

Transformation of Consumption Behavior: Comparison of the Pandemic and Post-Pandemic Periods of Covid-19 as a Pillar of Circular Economic Resilience

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ABSTRACT

The Covid-19 pandemic has had a significant impact on various aspects of life, including people's consumption behavior. This study aims to analyze the transformation of Generation Z consumption behavior in Surakarta by comparing consumption patterns during the Covid-19 pandemic and post-pandemic. The focus of the study is directed at two main dimensions: impulse buying and utilitarian consumption. The research method used is comparative quantitative with data collection techniques through online questionnaires. Samples were taken using purposive sampling of 100 Generation Z respondents who experienced both periods. The results of the study show that during the pandemic, impulse buying behavior increased significantly due to emotional factors and social media pressure, while post-pandemic shows a tendency to shift towards more utilitarian and planned consumption. This study contributes to business actors and policy makers in understanding the dynamics of consumer behavior after the global crisis.

KEYWORDS: consumption behavior; covid-19 pandemic; generation Z

INTRODUCTION

The Corona Virus Disease 2019 (Covid-19) pandemic caused by SARS-CoV-2 has become a global health crisis that has had a wide impact on various sectors of life, including the economy and people's social behavior (Wahyu, 2022). The Indonesian government responded with various policies, such as social restrictions, closing physical activities, and digitalizing services, to suppress the spread of the virus and its impact on the economy (Kurniawansyah et al., 2020). Social restriction policies have changed people's economic behavior, including in terms of consumption. Traditional shopping activities have decreased, while online transactions have experienced a significant increase (Donthu & Gustafsson, 2020). People are forced to adapt to new conditions, both in terms of basic needs and consumption styles.

The crisis situation has pushed people to adjust the way they shop, which has an impact on two main consumption patterns: emotional consumption indicated by impulse buying and rational consumption reflected in utilitarian consumption (Husaenie & Aisyah, 2020). This change in consumption patterns indirectly helps build the initial foundation for strengthening the resilience of the circular economy. Economic uncertainty and social restrictions encourage consumers to be more selective in spending by prioritizing functional and essential needs. Psychological pressure and increased shopping activity trigger a spike in impulsive purchases as a form of emotion (Nabila et al., 2025).

Impulse buying is a spontaneous, unplanned purchasing behavior that occurs frequently during a pandemic due to high levels of anxiety and uncertainty. According to the Stimulus-Organism-Response (SOR) theory, a pandemic as an external stimulus triggers an emotional

reaction in individuals, which then influences impulsive consumption behavior (Irdiana et al., 2021). The SOR theory is a communication model that emphasizes that an individual's response to a stimulus is influenced by internal processes within the organization (Ratnawati, 2024). Research conducted by Ascasaputra & Arimbi (2022) shows that unplanned purchases increased significantly during the pandemic due to factors such as fear, big discounts on e-commerce, and increased use of online shopping platforms. Unplanned purchases show that emotional aspects play an important role in driving consumption behavior during a crisis. *The Covid-19* pandemic has significantly changed the dynamics of consumer behavior (Arifianti & Gunawan, 2021). The anxiety and uncertainty caused by the global situation have driven an increase in impulsive buying behavior, which is influenced by various psychological and social factors.

The pandemic encourages people to consume more rationally, known as utilitarian consumption. Utilitarian consumption is consumption that focuses on the function and usefulness of the product (Rizkia & Riptiono, 2021). Crisis conditions require people to be more selective in shopping, only buying items that are really needed, according to Maslow's hierarchy of needs (Fallo & Goetha, 2022). In the context of Maslow's theory, utilitarian consumption is related to the fulfillment of physiological and safety needs, where individuals look for efficient and effective products to meet basic needs (Milla, 2022). During the pandemic, consumer preference for functional products increased, replacing hedonic consumption which tends to be emotional (Andayana, 2020).

The drastic changes during the pandemic indicate a transfiguration or transformation of people's consumption behavior, both emotionally and functionally (Nguyen & Nguyen, 2021). The increase in impulse buying during the pandemic was not entirely influenced by financial factors or trust in digital platforms, but rather by psychological and situational factors (Putri & Pinandito, 2023). Changes in economic activity can open up space to evaluate more deeply how the crisis impacts the way individuals make consumption decisions. This transformation of consumption patterns is what ultimately has the potential to become part of strengthening the pillars of circular economic resilience. Strengthening more sustainable consumption adaptation in the face of global uncertainty in the future (Fauzi et al., 2018).

This study aims to analyze changes in Generation Z consumption behavior in Surakarta, focusing on the comparison between impulse buying and utilitarian consumption behavior during and after the pandemic. This study is novel because it reviews two dimensions of consumption simultaneously in the context of post-pandemic economic recovery, and offers contributions in formulating sustainable consumption strategies that support the resilience of the circular economy.

Differences in impulse buying during and after the Covid-19 pandemic

Impulse buying behavior has changed significantly during the Covid-19 pandemic due to anxiety, economic uncertainty, and limited access to physical stores, which encourage consumers to make spontaneous purchases, especially for basic necessities and health products (Herianto et al., 2021). Wang et al. (2021) found that the increase in impulse buying during the pandemic was mediated by feelings of loss of control and anxiety. In Indonesia, the pandemic has also accelerated the transition of consumption from conventional to digital, encouraging the adoption of online shopping and increasing impulse buying through e-commerce promotions (Amri et al., 2024). Post-pandemic, with stable economic conditions and decreasing anxiety, impulse buying patterns tend to adjust.

H1: There is a difference in impulse buying during and after the Covid-19 pandemic

Differences in utilitarian consumption during and after the Covid-19 pandemic

During the Covid-19 pandemic, utilitarian consumption that focuses on function and efficiency has increased due to changes in consumer needs and shopping patterns. Partini (2021) revealed that limited access and increased financial awareness encourage consumers to prioritize purchasing basic necessities and essential products. This is in line with the findings of Susanti & Riptiono (2022) which show that consumers choose products based on utility and efficiency to

reduce risk and optimize economic benefits. Post-pandemic, as conditions normalize and consumption choices become more diverse, preferences for utilitarian consumption are expected to adjust.

H2: There is a difference in utilitarian consumption during and after the Covid-19 pandemic.

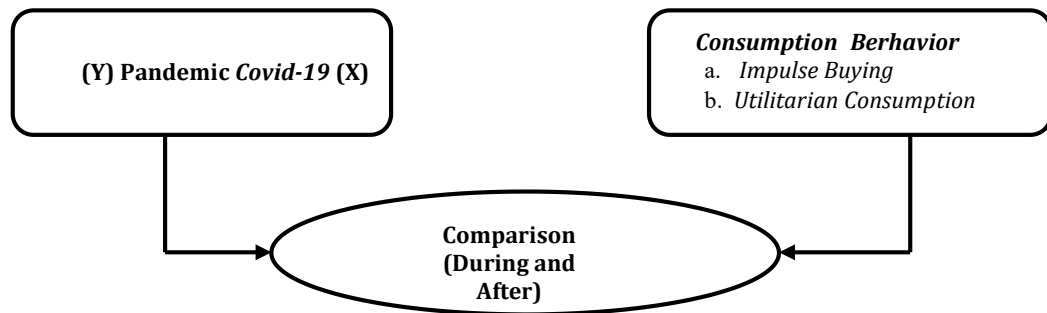


Figure 1. Research Model
(Source: Research Data,
2025)

METHODOLOGY Research Design

The research method used is quantitative with a comparative nature (comparison). The purpose of the comparative method is to compare the consumption behavior of Generation Z in Surakarta between the pandemic and post- *Covid-19 pandemic*. This study was conducted by distributing questionnaires via *Google Form* to obtain primary data. The type of data collected is numerical and analyzed statistically to determine significant differences between the two time conditions. (Normasyhuri et al., 2021) .

Population and Sample Used

Population refers to a generalization area consisting of subjects or objects with a certain number and characteristics determined by the researcher to be analyzed and concluded (Firmansyah, 2022) . The population in this study was all Generation Z in Surakarta City, namely individuals born between 1997 and 2012. The sampling technique used purposive sampling, with the criteria that respondents were domiciled in Surakarta and had experienced the pandemic and post-pandemic periods. The number of respondents successfully collected was 100 respondents. Data collection was carried out online via *Google Form* by distributing it through social media.

Data Collection Techniques

The research instrument is a closed questionnaire using a 5-point Likert scale, from 'strongly disagree' to 'strongly agree'. This instrument was developed based on the Stimulus-Organism-Response (SOR) theory to measure *impulsive buying* and Maslow's Needs theory to measure *utilitarian consumption* .

Tools or Instruments Used

Data collection was carried out using a closed questionnaire, namely a questionnaire that has provided answer choices (Yusuf et al., 2020) . Data were collected through an online questionnaire distributed for 14 days to Generation Z in Surakarta. The questionnaire was prepared in a closed manner with structured questions to facilitate filling and increase the response rate. Each respondent can only fill in once through their respective Google accounts to avoid data duplication.

Data Analysis Methods

The data analysis technique in this study used a comparative test approach (Prastiwi et al., 2024) . The collected data were analyzed using SPSS 25. The first stage was the normality test using

the Kolmogorov-Smirnov method. The results showed that the data was not normally distributed, so the analysis was continued using the non-parametric Wilcoxon Signed Ranks Test. This test is used to determine the differences between consumption behavior (impulse buying and utilitarian consumption) during the pandemic and post-pandemic.

RESULTS AND DISCUSSION

Table 1. Results of Normality Test (Kolmogorov-Smimov)
Changes in Consumer Behavior During and After the Covid-19
Pandemic

		Tests of Normality	
Smirnov ^a Behavior		Kolmogorov-	
Pandemic	Impulse Buying During the Covid-19	.190	100
		.000	Pandemic
	Impulse Buying After the Covid-19	.147	100
		.000	Pandemic
	Utilitarian Consumption During the	.173	100
		.000	Covid-19 Pandemic
	Utilitarian Consumption After the	.156	100
		.000	Covid-19 Pandemic

a. Lilliefors Significance Correction
(Source: SPSS 25, processed data,
2025).

The normality test was conducted to determine whether the data used in this study were normally distributed. In this study, the normality test used the Kolmogorov-Smirnov method with Lilliefors correction. The test results showed that all variables, both *Impulse Buying* and *Utilitarian Consumption* during the pandemic and post-pandemic, had a significance value of 0.000. This value is smaller than the significance level of 0.05, so it can be concluded that the four variables are not normally distributed.

The results of the study indicate that respondent data related to Generation Z's consumption behavior during and after the Covid-19 pandemic tend to deviate from the normal distribution. This data abnormality can be influenced by several factors, one of which is the highly fluctuating psychological condition of society during the pandemic. In line with what was stated by Wang et al. (2021), the Covid-19 pandemic created economic and psychological uncertainty that triggered extreme consumption behavior, both in the form of impulsive purchases and highly selective spending. This condition gives rise to an asymmetrical data distribution, resulting in a non-normal distribution pattern.

The characteristics of Generation Z, the subject of the study, also contribute to the irregularity of data distribution. Generation Z is known to be more responsive to changes in social and technological situations, and is more susceptible to the influence of social media in making purchasing decisions. Emotional factors such as anxiety, fear of scarcity of goods, and intensive promotional pushes from e-commerce during the pandemic have also increased variations in consumption behavior.

Data abnormalities also show extreme differences in consumption behavior between the pandemic and post-pandemic periods. The increase in impulse buying was caused by mobility restrictions, economic uncertainty, and the urge to shop online during the pandemic (Herianto et al, 2021). Referring to these conditions, the analysis technique used in this study continues with hypothesis testing using a non-parametric method, namely the Wilcoxon Signed Ranks Test which is more appropriate for data that does not meet the assumption of normality.

Table 2. Wilcoxon Test Results
Impulse Buying during and after the Covid-19 pandemic **Test Statistics ^a**

		After the Covid-19 Pandemic - During the Covid-19 Pandemic		
Z				
8.376	^b	Asymp.	Sig.	(2-tailed)

.000 a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

(Source: SPSS 25, processed data, 2025).

After the normality test showed that the data was not normally distributed, hypothesis testing was continued using the non-parametric Wilcoxon Signed Ranks Test. Based on the test results, a Z value of -8.376 was obtained with a significance value of Asymp. Sig. (2-tailed) of 0.000. A significance value smaller than 0.05 indicates that there is a significant difference between *impulse buying behavior* during and after the Covid-19 pandemic.

The results of the study strengthen the finding that the Covid-19 pandemic has a significant impact on impulsive buying behavior. During the pandemic, psychological factors such as anxiety, stress, uncertainty, and fear of shortages of goods encourage consumers, especially Generation Z, to make spontaneous purchases without planning. In line with the research of Saragih & Pusvitasari (2022) which states that crisis conditions trigger high levels of impulsivity in making purchasing decisions as a form of coping mechanism in dealing with uncertain situations.

Socio-economic stability has slowly begun to recover after the pandemic subsided. Decreasing levels of uncertainty, stabilizing availability of goods, and improving individual financial conditions have also reduced the intensity of *impulse buying*. Consumers tend to return to more planned and selective purchasing patterns, where rationality factors begin to dominate consumption decision-making. The significant decline in *impulse buying* after the pandemic also shows indications of a shift towards more adaptive and efficient consumption behavior, which can ultimately strengthen the pillars of circular economic resilience. Consumers are starting to be more careful in managing their financial resources, reducing waste, and increasing awareness of sustainability.

Table 3. Wilcoxon Test Results
Utilitarian Consumption during and after the Covid-19 pandemic **Test Statistics ^a**

		After the Covid-19 Pandemic - During the Covid-19 Pandemic		
Z				
8.180	^b	Asymp.	Sig.	(2-tailed)

.000 a. Wilcoxon Signed Ranks Test

b. Based on negative ranks.

(Source: SPSS 25, processed data, 2025)

Hypothesis testing of the *utilitarian consumption variable* was carried out using the Wilcoxon Signed Ranks Test, considering that the data used were not normally distributed based on the results of the previous Kolmogorov-Smirnov test. Based on the results of the Wilcoxon test, a Z value of -8.180 was obtained with a significance value of Asymp. Sig. (2-tailed) of 0.000. A significance value smaller than 0.05 indicates a significant difference between *utilitarian consumption* during and after the Covid-19 pandemic.

The results of the study show that during the Covid-19 pandemic, consumer preferences for utilitarian consumption have increased significantly. This is due to the high need for consumers to adjust their shopping patterns to be more functional, rational, and efficient in the face of economic uncertainty, limited mobility, and the threat of a health crisis. In a crisis situation, consumers tend to prioritize essential basic needs over emotional desires, as described in Maslow's Hierarchy of Needs theory which places physiological and safety needs as the main

priority in making consumption decisions.

This shift towards utilitarian consumption is also reinforced by the increasing financial awareness of the public to manage spending more carefully (Susanti & Riptiono, 2022). In the context of Generation Z, this change reflects an increased ability to adapt to crisis situations by re-evaluating purchasing priorities based on product function and benefits. Generation Z consumers consider more the usefulness, efficiency, and usefulness of the products they consume during the pandemic.

CONCLUSION

This study found significant changes in the consumption behavior of Generation Z in Surakarta during and after the Covid-19 pandemic, both in terms of *impulse buying* and *utilitarian consumption*. During the pandemic, *impulse buying* increased due to psychological factors such as anxiety, uncertainty, and increased online shopping activities. However, after the pandemic subsided, *impulse buying behavior* decreased as socio-economic conditions stabilized. Conversely, *utilitarian consumption* increased during the pandemic due to the encouragement of mobility restrictions, financial awareness, and the priority of basic needs according to Maslow's hierarchy of needs theory. After the pandemic, rational consumption preferences decreased again, while interest in hedonic consumption began to increase. These findings reflect the dynamics of adaptation of consumption behavior influenced by crisis situations, psychological factors, and the development of digital technology.

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