastic use, where 83.94% supported the campaign by bringing their own food containers. The campaign results are expected to increase future generations' behavior and awareness to reduce plastic use and the importance of preserving nature. Roy, T. R., & Morya, S. (2022) also one of the studies who has the aim of reducing plastic waste by replacing the use of better alternative materials such as various types of cutlery, preparation of edible cutlery, therapeutic properties and the tool market edible food. This research focuses on campaigns that minimize the use of plastic with better substitutes, such as cutlery made from plant-based products such as rice, sorghum, wheat, soybeans, and bran flour. This study believes that edible utensils are biodegradable and environmentally friendly, so that this product can be a good substitute for plastic cutlery. The other researcher with the same idea of reducing the amount of plastic at the university level is Pinto et al. (2018). This study aims to reduce food waste tested in the canteen of the School of Agriculture canteen (University of Lisbon, Portugal). To initiate this goal, this research created a campaign with the slogan 'Clean dish, clean conscience!' to increase student awareness in reducing plate waste by building a relationship between food waste and personal behavior. The first stage in this study was to measure how much plate waste was generated from canteen users over ten days. After the period, a per capita waste consumption index is calculated to evaluate consumer satisfaction and concern related to food wastage. Based on the calculation results, it is known that users lack the confidence to avoid food waste and plastic waste. The second stage will be held for 16 days to assess the campaign's effectiveness. To increase consumer awareness at the university, the campaign approach is carried out by displaying informative posters in strategic areas of the canteen along with simple messages reminding consumers not to accept food they will not eat. Based on the campaign, it is known that there is an average decrease in the waste consumption index by 15%. This campaign also focuses on increasing the awareness of students and all university staff to separate organic and inorganic waste. The results found that >70% of active users were participating in sorting waste. This study is conducting a slow campaign where researchers want to show how waste can be avoided and reduced simply by making students aware of the topic of food waste. Simple strategies such as campaigns can improve behavior and increase the sustainability of healthy canteens in university environments.

To fill the gap from the previous study, this research will focus on finding out the awareness and behavior of University students about the importance of using eco-friendly products, unlike the research conducted by Abd Hamid, I. and Wan Yahaya, W. A. (2020) which focused on assessing the behavior and awareness of students who use plastic

products and research conducted by Pinto et al. (2018) which focused on campaigns to reduce food waste, cutlery, and separate organic and inorganic waste. Moreover, this research will also campaign for the entire University community to start changing habits that often use plastic to use eco-friendly items; for example, during lunch there is a lot of styrofoam plastic waste that is found. This happens because mostly the University community buys food from outside, which is also the reason for the large amount of plastic waste that has exploded in the campus environment. Thus, the University community members who want to buy food from outside can use eco-friendly items such as bringing their lunch boxes, tumblers and cutlery from home. The authors of this study believe that a campaign at the university level that encourages people to reduce plastic waste by switching to eco-friendly containers will help create habits that will help reduce plastic waste in the long run.

#### Method

The research was conducted in Jakarta city, especially in University, South Jakarta from March to April 2023 with three respondents with the criteria: the respondents are University students living in Jakarta city that have received campaign from Jakarta Major Governor Regulation Number 142 of 2019 concerning Obligation to Use Eco-Friendly Shopping Bags in Shopping Centers, Supermarkets and Traditional Markets. The data was taken from University students because the researchers wanted to know students' awareness of the importance of protecting the environment from plastic waste by using eco-friendly products. The sampling method used was the purposive sampling technique. This study obtained the data through interviews where researchers will interview three university students who already know the Governor's regulations regarding the use of eco-friendly products in every area in Jakarta.

This study utilized qualitative research, focusing on the participants' beliefs, experiences, and perceptions of the importance of shifting from plastic to eco-friendly stuff. The qualitative method enables the researcher to record the students' own voices, examine their ideas, and try to comprehend the phenomenon and respond to these fundamental research questions. To collect the data, we developed a set of interview questions to explore students' perceptions of the importance of protecting the environment from the harmful effect of plastic waste. After developing the set containing two items, researchers must ensure that all students answers are related to gathering comprehensive data. To analyze the collected data, the researchers prepared raw data for analysis and were categorized based on research data, data sources, and interview results. Next, reading and coding data would be done to interpret the data from students' perceptions of the issue.

#### Result and Discussion

Plastic is a global problem that is undeniably still around society and is a critical problem that is happening right now, especially in Indonesia. To reduce the amount of plastic in Indonesia, especially the Jakarta area, the Governor of DKI Jakarta has issued

Regulation Number 142 of 2019 concerning the Obligation to Use Eco-Friendly Shopping Bags in Shopping Centers, Supermarkets and Traditional Markets. Through this research, researchers have interviewed three participants from University students. The purpose of the interview was conducted to find out University's awareness of the campaign that the Governor of DKI Jakarta had carried out to reduce the amount of plastic and also to find out whether the three participants had implemented plastic reduction like the existing campaign and contributed to the use of eco-friendly products.

#### Question 1: What do you think about the campaign by the Governor of Jakarta in an

#### effort to reduce the amount of plastic waste in Jakarta?

"Sebenarnya saya sendiri belum tahu kampanye apa yang diberlakukan oleh Gubernur sampai akhirnya setelah pandemi saya kembali ke Jakarta dan mulai berbelanja di toko swalayan seperti Alf\*m\*rt dan F\*rmer, penggunaan plastik itu udah dilarang. Misal sampai di sana saya saat belanja saya ga bawa kantong belanja nanti para pegawai bakal ngasih tau kalo mereka tidak menyediakan kantong plastik lagi. Jadi kalau saya ga bawa kantong sendiri, mereka bakal nawarin kantong belanja yang eco-friendly dari kain atau paper gitu. Nah kampanye apa yang dijalankan detailnya saya kurang paham tapi setelah kejadian ini saya lebih mendapatkan wawasan karena berarti kampanye dan peraturan pemerintah itu tersampaikan. Buktinya dari kejadian yang saya lalui dan mungkin orang lain juga saat berbelanja itu membuat mereka tidak lagi menggunakan kantong plastik. Saya rasa ini mampu membantu menekan jumlah sampah plastik asalkan ketatnya PerGub ini juga sampai ke bawah atau warung-warung lebih kecil." (FA).

"Peraturan tersebut bagus karena dibuat berdasarkan efek samping yang negatif untuk lingkungan dan mahluk hidup. Apa lagi plastik sendiri tiap jenisnya memiliki masa tersendiri untuk bisa hancur bahkan bisa mencapai ratusan tahun lamanya. Dipakai hanya sebentar namun untuk menghancurkannya butuh proses lebih lama dan menurut saya itu memang tidak apple to apple. Menurut saya sepertinya pemerintah juga masih kurang tegas dalam menerapkan dan mengkampanyekan peraturan ini. Karena bisa dilihat sampai sekarang masih ada banyak pengusaha atau penjual yang menggunakan kantong plastik atau produk plastik lainnya sebagai pembungkus barang atau makanan. Masyarakat sendiri yang banyak lupa untuk bawa tas sendiri juga akhirnya memilih plastik sebagai alternatif lain. Bahkan di convinience store seperti Ind\*maret saja sering menawarkan kantong plastik dengan membayar Rp. 200 saja. Masih ada kelonggaran bagi para penjual dan pembeli untuk menggunakan plastik walau kampanye telah dijalankan". (SM)

"Menurut aku udah terjalankan dengan baik karena pemerintah berusaha menarik perhatian dan simpati masyarakat untuk hidup lebih baik tanpa menggunakan plastik. Dalam kampanyenya yang aku tahu pun juga menginformasikan bahaya dari plastik untuk jangka pendek dan panjang bagi manusia dan lingkungan. Namun, menurut saya masih ada beberapa daerah yang luput dari perhatian pemerintah contohnya pasar swalayan yang sering memakai berbagai produk plastik. Kampanye ini belum cukup maksimal dalam mengedukasi para penjual dan pembeli di sektor tersebut. Menurut saya dibutuhkan sosialisasi langsung ke tempat tersebut untuk memastikan bahwa pola pikir masyarakat telah diatur sedemikian rupa". (Al)

Question 2: Do you still often use plastic products? If so, what is the reason?

"Saya masih menggunakan plastik karena pedagang kaki lima atau pedagang yang di pinggir jalan masih menggunakan plastik untuk membungkus makanannya. Namun setelah adanya Peraturan Gubernur DKI Jakarta dan kampanye yang dilaksanakan, saya mulai mengurangi penggunaan plastik dengan selalu membawa tumbler daripada membeli air kemasan dan membawa tote bag untuk mengurangi jumlah kantong plastik." (FA)

"Kadang saya menggunakan plastik karena itu sudah kebiasaan yang susah untuk dihilangkan, kemudian banyak warung makanan yang masih menggunakan plastik sehingga secara tidak langsung saya banyak menyimpan kantong plastik. Namun, setelah beredarnya Peraturan Gubernur mengenai larangan penggunaan plastik, saya mulai membawa totebag dan membawa kotak nasi langsung untuk wadah lauk saya." (SM)

"Ya saya masih menggunakan plastik karena di pasar tradisional ketika saya membeli ayam, ikan, dll masih sangat diperlukan kantong plastik. Namun, saya sudah mulai jarang dalam menggunakan plastik karena ketika bepergian, saya selalu membawa tote bag untuk makanan kering bahkan tumbler untuk mengurangi pemakaian plastik." (AI)

# A. Discussion

Question 1: What do you think about the campaign by the Governor of Jakarta in an

effort to reduce the amount of plastic waste in Jakarta?

Based on the data from the interviews with selected participants, it could be concluded that they have sufficient knowledge about the campaign the governor of Jakarta launched. FA, SM, and AI stated that the initial plan about reducing plastic waste in Jakarta by campaigning to not use plastic bags anymore is a good thing, yet in fact the implementation is still incomplete. As university students, their answers have shown that they are aware of the dangers of plastic and the government's follow-up actions on this issue. Even SM mentioned that the time it takes for plastic to decompose is very long. This result is similar to the previous research conducted by Abd Hamid, I. and Wan Yahaya, W. A. (2020), which found that even though they were still dependent on plastic bags, students began to be aware of plastic products were difficult to decompose. However, they think that

the government's efforts in this case are still not the best because of a number of things. SM and AI stated that, until now, many sellers still use plastic bags or other plastic products as packaging for goods or food. What these students are concerned about is similar to what Dilkes-Hoffman et al. (2019) discovered in their study that consumers had inadequate awareness about bioplastic, particularly its biodegradability, yet they still believe it is better for the environment than plastic made from fossil fuels. There is a need for the government to have some events to educate society about plastic waste.

## Question 2: Do you still often use plastic products? If so, what is the reason?

From question number 2, the results of the interview show that the three participants have started to rarely use plastic since the campaign to reduce plastic from the Governor of Jakarta was launched. This research is in line with the research conducted by Hendarsyah et al. (2020) sho state that the better campaign of policies was carried out the better and higher public awareness in reducing plastic use. The three participants answered that they had to use plastic because of a compelling situation, such as there are still many roadside traders, food stalls, and traditional market traders who still use plastic to package the food. It is also supported by Chamdegaar et al., (2015) who state that many traders still use plastic to package the food because plastic has low cost, versatile, and can maintain the convenience of food. However, the three participants already have the awareness to start using eco-friendly products such as bring tote bags, lunch boces, and tumblers. The result from this research are the same as research was conducted by Tafsia, C. L., & Mulatsih, S. (2022) who states that policy campaigns to reduce plastic use can have a positive effect on environmentally friendly actions because campaigns have a significant role in demonstrating understanding of eco-friendly products so that people start using ecofriendly products in part of their activity. It started from the results of FA interview that to reduce the amount of plastic, FA was no longer buying bottled water outside but he had started to bring tumblers. In line with that, AI also replied that she often brings a tumbler if she wants to go outside and also brings a tote bag for dry food. SM also has the same awareness of the importance of using eco-friendly products, so sometimes she brings tote bags and lunch boxes to reduce the use of plastic in the food she buys.

# **B.** Limitation and Suggestion

One of the limitations of our research is that there are limited journals and articles that can be used as references to corroborate some research results. Another limitation is that this research only focuses on the university level and the South Jakarta area. It causes this research to be inaccurate and does not represent all the voices of the people of Jakarta who know and participate in this campaign. Therefore, this research suggests that future research can collect data from various levels of society, for example from all levels. schools, offices, the trader sector, as well as the housewife sector. Apart from that, future research can also focus on various areas

in Jakarta such as West Jakarta, North Jakarta, and Central Jakarta because this campaign is implemented and must be followed by all DKI Jakarta residents.

### Conclusion

This research examines the impact of the campaign conducted by the Governor of DKI Jakarta on reducing the use of plastic in the DKI Jakarta area. This study aims to find out how University students are aware of the plastic reduction campaign launched by the Governor of DKI Jakarta. Based on the results of the interviews, it was shown that the participants already had an awareness of the importance of the campaign being launched to reduce the amount of plastic in the Jakarta area. However, they also still criticizing the Governor's campaign which is still not assertive and thorough because there are still many street traders and traditional market traders who are still unable to reduce the use of plastic in buying and selling activities. From the interview result, the three participants revealed that they still use plastic and have not completely given up from plastic because they found many street traders, traditional markets and food stalls who still use plastic for their food packages. Therefore, the behaviour they can do to take part in the existing campaign is to start using eco-friendly products such as when go outside they bring a tote bag, tumbler, and lunch boxes.

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