Identification of Factors Affecting Consumers In Buying Local Chocolate Products

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ARTICLE INFO	ABSTRACT
	Yogyakarta has become a potential market for culinary industries. One of the emerging products, which becomes a typical souvenir from Yogyakarta, is local chocolate products. Some of the local chocolate producers continue to grow through their uniqueness and different sales points. The objective of this study is to investigate factors affecting of consumer decision making in purchasing local chocolate as a souvenir. This study was conducted in September 2019 through primary data collection in Yogyakarta. This research study involves exploration of significant target consumers. The total sample of 31 respondents were collected by accidental sampling. The results indicate that consumers highlighted promotion as the most important marketing factor that influences the purchasing decision for local chocolate products. On the other hand, consumers show that the products' quality and store are more important than the prices. Premium quality products, attractive and economical packaging, and giving product samples, ranked as the top three influential promotion sub-factors related to local chocolate product selection. Consumers who have higher educational backgrounds will focus on quality. The price factor becomes the last consideration, which is the variable price versus the number of contents in one package.

1. INTRODUCTION

Chocolate is one of popular snacks in Indonesia. Chocolate is ranked fourth after pastry, biscuit, and candy with a market share of up to the US $776 million. The cocoa industry in Indonesia has rapid growth potential with high value-added cocoa derivative products. Global cocoa demand growth is approximately 4 million tons per year. Based on data taken from the International Cocoa Organization (ICCO) in the last five years, demand has increased by an average of 5 percent per year (Euromonitor International, 2015).

The total population in Yogyakarta, according to (Badan Pusat Statistik Propinsi D.I Yogyakarta, 2020), is 3.457.491 people with various ethnic characteristics. Meanwhile, the

homogeneity of its population is its trademark as the city of students and tourist destinations. This combination makes the market share in this city very attractive to the culinary industry, including chocolate food and beverages. Chocolate, which can either be a snack or a drink that is suitable for the millennial lifestyle, is undoubtedly an attractive market share.

Several studies on consumer behavior towards the consumption of chocolate products have been conducted. Consumer behavior is defined as the dynamic interaction of influence and cognition, behavior, and the environment in which humans exchange aspects of life (Engel *et al.*, 1995). Sukma and Baihaqi (2013) analyzed the consumers' perceptions of chocolate products in the city of Banda Aceh. Significant factors that influence consumer's perceptions of chocolate products in Banda Aceh City are taste, price, quality, and advertising. Jumba *et al.* (2015) analyzed consumer decision-making behavior for the type of Banua chocolate products in Sa'adah industry agency, Palu. Most consumers who consume those chocolates are students, and the least are employees. The types of chocolate they like include cashew, cheese, chili, wafers, ginger, and coffee. Darcaniya (2015) observed the factors that influence the consumer's intention to buy Monggo chocolate via online transactions. Maulidi (2018) analyzed the factors that influence the decision-making process of consumers in purchasing chocolate changer drinks in Padang City.

This research was conducted in order to support the sustainability of cocoa cultivation by local farmers, to support the development of local SMEs, and the growth of tourism, especially for local chocolate industries in Yogyakarta.

The marketing mix is used to describe the various choices an organization has to make in the process of bringing a product or service to the market (Dangelico and Vocalelli, 2017). For many years, marketing decision-making areas have been built around the 4P model: product, price, place, and promotion (Hulland et al., 2018). Since 1980, this model has been expanded to include people, processes, and physical evidence. Pourdehghan (2015); Borden (1965) claims to be the first to use the term marketing mix. The consumption of processed cocoa products in Indonesia from 2002 to 2012 has increased quite significantly. Table 1 shows that the consumption of processed cocoa products is very volatile, but tends to increase.

Table 1. Development of consumption of processed cocoa products in Indonesia

Year	Instant Chocolate		Powder Chocolate	
	Consumption (g/capita)	Increasing %	Consumption (g/capita)	Increasing %
2002	23,4		10,4	
2003	7,8	-66,67	5,2	-50
2004	23,4	200	10,4	10
2005	31,2	33,33	10,4	0
2006	15,6	-50	10,4	0
2007	23,4	50	10,4	0
2008	23,4	0	10,4	0
2009	15,6	-33,33	5,2	-50
2010	15,6	0	5,2	0
2011	23,4	50	15,6	20
2012	54,6	133,33	83,2	433,33

Source: (BPS, 2018)

A very significant increase in consumption occurred in 2012, where instant chocolate consumption reached 54,6 g/capita, up 133,33% compared to the previous year. Meanwhile, powdered chocolate consumption reached 83,2 g/capita or an increase of 433,33% from a

year earlier. With the increase in consumption of processed cocoa products in Indonesia, it will increase the opportunities for the cocoa processing industry to be further developed. In addition, it is also supported by an increase in the area of cocoa fields and production. Hence, the availability of cocoa as a raw material for the cocoa processing industry can always be fulfilled. This proves that chocolate is increasingly in demand by consumers in Indonesia. The amount of local chocolate snack consumption in Yogyakarta increases along with the development and the increase of the population numbers as well as the increasing numbers of tourists visiting the city.

2. RESEARCH METHOD AND MATERIALS

This study was conducted with a survey method in the Special Region of Yogyakarta, Indonesia, with the consideration that local cocoa producer rapidly emerges to make cocoa as the local specialty product. Data was collected in September 2019. According to Anderson et al. (2017), to determine the necessary sample size, there are three information needed: precision, confidence, and data homogeneity. The total sample of 31 respondents was collected by accidental sampling. Primary data collection was done by conducting questionnaire.

The data was collected from consumers of local chocolate products in Yogyakarta. The measurement scale used is a Likert scale (Sullivan and Artino, 2013), with five scales used in this research. Local chocolate souvenir producers in Yogyakarta continue to grow, compete with unique and different selling points of their respective superior products. This research was conducted to determine the factors that influence consumer decision-making in purchasing local chocolate products in Yogyakarta. In this study, secondary data collected were the geography and demography of Yogyakarta; local chocolate products in Yogyakarta: *Monggo* Chocolate, *nDalem* Chocolate, *Joyo* Chocolate, *Tugu* Chocolate, *Soklat 'e Jogja*. Before analyzing the data, the validity and reliability tests were conducted to determine the validity of the data and the level of confidence of the data instruments (Taherdoost, 2018).

A comparison of the importance of key marketing factors or marketing mix (Išoraitė, 2016) against the factors that influence purchases (Chikweche and Fletcher, 2010) was carried out using the Kruskal-Wallis test. Marketing mix data from each consumer group, including products, prices, places, and promotions, will be analyzed using the ANOVA or Kruskal Wallis test depending on data normality (Hecke, 2012).

3. RESULTS AND DISCUSSION

Table 2 shows that the average consumers who buy local chocolate products from Yogyakarta are from outside the city, which are 71% of the respondents. This indicates that the local chocolate products are desirable as souvenirs for tourists who come to Yogyakarta. In terms of gender, women dominate the chocolate consumption; 67,7% of respondents in this study are female. The age of consumers who dominate in this local chocolate field is the age group of 20 to 40 years, which is about 74,2% of the percentage. Meanwhile, the number of respondents who less than 20 years old is around 22,6 % of the ratio. This dominant age group is classified as a youth that is actively working and following trends and lifestyles; so that they consume more chocolate and believe in the benefits of chocolate in improving mood (Meier et al., 2017). Chocolate variants: bittersweet chocolate, dark chocolate, white chocolate, and milk chocolate contain *theobromine* and *phenylethylamine* (Vinson et al., 1999). *Theobromine* and *phenylethylamine* have an essential role in regulating feelings of pleasure in someone (Parker et al., 2006). The increased serotonin in

our brain, which is usually referred to as the hormone of happiness, causes feelings of joy. (Sirgy, 2019).

Table 2. Characteristics of Respondents

Variable	frequency	Percentage (%)
The origin area of the respondents		
Yogyakarta	9	29
Outside Yogyakarta	22	71
Total	31	100
Sex		
Male	10	32,30
Female	21	67,70
Total	31	100
Age (years)		
< 20	7	22,60
20-40	23	74,20
40-60	1	3,20
> 60	0	0
Total	31	100
Educational background		
Elementary/ junior high	0	0
Highschool/Vocational College	12	38,70
Bachelor University	12	38,70
Magister and beyond	6	19,40
Other	1	3,20
Total	31	100
Job/Occupation		
Students/ University students	11	35,50
Civil Servant	4	12,90
Private Sector	10	32,30
Entrepreneur	1	3,20
Other	5	16,10
Total	31	100
Income per month (million IDR)		
Less than 1,5	8	25,80
1,5-3	14	45,20
3-7	8	25,80
7-10	1	3,20
10-20	0	0
More than 20	0	0
Total	31	100

Based on Table 2, it is also shown that approximately 40% of respondents have a moderate educational background: high school and university. Educational background is a psychological factor that influences the decision in choosing the type and quality of the food that people consume (Glanz et al., 1998). Local chocolate consumers who are averagely young aged people are more concerned with following trends and lifestyles. It is also triggered by the widespread use of social media to provide information starting from the newest products on the market to the characteristics of the tourist destinations they would pick when they have off-time (Vogel et al., 2014). The level of income in accordance with

the age of consumers who tend to be young is below the range of seven million rupiahs per month. Still, with the number of more middle-class consumption targets, this becomes a very attractive market.

Respondents who are still students and who work in the private sector have the largest percentage of 35,5% and 32,3% (Table 2). This finding relates to Yogyakarta's trademark as the city of students as well as a tourist destination, which results in most local chocolate consumers come from students or private workers who live in or visit Yogyakarta.

Table 3 explains the description of the respondents based on the type of chocolate, frequency of purchase, number of one-time purchase, consumption orientation, and reasons for purchasing local chocolate products. (Bryant, 2011) defines social marketing as a commercial marketing technology application for analysis, planning, execution, and evaluation of programs designed to affect the voluntary behavior of target audiences. As many as 61,3% of the respondents bought milk chocolate, and 35.5% bought dark chocolate. Meanwhile, white chocolate was the least in demand, with only 3,2% percentage. Most consumers make a one-time purchase in a few months (67,7%). This case can be seen as the majority of consumers who buy local chocolate products from Yogyakarta, coming from outside the city, and they may go to Yogyakarta for tourist destinations once in a few months. Purchases made an average of 1-2 pieces of chocolate (61,3%), and the rest of them bought more than two pieces.

Respondents who bought local chocolate products for their consumption have the biggest percentage (43%) and others to be consumed with family/relatives and consumption for children. Besides, some of the respondents bought identical chocolate with gifts to show affection to their partners. There are three ways to change consumer attitudes (Bryant, 2011): (1) changing beliefs, or change the way consumer think, or consumer perception; (2) changing attribute importance, depending on how the brand is perceived; (3) changing ideal points by involving altering consumer's preferences about the ideal product. Chocolate, which is a snack that fits the millennial lifestyle, will become an attractive market share. The amount of consumption of local chocolate snacks in Yogyakarta increases along with the population growth as well as the increasing numbers of tourists visiting the city. Local chocolate as Yogyakarta's souvenir has become distinctive products, which is the reason for the highest purchase apart from the taste, quality, and brand power of the products. According to Miller et al. (2017), the overt features and benefits of a product are based on individual cognitive faculties. But actually, there are many aspects of products that will appeal to the individual's affective and conative aspect. The aspects that go beyond the rational decision-making process are branding, styling, and manufacturer reputation (de Chernatony, 1999).

Based on the analysis, the independent variables are factors that influence purchases; 14 variables are in the product category, 3 variables in the product category, 7 variables in the place category, and 8 variables in the promotion category. A comparison of the importance of marketing mix factors against factors that influence purchases will be conducted using the Kruskal-Wallis test.

In terms of the marketing mix, consumers highlight promotion as the most important marketing factor influencing the purchase decision of local chocolate products. On the other hand, consumers state that the products and places are more important to their purchasing decision factors than the price. Analysis of the sub-factors of each marketing mix factor will be conducted using the Kruskal-Wallis test.

Table 3. Description of the type of chocolate, frequency, quantity, orientation, and reason for purchasing Yogyakarta's local chocolate

Variable	Percentage (%)
What types of chocolate are bought and liked	
Dark chocolate	35,50
Milk chocolate	61,30
White chocolate	3,20
Total	100
Frequency of purchase	
Once a week	6,50
At least once a month	25,80
Once in a few months	67,70
Total	100
Amount in one purchase	
1-2 pieces	61,30
3-5 pieces	25,80
6-10 pieces	3,20
> 10 pieces	9,70
Total	100
Consumer's orientation	
Themselves	43,16
Their children	9,79
Their partner	13,74
Family/ relative	29,42
Other	3,89
Total	100
Reasons to buy local chocolate products	
Because it's a local product of Yogyakarta	48,40
Brand Image	9,70
Quality	12,90
Flavor	29
Price	0
Total	100

Table 4. Factors that influence purchases

Factors that influence purchases	Consumers' responses
Product	$4,78 \pm 0,77$ a
Price	$4,68 \pm 0,91$ a
Place	$4,89 \pm 1,02$ ab
Promotion	$5,00 \pm 1,00$ b

Note: Means followed by different letters are significantly different ($p \leq 0.05$)

3.1. Product

Five significantly important product sub-factors ($p \leq 0,05$) that influence consumers' purchasing decisions are good taste, quality assurance on the packaging, preservative-free label, raw materials (ingredients), and nutritional content. The good taste of local products is still decisive in influencing purchases on the product side. Quality assurance, preservative-free label, constituent raw materials, and nutritional content of the product is a must for consumers. Consumers who have higher education will focus more on the quality of the food that they consume (Öz et al., 2018).

Table 5. Level of importance of product sub-factors

Products Attribute	Value
Good flavor	5,32 ± 0,98 cd
Ingredients	4,90 ± 0,98 bcd
Nutritional content	4,90 ± 1,08 bcd
Without preservation	5,03 ± 0,98 bcd
Long self-life	4,74 ± 1,15 abcd
Have a quality guarantee on the packaging	5,26 ± 0,96 cd
Using 100% of local raw materials	4,58 ± 1,34 abc
Using imported raw materials	3,55 ± 1,18 a
Easy-to-use packaging	4,71 ± 1,16 abcd
Visually attractive packaging	4,90 ± 1,16 bcd
Showing trademark and producer name on the packaging	4,74 ± 0,96 abcd
It has customer services phone number on the packaging	4,26 ± 1,18 ab
The ingredients are written on the packaging	4,84 ± 1,00 abcd
The reputation of the packaging brand and manufacturer	4,74 ± 1,12 abcd

Note: Means followed by different letters are significantly different (p≤0,05)

3.2. Price

Table 6 shows the comparison of the level of importance for the price sub-factor. Consumers consider price as a less important factor that influences their buying decisions for local chocolate products because it is equivalent to its quality. The price factor becomes the last consideration where the price variable versus the number of contents of one package becomes the most important; consumers are aware that the price for premium quality with high chocolate content compensates the price. Besides, the production cost tends to be high due to the small production scale and local raw materials.

Table 6. The importance of price sub-factors

Price Attribute	Value
Price versus product quality	4,84 ± 1,13 b
Price versus number of contents in one package	4,52 ± 1,12 a
Less expensive than other products	4,68 ± 1,22 ab

Note: Means followed by different letters are significantly different (p≤0,05)

3.3. Place

The comparison of the importance level of place sub-factors for local chocolate consumers is shown in Table 7.

Table 7. Levels of the importance of place sub-factors

Place attribute	Value
Official outlets	4,68 ± 1,22 ab
Location is near living space/ offices or recreational object	4,64 ± 1,31 ab
Easy parking lot	4,81 ± 1,80 abc
Lower price	5,00 ± 1,03 bcd
Complete variations and types of chocolate products	5,00 ± 1,15 bcd
The authenticity of the product for sale	5,39 ± 0,88 cd
Online ordering and delivery system	4,52 ± 1,31 a

Note: Means followed by different letters are significantly different (p≤0.05)

The most important place sub-factor (p≤0,05) for consumers is a place that guarantees the authenticity of the product because these local chocolate products are sold in

several places; official outlets as well as souvenir stores and tourist attractions. Lower prices and a complete variety of types of chocolate in the store are also important factors in determining purchases.

3.4. Promotion

Santini et al., (2015) define sales promotion as an activity that focuses on marketing events to have a direct impact on the behavior of the firm's customers. Promotion is the most important marketing factor influencing the purchase decision of local chocolate products. Table 8 shows a comparison of these consumer promotion sub-factors assuming that all promotion sub-factors are not significantly different for their purchasing decisions. However, premium quality products, attractive and economical packaging, and giving product samples ranked in the top three for influential factors.

Table 8. The importance level of promotion subfactors

Promotion attribute	Value
Giving product sample to be tasted	5,16 ± 1,21 ab
Owning brochures with detailed info of the products	4,87 ± 1,18 a
Owning a website with detailed info of the products	4,84 ± 1,29 a
Discount	4,94 ± 1,36 ab
Premium quality products	5,45 ± 0,81 abc
Attractive and economical packaging	5,29 ± 0,94 ab
Available in parcel form as souvenirs	4,71 ± 1,40 a
Advertising and promotion on print and online media	4,81 ± 1,11 a

Note: Means followed by different letters are significantly different ($p \leq 0,05$)

4. CONCLUSION

Based on the results, it can be concluded that consumers highlight promotion as the most important marketing factor that influences the purchase decision for local chocolate products. On the other hand, consumers show that products and places are more important to their purchasing decisions than prices. Premium quality products, attractive and economical packaging, and giving product samples, ranked as the top three influential promotion sub-factors related to local chocolate product selection. Consumers who have higher education will focus more on the quality of the food that they consume. The price factor becomes the last consideration where the price variable versus the number of contents of one package becomes the most important; consumers are aware that the price for premium quality with high chocolate content compensates the price. Besides, the production cost tends to be increased due to the small production scale and local raw materials.

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