

## Analysis of Factors Influencing Consumer Preferences of Kasbi Sago (Sagu Jay Brand) Purchasing Decision

Nurdiyanawati Djumadil<sup>1\*</sup>, Suhardi<sup>2</sup>

<sup>1</sup> Department of Agribusiness, Faculty of Agriculture, Universitas Khairun, Indonesia,  
[diyana.waty@yahoo.co.id](mailto:diyana.waty@yahoo.co.id)

<sup>2</sup> Department of Agribusiness, Faculty of Agriculture, Universitas Khairun, Indonesia,  
[suhardi@unkhair.ac.id](mailto:suhardi@unkhair.ac.id)

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### ABSTRACT

The research identifies factors influencing consumer preferences of kasbi sago (Sagu Jay Brand) purchasing decision. It conducts in Ternate from July to December 2020. The *kasbi* sago from Sagu Jay Brand is produced in Jaya Village, distributed through collectors, and marketed in Ternate City. The brand is chosen because the village is a center of Sagu Jay sales with the highest consumer demand in North Maluku compared to other *kasbi* sago production. The research is a survey research using qualitative and quantitative methods. The qualitative aims at identifying research descriptions derived from traders in marketing the Sagu Jay product and related respondents. The qualitative data are then quantified by processing the data to generate tabulated valid data. The quantitative data are numeric or values in the variable are expressed in real numbers. Research variables to be observed include cultural, price, flavor, and purchase location factors. Consumer preference sampling refers to experts' opinion that sampling used to obtain representative data is a non-probability sampling, namely accidental sampling. The research analysis method used is conjoint analysis. The research results of factors influencing consumer preferences of Sagu Jay purchasing decision in Ternate indicate that flavor factor at the original level (1.921) and the chocolate level (1.668) are dominant factors and levels that form consumer preferences. The second dominant factor is the texture factor at the dry level (0.918) followed by the price factor at the level of Rp. 10.000 (0.576), and purchase location factor at the level of Kota Baru market (0.060). The lowest factor is cultural factors at regional acceptability (0.29). This suggests that the consumers prefer kasbi sago products from the Sagu Jay brand due to the flavor factor at the dry level than other factors.

**Keywords:** sagu jay, preference, consumers, purchasing, conjoint

### ABSTRAK

Penelitian ini bertujuan untuk mengetahui faktor-faktor yang mempengaruhi preferensi konsumen terhadap keputusan pembelian sago kasbi brand sagu jay yang dilaksanakan di Kota Ternate berlangsung bulan juli sampai Desember 2020. dengan pertimbangan bahwa produk sago kasbi brand sagu jay yang di produksi dari Kelurahan jaya dan didistribusi melalui pedagang pengepul yang dipasarkan di Kota Ternate merupakan sentra penjualan produk sago jay mempunyai tingkat permintaan konsumen tertinggi di dibandingkan dengan produksi sago kasbi lainnya yang ada di Maluku Utara. Jenis penelitian ini merupakan penelitian survey dengan menggunakan metode kualitatif dan kuantitatif. Kualitatif digunakan untuk mengetahui gambaran penelitian yang diperoleh melalui pedagang pengepul dalam memasarkan produk sagu jay dan responden yang berkaitan langsung. kemudian dikuantitatifkan dengan mengolah data untuk mendapatkan data yang valid yang ditabulasi. Data kuantitatif bernilai secara numerik atau nilai-nilai peubah ini dinyatakan dalam bilangan real. Sedangkan variabel penelitian yang akan diamati adalah faktor budaya, faktor tekstur, faktor harga, faktor rasa,

faktor lokasi pembelian. Penentuan sampel pada preferensi konsumen, secara keseluruhan berpedoman pada pendapat pakar sampling bahwa untuk mendapatkan data yang representatif, Metode pengambilan sampel dengan menggunakan *non-probability sampling* yaitu *accidental sampling*. Metode analisis yang digunakan adalah analisis konjoin. Hasil penelitian faktor faktor yang mempengaruhi preferensi konsumen terhadap keputusan pembelian sago jay di Kota Ternate menunjukkan bahwa dalam pengambilan keputusan konsumen lebih memilih faktor rasa pada level original (1,921), level coklat (1,668), yang merupakan faktor dan level yang paling dominan membentuk preferensi. Faktor dominan kedua adalah faktor tekstur pada level kering (0,918). Faktor harga pada level Rp. 10.000., (0,576), dan faktor lokasi pembelian pada level Pasar Kota Baru (0,060) serta faktor terendah adalah faktor budaya pada level tingkat kesukaan regional (0,29). Hal ini bearti bahwa konsumen lebih cenderung memilih produk sago kasbi brand sago jay karena faktor rasa pada level kering, di dibandingkan dengan faktor faktor lainnya.

**Kata kunci:** sago jay, preferensi, konsumen, pembelian, konjoin

## INTRODUCTION

Sago is a functional food product from cassava or locally known as “*Kasbi sago*”. It serves as nutrition that contains carbohydrates. The food product is a traditional food of North Maluku as a substitute for rice. It has a long rectangle shape with a thickness of 5 mm. It has yellowish-white color and soft texture, and it is dry after a drying process aiming at obtaining long shelf life.

Kasbi sago has a low protein level on an average of 0.43% as well as fat level. This is due to its main ingredient, which is cassava. It contains crude fiber of 2.17% (Chris Sugihono, Sarpina, M.Assagaf, Yopi Saleh, I Made Jana Mejaya, 2011). It is assumed as resistant starch, which is a fiber undigested by digestive enzymes in the healthy human small intestine. It has, however, physiological functions like food fibers including capable of binding bile acids, increase feces volume, and shorten transit time (Birt et al., 2013).

Sagu Jay brand, registered as “Hula Jay” brand is one of the *kasbi sago* products in Jaya Village North Tidore Sub-district, Tidore island. It is different from other *kasbi sago* produced in North Maluku in terms of shape, texture, and flavor variants. People recognize the product as “Sagu Jay” since it produces in Jaya Village. Sagu Jay demand is increasing over years from local consumers and outside North Maluku. Its production, however, cannot meet the increased demand as it produces only 3 times a week with an average production capacity of 5000 plates for original Sagu Jay and 1000 plates for flavor variants. Therefore, it requires an increase in production with a competitive market orientation.

Consumer preference factors that influence the demand and purchase decision are varied, namely, cultural, texture, flavor, price, and location factors. Consumers consider these factors in selecting the Sagu Jay products. Despite the high demand for original sago based on the increasing number of potential buyers, the demand is not proportional to the amount marketed due to the low level of production. Similarly, the demand for flavored sago is also varied with chocolate flavor as a favorite. The general issue, however, especially in Ternate City, is related to the low consumer purchasing power of flavored sago. In the location factor, price is a factor influencing consumer preferences (Rahardi & Wiliasih, 2016).

The Sagu Jay purchase decision is formed due to the consumer preferences for dominant factors that influence it. This encourages the researchers to develop a study on factors shaping the consumer preferences of Sagu Jay product purchase decisions as a reference for Sagu Jay producers in developing production and observing market information.

## MATERIALS AND METHOD

### Research Sampling

Consumer preferences sampling referred to sampling experts' opinion that there are no strict rules on the number of samples required from an available population for research to derive representative data (Nasution, 2011). Therefore, the sample was set at 30 respondents using non-probability sampling (nonrandom sampling) of accidental sampling. The research was related to consumer preferences for Sagu Jay; thus, samples taken were consumers met at the research location. Sampling continued until a certain period according to the research period (Sugiyono, 2017).

### Data Collection Method

Data collection methods used in the research included:

1. The observation is a data collection through direct observation to traders and respondents in Ternate City.
2. The interview is a data collection through questions and answers with respondents regarding preference factors, namely cultural, texture, flavor, price, and purchase location factors. The sample unit interviewed consisted of traders as key informants and respondents of Sagu Jay buyers.

### Data Source

The research data derived from two sources, primary and secondary data. The primary data were generated from a direct-structured interview with Sagu Jay respondents using prepared questionnaires. The secondary data were obtained from the Department of Industry and Trade and BPS (Bureau of Statistics).

### Research Type and Variables

The research was survey research using qualitative and quantitative methods. The qualitative method aimed at identifying the research description obtained from traders in marketing the *Sagu Jay* products and respondents regarding factors influencing consumer preferences of Sagu Jay purchasing decision. The data were then quantified by processing data to obtain tabulated valid data. The quantitative data were numeric data or the variable values were stated in real numbers (Sugiyono, 2014). The research variables observed included factors influencing consumer preferences of Sagu Jay purchasing decision, namely cultural factor, texture factor, price factor, flavor factor, and purchase location factor.

### Data Analysis Method

The research used conjoint analysis as its data analysis. Conjoint analysis is a technique specifically utilized to understand how consumer preferences for a product or service by measuring utility level and relative importance value of various attributes of a product (Hair et al., 1998). The research analysis stages were as follows (Julianisa et al., 2016):

1. Identify characters of Sagu Jay consumers selected as respondents by using descriptive analysis
2. Calculate the deviation value by subtracting the average ranking of each level from the average ranking of the respondents.
3. Perform part-worth estimation for each attribute level. The greater the part-worth (positive or negative) value, the larger is its overall utility value.
4. Calculate the percentage of the relative importance of each attribute by dividing the range of part-worth of each attribute by the total number of the range of part-worth
5. Evaluate the conjoint analysis results using the Kendall Tau correlation. The evaluation is intended to find a correlation between actual ranking and prediction ranking. The conjoint analysis tool uses SPSS 21.

## RESULTS AND DISCUSSION

The research identifies factors influencing consumer preferences of sagu kasbi purchasing decision from Sagu Jay brand as a dominant factor that shapes preferences. These factors are indicated in Table 1.

Table 1. Factors Influencing Consumer Preferences of *Kasbi* Sago of Sagu Jay Brand Purchasing Decision in Ternate City

Factor	Level		Utility Value	Preference
	No	Description		
Culture	1	Ethnic	-.029	Regional
	2	Regional Acceptability	.029	Acceptability
Texture	1	Soft	-.918	Dry
	2	Dry	.918	
Flavor	1	Original	1.921	Original
	2	Chocolate	1.668	Chocolate
	3	Strawberry	-.799	
	4	Lemon	-1.592	
	5	Mango	-1.199	
Price	1	Rp. 10.000.,	.576	Rp.10.000.,
	2	Rp. 13.000.,	-.188	
	3	Rp.,15.000.,	-.388	
Location	1	Kota Baru Market	.060	
	2	Gamalama Market	-.060	
(Constant)			5.365	

Table 1 indicates that the cultural factor that influenced consumer preferences was in regional acceptability with a positive utility value (0.029), whereas the ethnic level had a negative value (-0.029). This suggests that the consumer preference of Sagu Jay purchasing decision was regional acceptability. This result was due to the people of Ternate City that are varied in ethnicity who mingling with and influence each other as well as adopt traditional values. One of the values is a habit of consuming *kasbi* sago as a substitute for carbohydrates, complementary food, and snack. The result agrees with a research by Andi Faisal dkk, 2018 that cultural factors influenced consumer purchase decisions; however, the influence was in negative value or not a dominant factor because other factors were more important than the cultural factor. Culture is a set of belief values, habits, desires, and behaviors learned by the local community as a code of conduct (Kotler & Amstrong, 2012) The cultural factor is also a determinant of desires and behaviors that are reflected from ways of life, habits, and traditions in the demand for various goods and services. Consumer preferences, in this case, will be different from one consumer to another due to no homogeneity in the culture (Syafirah, Lisbeth Mananeke, 2017).

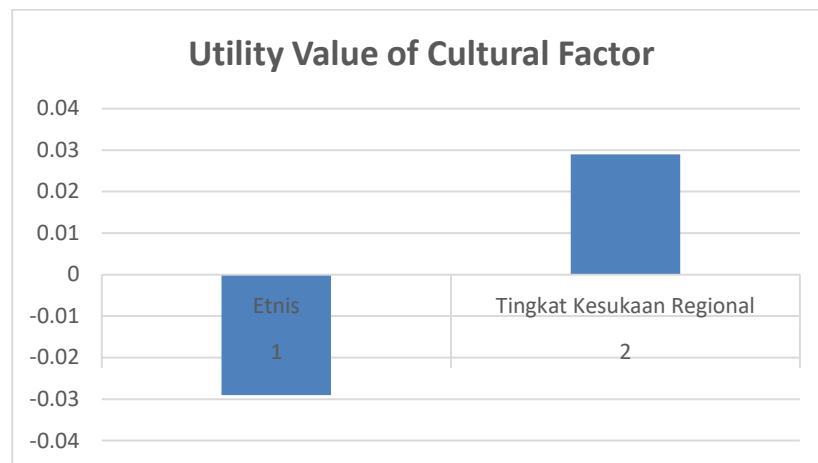


Figure 1. Utility Value of Cultural Factor

The texture factor that influenced consumer preferences was found in dry texture level with a positive utility value (0.918), while the soft texture level was negative (-0.918). The result indicates that the consumer preferences of Sagu Jay purchasing decision were dry sago. This was due to the soft Sagu Jay that is soft and easily moldy; thus, it has low durability (no more than two days). The dry sago, in contrast, has longer storability (about one year) if it is stored in a dry area. The texture factor is a factor most considered by consumers since consumers tend to prefer products according to the product characters (Putrinda, 2017).

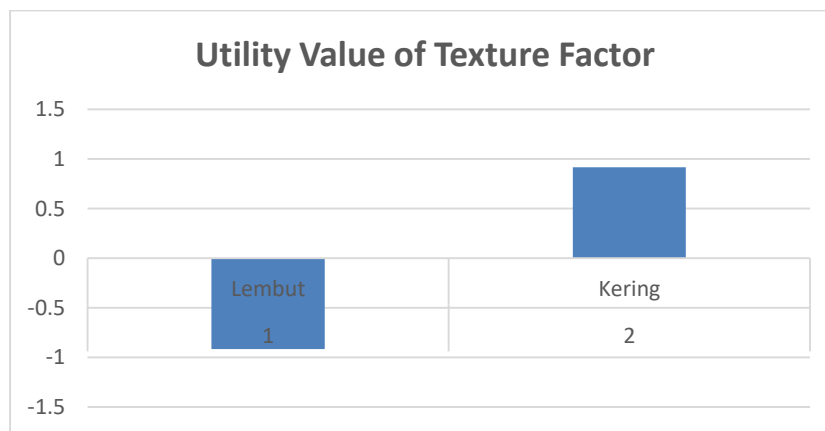


Figure 2. Utility Value of Texture Factor

The flavor factors that influenced consumer preferences were original flavor and chocolate flavor levels with a positive utility value of 1.921 and 1.668, respectively, whereas the other three levels had a negative value, namely strawberry flavor (-0.799), lemon flavor (-1.592), and mango flavor (-1,199). This indicates that the consumer preference of Sagu Jay purchasing decision was original flavor. In the perspective of historical characteristics, this result was related to the original sago that has been produced for decades since sago was first introduced to the community as a staple food substitute for rice; therefore, people are accustomed to consuming original Sagu Jay. Sagu Jay in various flavors was produced eight years ago and launched in 2018. It was an effort to modernize high-quality *kasbi* sago that contained high protein since it is fortified with instant milk powder. People, however, are still not familiar with these flavors, especially in Ternate City due to lack of promotion. Nevertheless, the demand for these various flavors of Sagu Jay has spread to other regions outside Ternate City

and even outside North Maluku, such as Sulawesi, Maluku, and Java. Sagu Jay of chocolate flavor had a positive influence on purchasing decision as consumers stated that the flavor is tastier than other flavors. A company should prioritize an improvement of quality product through an evaluation of flavors that are favored by consumers because there are flavors less suitable to the acceptance of local flavors (Rheinnadia et al., 2017). Flavor is not a priority for consumers in purchasing since consumers prefer products suitable to product characters that meet their needs and become their priority (Fauza et al., 2018).

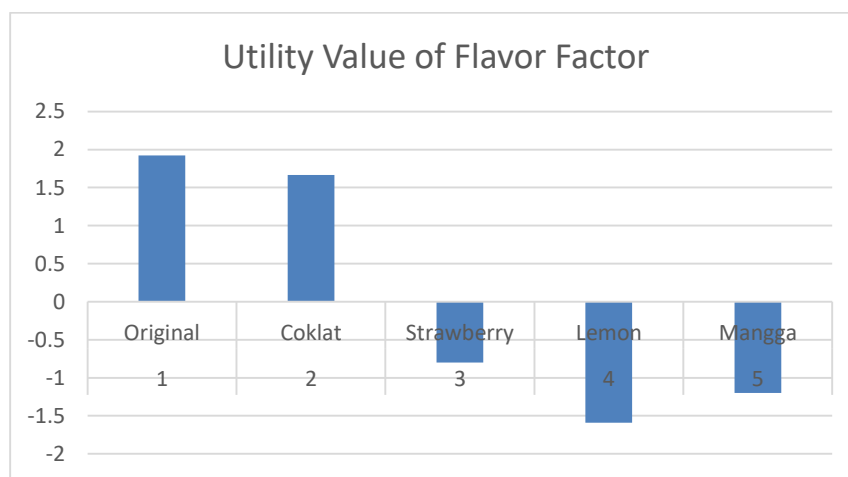


Figure 3. Utility Value of Flavor Factor

The price factor that influenced consumer preferences was at the price level of Rp.10,000 with a positive utility value (0.576), whereas the price level of Rp. 13,000 and Rp. 15,000 had a negative value of -0.188 and -0.388, respectively. This indicates that the consumer preferences of Sagu Jay purchasing decision was at the price of Rp.10,000. Preference to lower price did not suggest a low quality or taste; however, the price is for original Sagu Jay product that is in great demand among the consumers and price is not a factor for consumer consideration. Price is one of the marketing mix elements that is easy to adjust. Research by (Kepulauan et al., 2014) indicates that the price factor had a positive value suggesting that price had a significant influence on consumer behavior in buying processed sago products. In the perspective of consumers, price is often utilized as a value indicator if it is linked to the perceived benefits of a good or service. It is comparable to a study by (Wardhani et al., 2016) that the price factor had no significant influence on consumer perception. Therefore, it can be inferred that at a certain price level, if benefits perceived by consumers increase the value would increase (Puspita & Suryoko, 2018). The price factor suitable to flavor obtained becomes the consumer preferences in selecting products (Preferensi et al., n.d.). The price variable had a moderate relationship to consumer satisfaction; thus, price had a positive and significant influence on consumer preferences (Putri et al., 2015). The price factor influenced the purchase decision yet it was not significant compared to other factors because a company should consider price to add benefits from the product to increase consumer confidence in their purchase decision (Jurnal et al., 2018). The price of the same type and size could be different in the flavor level (Mulyasari et al., 2020).

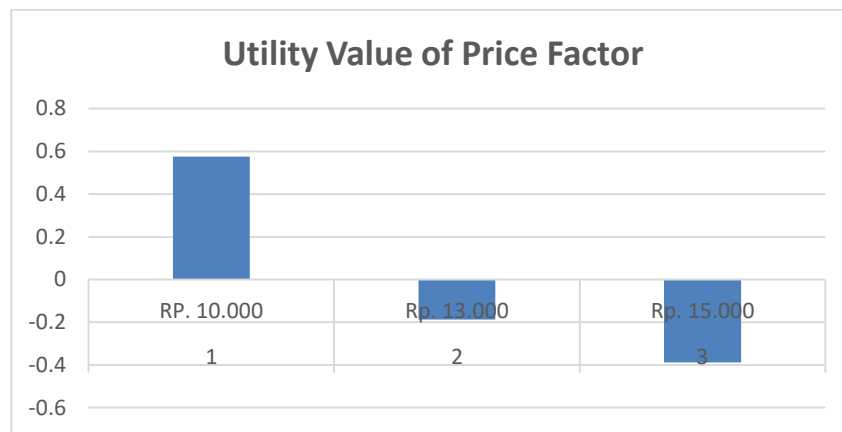


Figure 4. Utility Value of Price Factor

The purchase location factor that influenced consumer preferences was found in Kota Baru market level with a positive utility value (0.060), whereas at Gamalama market had a negative utility value (-0.060). This suggests that the consumer preference of Sagu Jay purchasing decision was purchase location at Kota Baru market. This was due to the market as one of the traditional markets that sells foods and clothing. The market also sells agricultural commodities that are supplied from outside Ternate City. The market is also known for its relatively low price and has many visitors. Shop location or site is where companies or traders are located to carry out their operation. The consumer preferences are more dominant to the shop location. This market operates twice a week, Wednesday and Saturday. The Sagu Jay product is first introduced in the Kota Baru market through traders and in a large quantity; thus, consumer purchasing power in this market is high compared to those in the Gamalama market that only have one trader and limited quantity although it operates every day. This result is supported by (Sembiring, 2017) research indicating that market location had a significant influence on consumer preferences. The easier the market location to reach, the higher is the consumer preferences to buy a product at the market. Consumers prefer a place that provides various goods to a place with less variation because they have an opportunity to select (Hariyadi, 2017). The location variable had a significant influence on the hotel selection, which means that consumers that had one score higher for location level or strategic place had a greater chance and tended to select the hotel (Rahardi & Wiliasih, 2016).

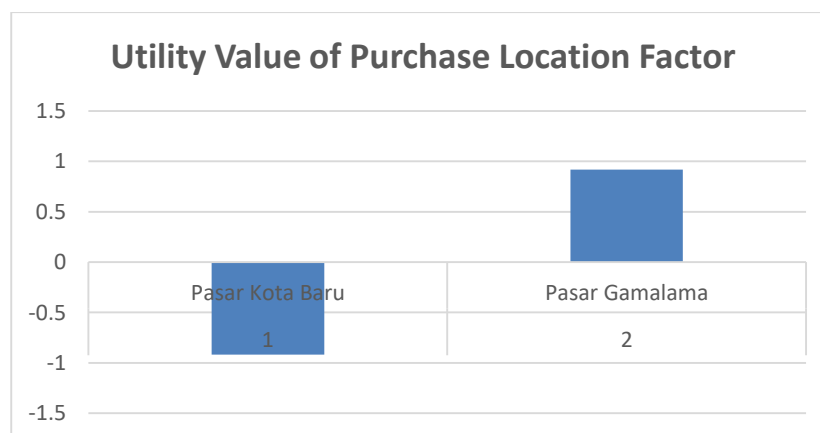


Figure 5. Utility Value of Purchase Location Factor

A correlation test to measure the accuracy of prediction of conjoint analysis results on a combination of levels and consumer preferences result can be seen in Table 2

Table 2. Results of Correlation test of Factors Influencing Consumer Preferences of Sagu Jay Purchasing Decision in Ternate City

Parameter	Value	Sig.
Pearsons' R	.915	.000
Kendall's tau	.905	.001

Table 2 shows that Pearson's correlation value (R) was 0.915. The value implies that there was a relationship with high accuracy between level combination and consumer preferences indicated by a significant value of  $0.000 < 0.05$  (significance level). The test result can be interpreted that the conjoint analysis result was accepted in describing consumer preferences. The Kendall's Tau correlation was not calculated because the research utilized Likert scale rating instead of ranking.

## CONCLUSION

Factors influencing consumer preferences of Sagu Jay purchasing decision in Ternate City consisted of flavor factor at the original level (1.921) and the chocolate level (1.668), which were the most dominant factors and levels that form preference. The second dominant factors were the texture factor at dry level (0.918), the price factor at a level of Rp. 10,000 (0.576), and the purchase location factor at Kota Baru market level (0.060). The lowest factor was the cultural factor at regional acceptability (0.29). Consumers prefer kasbi sago product of Sagu Jay brand based on preference in flavor factor at a dry level compared to other factors.

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