

Analysis of Attributes in Consumer Preferences Towards Rice Purchasing Decisions in South Bangka

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ABSTRACT

Consumer preferences can assist a business in understanding the attributes that are essential or desired by consumers. The decision of a consumer to choose a product is closely related to the preferences of an individual consumer. An example of a commodity in the agricultural sector that has the potential to influence consumer preferences is rice. This study aims to identify the attributes that are preferred by consumers in the decision to purchase rice, considering the importance level of each attribute, in The Toboali District, South Bangka Regency. The sampling method used in this research was judgment sampling. Data collection techniques include interviews, questionnaires, observations, and focus group discussions. Data processing in this study uses Conjoint Analysis. The results showed that consumer preferences for rice products were based on certified rice, packaged in sacks, 5 kg in size, and had a tender texture.

Keywords: *certified rice; consumer influence; consumer preferences; rice commodity*

INTRODUCTION

Consumer preferences are activities that can help a business identify the attributes that are essential or desired by consumers when purchasing rice products (Syahrir et al., 2015). In this case, consumer preferences need to be explored because a consumer's decision to choose a product is closely related to the preferences or choices of an individual consumer (Adiyoga and Nurmalinda, 2012). Consumer preferences indicate the liking of consumers for a product based on the fulfillment of consumer needs for attributes possessed by a product, including rice (Nurmalina and Astuti, 2012). Therefore, if producers have presented attributes according to consumer needs, it is expected to impact the improvement of the quality of rice products (Hidayat and Savitri, 2020). This is expected to provide satisfaction in the use of the product by end consumers, thus generating consumer loyalty to reuse the product or use it continuously (Krystallis and Ness, 2005).

The emergence of various types of rice products in the market demands marketers to seek information on how consumer preferences for the desired rice products (Resky, 2022). Information on consumer preferences for rice products can be crucial for business owners to develop a product that aligns with the needs or desires of consumers.

Business actors, especially rice distributors, always engage in various promotional activities to develop their marketing systems and expand the distribution coverage area. These activities are carried out continuously to enhance product sales and bring the product closer to the hearts of consumers. Consumer actors are a crucial component in agribusiness activities (Haryanto, 2019). Understanding consumer preferences and attitudes

provides vital market information for the agribusiness sector, serving as input for planning, developing products, and marketing more effectively (Owon and Rato, 2021). Consumers tend to choose products of better quality at a more affordable price (Yulia et al., 2019).

Toboali Subdistrict, the capital of South Bangka Regency, is a developing area and serves as a local rice marketing destination for the consumption of rice from several rice production centers in South Bangka Regency. Toboali City also has a diverse population structure and social classes. Based on the above description, this study aims to identify the attributes that are preferred by consumers in the decision to purchase rice, considering the importance level of each attribute, in The Toboali Subdistrict, South Bangka Regency.

MATERIALS AND METHODS

This research was conducted in The Toboali Subdistrict, South Bangka Regency. The selection of this location was purposive, considering that The Toboali Subdistrict was one of the rice production centers in South Bangka Regency, Bangka Belitung Islands Province. The data collection in the field took place in April – May 2023.

The data used in this study were primary data obtained from focus group discussions and questionnaire surveys. Focus group discussions were conducted by distributing a brief questionnaire to identify the top five attributes considered by consumers in making rice purchase decisions. Subsequently, a questionnaire was distributed using the five attributes obtained in the focus group discussions to determine respondent characteristics and consumer attitudes.

This study used quantitative and descriptive methods. The quantitative method was employed to process research data to obtain valid data in tabulation form, while the descriptive method is used to illustrate the acquired research data. The data analysis techniques employed in this study include Conjoint Analysis.

The measurement of attribute analysis with consumer preferences uses conjoint analysis (Adiyoga and Nurmalinda, 2012). Conjoint analysis aims to provide identification of the most preferred combinations of attributes by consumers and the relative importance of each attribute (Isfar and Widowati, 2020). According to Yasmin *et al.*, (Yasmin *et al.*, 2017), the stages of conjoint analysis include:

The selected attributes of rice products were externally recognizable and easily identified by consumers. Four chosen attributes include taste, size, packaging, and halal label. The research findings indicated that taste, aroma, texture, color, and product attractiveness, packaging, and price are relevant food attributes to be considered.

Subsequently, the attribute/sub-attribute levels were determined for the four specified attributes. The determination of these attributes and sub-attributes was also based on a review of relevant research and discussions with Mr. Imam, a rice producer. The attributes and sub-attributes used in this study can be seen in Table 1.

Table 1. Attributes and sub-attributes in consumer preferences

Attributes	Subattributes
Taste	Sweet, Tender
Size	5 kg, 10 kg, 15 kg
Packaging	Plastic, Sack
Certification	Certified, Not C certified

Source: Processed primary data, 2023

The use of four attributes and eleven sub-attributes resulted in a possible combination formed from various sub-attributes, which is $2 \times 3 \times 2 \times 2 = 24$ stimuli. Stimuli were combinations of attributes formed. Based on the possible combinations formed, theoretically, respondents must evaluate 24 types of sub-attribute combinations for the product. The measurement of stimuli used in this study employed a rating with a Likert scale. The relationship between numerical scores and the preference choices for the presented stimuli will be found in Table 2.

The assessments of the stimuli provided by the respondents were then entered into the SPSS syntax system for the conjoint analysis process.

Table 2. Likert Scale for Assessing Attribute Analysis with Consumer Preferences

Statement	Value
Extremely Like	5
Like	4
Quite Like	3
Dislike	2
Extremely Dislike	1

Source: Processed primary data, 2023

RESULTS AND DISCUSSION

Consumer actors had various reasons that result in them having a preference for one product over another. Consumer preference was a choice of liking, leading consumers to favor a particular product (Lestari and Saidah, 2023). A product was composed of various attributes inherent to the product. These attributed build interest, enabling consumers to have a choice of a specific product (Gunawan and Melinda, 2021).

The conjoint analysis tool was one of the analytical tools used to observe consumer preferences for a product (Artanti, 2021; Krystallis and Ness, 2005). This conjoint analysis tool is often employed due to its broad scope of application, particularly in selecting attributes in product or service development (Yuniarti, 2008).

Consumer preferences for rice products in Toboali were analyzed using the conjoint analysis tool. The results of the conjoint analysis can be seen in the following Table 3:

Table 3. Rice Consumer Preferences

Attribute	Importance Value	Preference
Certified	35.01	Available, Not available
Packaging	15.10	Plastic, Sack
Size	20.10	10 kg, 15 kg, 5 kg
Taste	30.01	Sweet, Tender

Source: Processed primary data, 2023

In Table 3, the attribute of certified rice had the highest importance value, reaching 35.01%, making it the top-ranking attribute compared to others. Certified rice provided assurance that the product was safe for consumption for consumers of all backgrounds. Based on interviews with respondents, many preferred rice from Mr. Imam because it was certified. Respondents' preference for this attribute indicated that rice producers must maintain Mr. Imam's brand to gain consumer trust as a halal product.

Packaging was the second-ranked attribute after certification, with an importance value of 15.10%. Regarding respondents' preferences for packaging, the choice of using sacks was favored by many respondents in the research location. In terms of practicality, using sack packaging can protect rice from heat exposure, air humidity, impact, and

contamination, preserving its quality during distribution.

Therefore, Mr. Imam's rice milling business needed packaging that not only protected the product but also served as a representation of the rice sold to consumers. Size became the third attribute with an importance value of 20.10%. Respondents' preferences for the three proposed sizes indicated a preference for the 5 kg size. Usually, 5 kg rice sack packaging was popular among consumers because it was practical, widely used for household needs, and affordable for all income groups.

Taste was the fourth attribute with an importance value of 30.01%. Based on respondents' preferences, a tender texture was the consumer's preference. Tender rice was also known as low amylose rice. Generally, tender rice had short grains, while high amylose rice was called coarse rice and has long grains.

Considering the importance values for the four attributes evaluated by respondents, the most crucial attribute for respondents in purchasing Mr. Imam's rice brand was certified rice. This study also demonstrated that for small-scale rice milling home industries that already had loyal customers or products that matched consumer preferences in Desa Rias, taste was not the primary consideration. Research on the preferences of other rice products showed a similar pattern, where there were other primary attributes besides certification that consumers consider first.

Several studies on consumer preferences indicated differences in consumer preferences for rice compared to other products, such as fruit. In the case of fruit, consumers prioritized taste as the main consideration for choosing fruit. This was because the sweetness of fruit is difficult to maintain consistently, requiring consumers to actively seek or choose fruits with a sweet taste.

CONCLUSION

Consumer preferences for the purchase decision of rice from Mr. Imam's rice milling business refer to the choice of rice products that are officially certified, packaged in sacks for practicality, with a size of 5 kg being widely favored, and having a tender texture. Mr. Imam's rice milling business in Desa Rias is expected to build a brand with specific characteristics or a distinctive product identity compared to other rice products. This aims to make it easily remembered and the first brand that comes to the minds of consumers in the Toboali District.

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