The Influence *of Decoy Effect* on Consumer Purchasing Decisions at Starbucks Jakarta

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Abstract. The emergence of various new coffee brands, both from within the local and international companies, must think of ways to keep their products afloat amidst the increasingly fierce competition. The aims of this study are: 1) To analyze the differences in consumer purchasing decisions at Starbucks Jakarta before and after applying the decoy effect, and 2) To see the effectiveness of the decoy effect on consumer purchasing decisions at Starbucks Jakarta. The research employs quantitative analysis through an experimental method. The population for this research is the customers who have purchased a Starbucks beverage product at least once and will be applying non-probability purposive sampling. The data collection research used an online questionnaire. Data were then analyzed using the Wilcoxon and N-gain test, which was processed using IBM SPSS Statistic version 25. The results of this study proved that there were changes in consumer decisions before and after the decoy effect was applied based on the Wilcoxon Test, which was carried out with a result of 0.000 <0.05 so that it could be concluded that Ha was accepted, and Ho was rejected. In addition, the decoy effect is also considered quite effective on consumer purchasing decisions based on the N-gain test conducted. The result obtained was 0.68 for the N-gain score, so it is in the medium category, and 68% for the N-gain percent, so it is considered quite effective.

1 Introduction

The effects of the pandemic that occurred in 2020 certainly had a major impact on the Indonesian economy. In the trade industry, consumer consumption, which is generally stable, has declined due to the pandemic that lasted for approximately two years. One of the industries that has been affected is the food and beverage industry. Although it experienced a decline, especially during the pandemic, based on gross domestic income data obtained from the Central Bureau of Statistics in the second quarter in 2022, the food and beverage industry experienced an increase and managed to record 200.26 trillion rupiah [1]. Compared to the previous year, which only managed to record 193.16 trillion rupiah in the same period, this number increased by 3.68%. So, it can be concluded that the Indonesian food and

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beverage industry has recovered from the impact of the pandemic and can have stable development in the future.

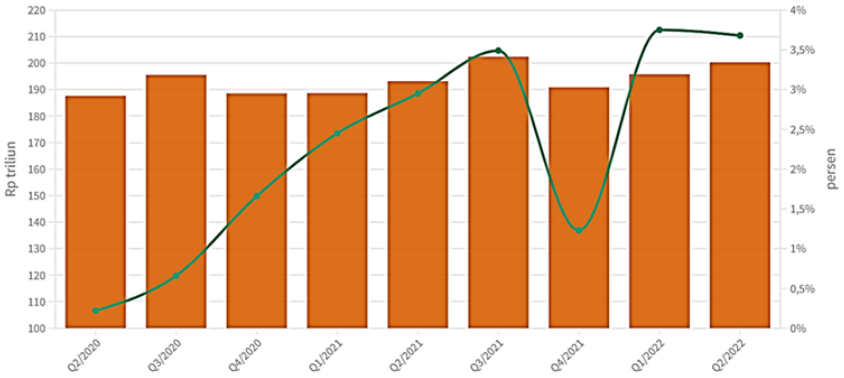

Fig. 1. Food and Beverage Industry Gross Domestic Product (Source: Central Bureau of Statistics, 2022) [1]

One beverage product that is popular is coffee. Currently, it is estimated that the world coffee market is growing at a value of USD 200 billion per year. Coffee consumption in Indonesia itself is quite high. According to International Coffee Organization (ICO) data, from 2020 to 2021, coffee consumption in Indonesia reached 300 million kilograms. This number makes Indonesia occupy the fifth position as a country with the highest amount of coffee consumption worldwide.

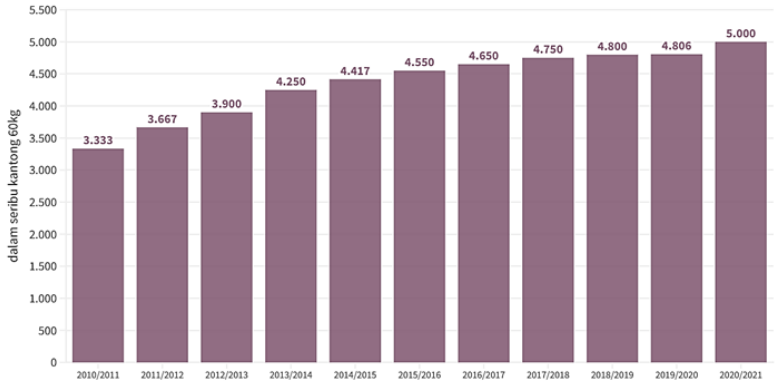

Fig 2. Indonesian Coffee Consumption (Source: International Coffee Organization, 2021)

Not only does Indonesia have high coffee consumption, but it is also one of the countries that produce quality coffee. Previously, in 2017, the International Coffee Organization (ICO) released that Indonesia was ranked fourth in the world as a coffee producer. The history of coffee in Indonesia also dates back to the era of the Dutch East Indies government, where Indonesia was known as one of the best-tasting coffee producers in the world [2].

The increasing consumption of coffee drinks in Indonesia is also accompanied by the growth of coffee beverage outlets both from local and international brands that offer their own advantages and uniqueness, for example, by presenting a variety of diverse variants or providing a variety of size choices that can be adjusted to the preferences of each consumer. In 2019, TOFFIN conducted research in which it was found that 2019 there was an almost threefold increase in the number of coffee shops in Indonesia compared to 2016, from

approximately 1000 shops to 2,937 shops.

With the increase in coffee beverage outlets, entrepreneurs must be innovative so that their businesses can continue to grow amid increasing competition. Marketers must think of ways so that the products sold can still compete or even come out as winners among their competitors. This is where marketing strategies can be used and practiced in addition to attracting consumer buying interest also so that consumers decide to buy products sold by the company so that they can achieve the company's goal of making a profit.

One type of marketing strategy that can be applied is the marketing mix, which aims to achieve marketing goals by meeting consumer needs in the exchange of goods and services [3]. The marketing mix itself consists of several elements; these elements can be classified into four categories, namely product, price, promotion, and place [4]. Seeing that price plays an important role in marketing activities, pricing becomes one of the important points in a business. If the price offered by the company is too high, of course, consumers will think again before deciding to make a purchase. On the contrary, if the company sets a price that is too low, it is feared that the company will find it difficult to make a profit. Based on this anxiety, it is necessary to implement certain strategies to set prices that are appropriate for consumers but also still provide the maximum benefit for the company.

Price is the amount of value that consumers exchange for benefit by owning or using a good or service [5]. One pricing strategy that is commonly used but rarely realized is the decoy effect. The decoy effect itself is directly related to marketing psychology, which is the science that studies human behavior to be applied in general marketing activities to generate maximum sales. This strategy is also called marketing psychology [6]. In short, marketing psychology is applied to influence the minds of consumers so that, eventually, consumers will tend to choose the products or services we offer. So, in a nutshell, the decoy effect is a trick of price psychology, where a consumer tends to switch choices between two choices when given an unbalanced third choice. This option makes one price unreasonable while another looks very profitable.

One company that implements a decoy effect strategy is an American coffee beverage company, Starbucks. Starbucks itself is a coffee company originating from Seattle, United States. In 2002, this coffee shop began to enter the Indonesian market by opening its first shop in Plaza Indonesia Mall. Currently, Starbucks provides a wide selection of drinks ranging from coffee to non-coffee drinks and a choice of different drink sizes, namely Tall (small), Grande (medium), and Venti (large). By setting three choices of drink sizes at different prices, Starbucks directly traps consumers into an unwitting decoy effect. If Starbucks provides two size options, most likely, consumers will choose a smaller size at a price that is certainly cheaper to save their expenses. By presenting additional options, commonly called decoys, consumers will reanalyze their choices, especially with the right price. Consumers can even buy the largest size at the most expensive price because they feel benefited.

Research related to the effect of decoy effect on consumers' own purchasing decisions has been reported in various publications. A current online experiment on the effects before and after the introduction of decoy options on tobacco counseling had the result that introducing decoy effect had no impact on smokers in the selection of tobacco counseling options [7]. Other studies investigated the consumers’ choices of various brands ranging from store brands to premium brands. The result of this experiment is that consumers will buy products at medium prices when presented with a choice between store-brand, commercial brand, and premium brand [8]. Furthermore, it was also revealed that the decoy effect will be more influential as the age of the participants increases; this can also be based on the social experience of each participant, which continues to grow with age, where the younger the participant, the social experience they have is certainly not as much as participants who have an older age [9]. Based on this description, the authors want to find out the difference in

consumer purchasing decisions at Starbucks Jakarta before and after the decoy effect is applied. In addition, it aims to find out the effectiveness of the decoy effect on consumer purchasing decisions at Starbucks Jakarta.

2 Method

Based on the type of research data and analysis carried out, this research is included in quantitative research with a pre-experimental design. In this study, there are 2 variables. The variables in the study are the decoy effect (X) as an independent variable and the purchase decision (Y) as a dependent variable. The population in this study is consumers who have bought Starbucks beverage products at least once, with a sample of 50 people. Prerequisite testing for the analysis used is testing normality and homogeneity. The analysis test in this study is the Wilcoxon test and the N-gain test.

3 Results and Discussion

3.1 Respondent Profiles

The composition of the respondents based on gender showed that there were 24 male respondents (48%) and 26 female respondents (52%). Based on the age level, it shows that there are 15 respondents with an age level of 17-24 years (30%), 10 respondents with an age level of 25-39 (20%), and finally 25 respondents with an age level of 40-60 years (50%). The composition of research respondents based on the type of work showed that there were 10 respondents who were students/students (20%), 22 respondents who were employees / civil servants (44%), and 18 respondents who were housewives (36%) and finally none of the respondents were retirees.

The composition of research respondents based on the amount of income shows that there are 11 respondents with incomes between Rp 1,000,0000 – Rp 3,000,000 / month (22%) and 5 respondents with incomes between Rp 3,000,000 – Rp 5,000,000 / month (10%), and finally 34 respondents with incomes above Rp 5,000,000 / month (68%). Furthermore, the composition of research respondents based on the frequency of purchasing Starbucks beverage products shows that there are 28 respondents buying more than 1 time every week (56%), then 13 respondents buy 1-2 times every week (26%), finally, as many as 9 respondents buy 3-4 times every week (18%).

3.2 Data Analysis

Descriptive statistical analysis is useful for describing and explaining the results of objects that have been studied as they are. From there, conclusions can be drawn related to objects that have been studied previously and can be observed using a series of numbers [10]. The results of descriptive statistical analysis only describe the content of the variables under study but are not intended to test any hypothesis.

Table 1. Descriptive Analysis

	Pre-Test	**Post-Test**
N	50	50
Mean	1.40	1.94
Std. Deviation	.495	.740

Furthermore, the normality test in this study was used to test whether the distribution of data in a group of data collected was normally distributed or not [11]. This study used Kolmogorov Smirnov's normality test with the condition that the significant value >0.05.

Table 2. Test of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pre-Test	.391	50	.000	.622	50	.000
Post-Test	.306	50	.000	.750	50	.000

Based on the table above, the resulting significance value is 0.000 > 0.05. Thus, it is stated that the data does not have a normal distribution. Furthermore, homogeneity tests were used to show that both groups of samples that had been obtained were taken from the same variant population. Where the condition of the test is that the data is said to have homogeneous variance if the significant value of the test is >0.05.

Table 3. Homogeneity

		Levene Statistic	df1	df2	Sig.
Decision making	Based on Mean	5.803	1	98	.018
	Based on Median	2.579	1	98	.112
	Based on Median and with adjusted df	2.579	1	97.983	.112
	Based on trimmed mean	6.125	1	98	.015

Based on the table above, the resulting significance value is 0.18 > 0.05. Thus, it is stated that the data obtained has a homogeneous variance. The Wilcoxon test was used to test the hypothesis. The Wilcoxon test itself is an alternative to the paired T-test if the data studied do not meet the assumption of normality. The Wilcoxon test itself is carried out to see whether there is a change in the average of the two data samples studied. Where the condition of the test is that the data is said to have a difference if the significant value of the test is <0.05

Table 4. Wilcoxon Test

	Post Test - Pre Test
Z	-6.289[b]
Asymp. Sig. (2-tailed)	.000

Based on the table above, the resulting significance value is 0.000 < 0.05. Thus, it is stated that the two data samples studied have differences. Finally, the N-gain test was carried out, and it was found that the application of the decoy effect resulted in differences between the pre-test and post-test classes. N-gain test to measure the effectiveness of the treatment applied, namely the decoy effect. The N-gain test is performed by calculating the difference between the pre-test and post-test values. Based on the Table 5, the resulting mean value for the N-gain score is 0.68, where 0.68 is between 0.3 and 0.7, with a moderate level of effectiveness. As for the N-gain score in the form of percent produced, it is 68%, which is

included in the category of quite effective.

Table 5. N-gain Test

	N	Minimum	Maximum	Mean	Std. Deviation
N-gain score	50	.00	1.00	.6800	.34641
N-gain percent	50	.00	100.00	68.0000	34.64102
Valid N (listwise)	50				

4 Conclusion

Based on the results of research and data processing that has been carried out, conclusions can be drawn that there are changes in consumer decisions before and after the application of the decoy effect based on the Wilcoxon Test conducted with results of 0.000<0.05 so that it can be concluded that Ha is accepted, and Ho is rejected. In addition, the decoy effect is also considered quite effective on consumer purchasing decisions based on the N-gain test conducted; results were obtained 0.68 for the N-gain score so that it entered the medium category and 68% for the N-gain percent so that it was considered quite effective. The strength of this study is that researchers cannot control the awareness and seriousness of respondents in filling out questionnaires, so the data collected is not necessarily valid, and the research time is limited. For future research, it is hoped that qualitative methods can be added to provide a broader perspective on this topic because this research uses quantitative methods, the results will be in the form of numerical and statistical data that do not provide in-depth results such as why the application of decoy effects has an impact on purchasing decisions. Finally, Starbucks Jakarta has done the right thing by applying the decoy effect to influence the purchasing decisions of its consumers. In the future, it is hoped that in addition to implementing the decoy effect, Starbucks can also continue to pay attention and implement other strategies to increase the company's profits in the future.

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