

Consumer Preferences on The Purchase of Cayenne Pepper in Bali Province Market

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Modern consumers mature because they have access to product information before purchase. In Indonesia, the chili market is becoming increasingly competitive since buyers are worried about the product's quality. This study aims to determine the factors that become customer preferences in chili purchase decisions and the attributes that consumers in Bali Province consider most while purchasing chili. The procedure for determining the sample consists of a convenience sample of 30 respondents. The data indicate that the Cayenne Pepper with the highest level of spiciness, bright red color, and smooth, shiny skin surface was the most popular. Spiciness (15.34), color (13.32), and skin surface are the three characteristics that people value most when purchasing chili peppers (12.69). This research contributes substantially to the connection between customer preference and chili purchasing.

Key words: Consumer preferences, purchasing decision, cayenne pepper.

1. INTRODUCTION

Chili is a sort of spice that is commonly grown worldwide, especially in Indonesia, for either domestic or commercial usage. Growing chili peppers may be a lucrative business for both farmers and retailers, allowing the former to earn a living and the latter to increase their consumer base. In addition, chili is used as a main ingredient in the processed food and pharmaceutical industries, and its exportation generates substantial revenues.

The extensive usage of cayenne pepper in cooking is due to the population's preference for spicy meals. In 2017, the Food and Agriculture Organization (FAO) issued information detailing the nations with the highest chili production. China's production of over 10 million tons is in the top place. Indonesia ranks fourth with a total output of 1.8 million tons worth \$812 thousand. Production Indonesia's cayenne pepper production will reach 1.39 million tons in 2021. Compared to 2020, when 1.5 million tons were produced, the Central Statistics Agency (referred to as BPS) reported a drop of 8.89%. In 2021, the production of cayenne pepper will fall for the first time in the previous five years. This figure will continue to increase through 2020. In July 2021, 134,4 thousand tons of cayenne pepper will be produced. February was the lowest month, with a total of 94,54 thousand tons.

As demonstrated in Table 1, Bali Province is one of the Indonesian provinces that is optimizing its cayenne pepper crop. The government, in this case, the Food Agriculture Service, is boosting the addition of farmer groups to the province's cayenne pepper cultivation due to the province's strong expansion potential in cayenne pepper output (Gosardi et al., 2022).

Based on Table 1, Buleleng Regency produced the most chili in the province of Bali in 2020, with 16,581 tons, while Jembrana Regency produced the least, with 124 tons.

Typically, when creating agricultural policy in Indonesia, chili cultivation is favored. The fundamental purpose of domestic chili production is to develop market-appropriate products. However, the development of chili products in Indonesia remains hindered, as do consumers' evolving preferences and willingness to spend more for high-quality items. Product enhancement and development generate product value. This is the key to corporate sustainability.

Table 1: Production of seasonal cayenne pepper in the province of Bali 2021

County/City	Cayenne Pepper Production in Bali Province by Regency/City (Tons)		
	2018	2019	2020
Jembrana Regency	58	86	124
Tabanan Regency	2405	901	1175
Badung Regency	2089	1956	1504
Gianyar Regency	6169	1864	4919
Klungkung Regency	1161	2324	1725
Bangli Regency	16103	10545	8552
Karangasem Regency	12118	6074	8792
Buleleng Regency	5036	15088	16581
Denpasar City	16	6	9
Bali province	45155	38844	43380

Source: Bali Central Statistics Agency (2021)

Nevertheless, the product development process demands data for determining client requirements. If the product does not satisfy the client's specifications, much money is lost during the product development. Therefore, new product development is necessary to determine the product's most desirable characteristics.

This study will evaluate the factors that influence purchasing decisions for chili products. Commonly, a marketing technique is utilized to examine and answer questions (Kessels et al., 2008); accordingly, conjoint analysis is presented since it is effective for everyday market surveys and product creation. Alriksson and Oberg (2008) report that the recent application of conjoint analysis to agricultural products has resulted in product adjustments that better match consumer needs.

Regarding the purchase of cayenne pepper, the results will provide important information regarding the significance of product qualities like flavor, price, size, packaging, herbal compounds, and organic chilies. Customers' tastes for sambal, which are rarely studied, are better understood as a result of this study. In addition, this research aids chili companies know what cayenne pepper buyers seek. In addition to gaining a competitive advantage and reducing product development costs, the company can design goods that fulfill client requirements.

2. LITERATURE REVIEW

There is evidence that conjoint analysis (hereafter CA) plays a crucial role in analyzing individuals' product preferences. This strategy has been utilized in marketing research for four decades (Green & Srinivasan, 1978). Numerous uses of CA include creating new products, upgrading existing products, pricing, promotion, distribution routes, and market segmentation (Alriksson & Oberg, 2008). Lancaster's notion of characteristic demand provides the foundation for CA's core premise. The CA approach refers to the utility or consumer satisfaction created by each distinct instead of the satisfaction derived from utilizing the product (Submitter et al., 2020).

Alriksson & Oberg (2008) and de Pelsmaecker et al. (2013) say that consumer decisions depend on product qualities; consequently, examining physical product characteristics is the key to making decisions. The theory of attributes generates purchasing patterns. Previously, (Green & Srinivasan, 1978, 1990) suggested that buyers prefer to buy products based on product features rather than product advantages. In addition, Lancaster (1966) contends that product features can affect consumer preference. In his description of the attribute model, he demonstrates how product qualities influence purchasing decisions, including the physical aspects of the product.

In addition, Lancaster (1966) distinguishes between clients' relevant and irrelevant aspects of the product purchase process. Relevant qualities are product attributes that can impact a customer's purchasing choice. Similarly, if product characteristics change, so will decision-making. Appropriate qualities suggest that product attributes do not affect customers' purchase decisions. Changes to the product's features will not impact decision-making (Deliza et al., 2010). The purpose of the CA study is to determine the relative significance of the product features described by the study. Each attribute has at least two selection levels. The most significant characteristic of CA is that the product is competitively priced, and customers must be

able to differentiate between items (Alriksson & Oberg, 2008). CA will consequently compile a list of consumer preferences at each attribute level based on the responses of each respondent (Gustafsson et al., 1999).

Furthermore, most consumer preference research has been conducted in industrialized nations like the United States (Schiessl et al., 2022; Sun et al., 2022; Yaqub et al., 2022). There aren't many studies with an Asia Pacific concentration. Any attempt to generalize these findings would therefore be fruitless, as different environmental conditions may have varying effects on consumer desire, depending on the circumstances (Khatri et al., 2022; Kuttaula et al., 2022). Location and atmosphere were the least important factors in determining whether a customer would return to a catering restaurant, while service quality was the most important (Han, 2021; López-Sanz et al., 2021; Taghikhah et al., 2021). In contrast, when choosing a food service establishment, the cost was one of the most relevant aspects.

In addition, research revealed that customers were more price-conscious when dining with their families than during work lunches. To attract clients, restaurants must provide reasonably-priced foods in a welcoming atmosphere (Di Crosta et al., 2021; Jang & Hsieh, 2021; Trimurti & Utama, 2021; Widayat et al., 2021). Past research has shown that a restaurant's ambience and decor influence its customers' decisions. The concept and design of the place were of the utmost significance, with the food coming in last. According to a previous study, descriptive names improve sales and raise customer expectations for the dish and catering company (Cohen, 2022; Fathoni et al., 2022; Khatri et al., 2022; Mariani et al., 2022). A connection between product brand and service business brand.

Studies have inconsistently assessed the significance of restaurant attributes, which typically include price, tangible items, and marketing, as well as customer experience and quality (Jeong & Chung, 2022; Kuttaula et al., 2022). These facts demonstrate the need for the proposed study, which will assess the importance of the qualities. In the psychological literature, preferences are a person's attitude toward a collection of things, often represented through an intentional judging mechanism. In contrast, the most specific psychological meaning of "preference" could be evaluative judgment in the sense of liking or hating an object (Di Crosta et al., 2021; Trimurti & Utama, 2021; Widayat et al., 2021). However, this does not imply that a flavor will never change.

Even subconsciously, decision-making mechanisms such as options can drastically modify desire (Aw et al., 2021; Jain et al., 2021; Jang & Hsieh, 2021; Yalley, 2021). Acceptability shows a willingness to accept the established order or these less popular alternatives, but ordinary consumers tend to choose between equally or more valued options. The name of a food can provide an indicator of its flavor (López-Sánchez et al., 2021; Mukherjee & Chatterjee, 2021; eri & eri, 2021). Similar to the studies

that demonstrate they affect food sales, customer satisfaction, and inclination to return, positively descriptive menu names can enhance sensory judgments of appearance and taste (Han, 2021; Peterson et al., 2021; Sari et al., 2021; Shankar & Jain, 2021). According to a previous study, descriptive names improve sales and build client expectations for the restaurant's cuisine and atmosphere.

In the case of hotels and foodservice companies, there is a strong association between brand success and corporate performance. Various scholars have identified price as a customer expectation (Hoe & Mansori, 2018; Imran et al., 2019; Rita et al., 2019). The purpose of offering limited-time promotions such as new product releases was to increase sales and repeat visitors. It is a known fact that claimed pricing fairness influences customer happiness and loyalty. However, customer loyalty and satisfaction are essential prerequisites for price acceptability. Price has been found to correlate with consumer satisfaction. In reality, price harms consumer satisfaction. Numerous studies have highlighted the importance of physical qualities for food companies (Hao, 2011; Hoe & Mansori, 2018; Islam et al., 2021; Salamat et al., 2013; Yaqub et al., 2022).

The design of a catering establishment may attract greater attention because it contributes to its distinctive atmosphere. However, service quality may be affected by the location. Richness is essential in the grocery sector since it influences the quality of the customer experience (Hoe & Mansori, 2018; Imran et al., 2019; Murad et al., 2022; Rita et al., 2019). Political and commercial interests are among restaurant and hotel patrons' top ten complaints lodged. According to various research, there is a positive correlation between client choice qualities and economic performance. There are financial and non-financial corporate strategy indices. Revenue growth refers to the economic effects of a company's policies and actions, such as the rate of return, assets ratio, absolute value, competitiveness, sales, and income.

Regrettably, by the late 1970s, it had become increasingly apparent that conventional corporate finance approaches could not sustain enterprises in modern markets. Many researchers concurred that while traditional methods reveal the performance that results from an organization's assets, they reveal little about how that performance is produced or how it may be improved. Non-financial corporate governance begins to emerge due to the inability of profitability ratios to effectively manage enterprises operating in an expanding economy (Herbas Torrico & Frank, 2019; Lakmali & Kajendra, 2021; Menon, 2018).

Delighted customers will return to the business to acquire additional products and services, bolstering the company's bottom line. In addition, there is a strong correlation between total sales, the allowance for service levels, the perception of overall quality, and the happiness of customers' opinions. The apparent advantage of customer happiness is improved market domination, the ability to

attract repeat business, and the ability to drive business expansion, all of which raise income. Despite external pressure and marketing initiatives, loyalty is defined as the desire to acquire a preferred good or service in the future repeatedly (Ahn & Kwon, 2022; Gulfraz et al., 2022; Liu et al., 2022; Shamim & Islam, 2022). In addition, a loyalty concept considers purchase frequency and average order cost.

3. RESEARCH METHODS

The study investigates the factors that form consumer preferences in chili purchase decisions and the attributes consumers in Bali Province consider most when purchasing chili. Consumers will prefer and buy things that meet their specifications. The concept of the product attribute approach is derived from the study of consumer behavior by articulating the preferred quality attributes of the product. In the concept of product attributes, buyers evaluate a product as a collection of distinct characteristics. Understanding customer preferences is crucial for the decision-making process of key stakeholders, including producers/farmers and other parties involved in the vegetable subsector.

This study applies quantitative descriptive analysis to summarize and clarify red chilli pepper purchasers' features and decision-making processes. Red cayenne pepper customer preferences are rated as follows on a Likert scale: extremely important = 5, important = 4, medium = 3, not important = 2, and very insignificant = 1.

a) Multi Analysis Attribute Fishbein

In principle, Fishbein's attitude model will calculate A_o (Attitude toward the object), namely a person's attitude towards an object that is recognized through the attributes attached to the object. By identifying an object through seeing, feeling, trying and using the object for a long time, a consumer will have a certain attitude towards the object he uses or uses. Usually, before consumers consume an object, they expect the object. So that after seeing, trying and using it, the consumer can judge whether the object in question is following his expectations. Fishbein multi-attribute analysis with the following formula:

$$A_o = \sum (b_i \times e_i)$$

Information:

- A_o = attitude towards the chili product
- b_i = consumer confidence in attribute i of the cayenne pepper product before he buys or uses it
- e_i = consumer evaluation of attribute i of red chili products in general

To determine the evaluation of attribute (e_i) is done by multiplying the score of each attribute by the frequency of consumers' answers to the cayenne pepper attribute.

b) Chi Square Analysis (χ^2)

To determine whether there are differences in consumer preferences for red chili peppers, Chi-Square analysis is used with the following formula:

$$\chi^2 = \sum \left[\frac{(f_o - f_e)^2}{f_e} \right]$$

Information:

- X² = Chi-Square
- f_o = the number of consumers who choose the category in the attribute of red cayenne pepper
- f_e = the number of consumers expected in the red chili attribute category
- i... k = attribute category in the red chili attribute

4. RESEARCH FINDINGS

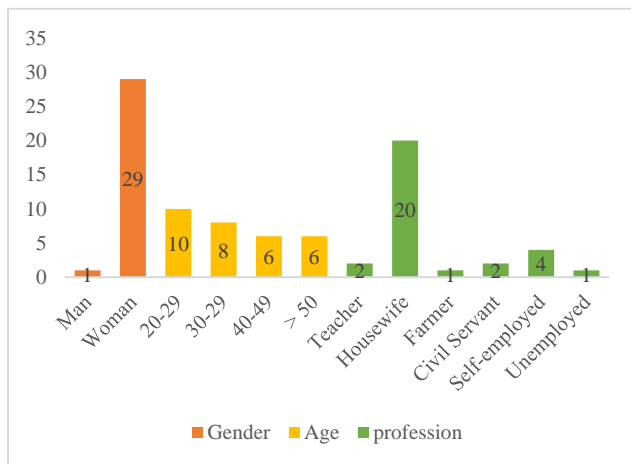


Figure 1: Consumer Description

It is evident from Figure 1 that the majority of cayenne pepper purchasers are female, with 29 females compared to a single male. This suggests that women in the home are primarily responsible for meeting household demands in terms of household expenses. This is because women are generally accountable for household care, which includes limiting household consumption. Men occasionally partake in shopping activities, but buying for consumption and domestic necessities is primarily the domain of women.

There are ten consumers between the ages of 20 and 29. This age range (15-64) is a productive age; at this age, consumers still have the desire and ability to work, which affects the household income received and used to satisfy demands. In addition, this age group is considered mature. Therefore, they tend to purchase cayenne pepper with a more sensible mindset.

The bulk of cayenne pepper purchasers is twenty housewives. Due to their daily usage of cayenne pepper in cooking and administration of home finances, housewives are the ones who make decisions regarding the purchase of the spice.

4.1 Purchase Frequency

Some users have a set plan (daily or monthly) for obtaining cayenne pepper, while others make purchases on an irregular basis. The frequency with which people purchase

cayenne pepper is shown in Table 2.

Table 2: Frequency of Purchase of Cayenne Pepper

Frequency	Amount	Percentage
Daily	9	30.00
Weekly	11	36.67
Uncertain	10	33.33
Total	30	100.00

Table 2 indicates that the frequency with which consumers purchase cayenne pepper varies, with the majority, 36.67 percent, purchasing once per week. This is influenced by consumers' propensity to buy on certain days and maintain a one-week supply of cayenne pepper.

5. ATTRIBUTE ANALYSIS

Attributes analyzed in this study include color, level of spiciness and skin surface.

1) Consumer Preferences towards the Purchase of Cayenne Pepper

Consumer preferences for cayenne pepper are a person's choice of likes or dislikes of the cayenne pepper products that are consumed. These choices vary from one consumer to another. Consumer preferences for cayenne pepper in Bali Province can be analyzed using Chi-Square analysis. The results of the Chi-Square analysis are presented in the following table 3.

Table 3: Results of Chi-Square Analysis of Consumer Preferences on Cayenne Pepper

Cayenne pepper attributes	χ ² statistic	Asymp. Si
Color	22.53a	0.000
Spicy Level	9.80b	0.007
Skin Surface	32,671	0.000

a. Significant at the level of significance α = 1%

b. Significant at the level of significance α = 5%

Based on Table 2, it can be shown that all of the attributes observed in this study were statistically different, with significance levels of = 1% for skin color and surface and = 5% for spice level. This indicates that consumer preferences for cayenne pepper vary in the Bali Province market.

Consumer preferences for cayenne pepper in the Bali Province market can be determined by examining the category or attribute criteria that consumers select the most, as shown in the table 4 below.

Table 4: Consumer Preferences for Cayenne Pepper in the Bali Province Market

Cayenne Pepper Attributes	Consumer Preference
Color	Bright Red
Spicy Level	Very spicy
Skin Surface	Shiny

Table 4 indicates that consumers in Bali prefer vivid red cayenne pepper. Bright red cayenne pepper is desirable because it signifies the pepper is fresh and ripe. The favored level of cayenne pepper spiciness among consumers in the Bali Province market is very spicy. Cayenne pepper from the province of Kalimantan often

possesses a high spiciness. The rationale offered by the consumer is that less cayenne pepper is required to get the desired amount of spiciness. Consumers prefer glossy-appearing cayenne pepper skin in the province of Bali.

2) Confidence and Evaluation of the Attributes of Cayenne Pepper

Consumer attitudes define how customers feel about cayenne pepper regardless of whether or not they enjoy it. The consumer's belief in cayenne pepper's numerous properties and advantages is also reflected in their attitudes. Knowledge of the benefits and attributes of cayenne pepper inspires consumer confidence.

The level of spiciness is the attribute that customers believe in most firmly, or the level of spiciness of cayenne pepper purchased by consumers is regarded as the best level of cayenne pepper. Consumers view the skin surface characteristic as the least desired characteristic. The confidence of consumers regarding the qualities of cayenne pepper is displayed in [Table 5](#).

Table 5: Consumer Confidence towards Cayenne Pepper Attributes

Attribute	Value					Total Value	Average
	5	4	3	2	1		
Color	20	56	27	6	0	109	3.63
	4	14	9	3	0	30	
Level of Spiciness	35	60	18	4	0	117	3.90
	7	15	6	2	0	30	
Surface	10	60	24	6	2	102	3.40
	2	15	8	3	2	30	

In the meantime, the attribute customers consider the most are the level of spiciness, or it can be argued that consumers regard the evaluation of the amount of spiciness to be the most significant factor in creating attitudes toward the purchase of cayenne pepper. The consumer evaluation (ei) of the characteristics of cayenne pepper is shown in [Table 6](#).

Table 6: Consumer Evaluation (ei) of Cayenne Pepper Attributes

Attribute	Value					Total Value	Average
	5	4	3	2	1		
Color	10	68	30	2	0	110	3.67
	2	17	10	1	0	30	
Level of Spiciness	25	72	21	0	0	118	3.93
	5	18	7	0	0	30	
Surface	10	84	12	6	0	112	3.73
	2	21	4	3	0	30	

The consumer attitude index (Ao) reflects the consumer's evaluation of the cayenne pepper's qualities, including color, amount of spiciness, and skin surface. The greater the Ao value, the greater the number of consumers who evaluate these features. Spiciness (15.34), color (13.34), and skin surface are the most important characteristics when deciding whether to purchase cayenne pepper (12.69). [Table 7](#) displays the consumer attitude index (Ao) analysis findings towards cayenne pepper.

Table 7: Consumer Attitudes Towards Cayenne Pepper in the Bali Province Market

Attribute	Confidence	Evaluation (ei)	Attitude (Oo)	Rating
Color	3.63	3.67	13.32	II
Spicy Level	3.90	3.93	15.34	I
Skin Surface	3.40	3.73	12.69	III

Cayenne pepper is mainly used in cooking to impart a spicy flavor, so the level of spiciness is the most important characteristic that buyers evaluate when making purchasing decisions. Additionally, customers take color into account while making purchasing selections. The cayenne pepper's vivid red hue shows that it is still fresh. The surface of the cayenne pepper's skin is the last factor people evaluate when making purchases. If the cayenne pepper has glossy skin, it is fresh.

The purchase location of chili is related to the product's origin. Both traditional markets and stalls sell chilies so that people can purchase them at either venue. There is now no modern market (minimarket) that sells these things. The following table lists sites where consumers can buy chili.

Table 8: Where to Purchase Chili by Consumers

The place	Amount	Percentage
Traditional market	28	93.33
Shop	1	3.33
Traditional Market and Shop	1	3.33
Total	30	100.00

[Table 8](#) indicates that 93.33 % of respondents purchase chilies from traditional markets situated throughout the province of Bali. At Traditional Markets, chilies are available in a wider variety of sorts and price points, providing consumers with more purchase alternatives.

6. DISCUSSIONS

Agricultural commodities production typically employs a monoculture cropping strategy. This farming strategy can boost crop yield while decreasing expenses and labor. On the other hand, the uniformity of cultivars facilitates the spread of plant-disrupting organisms. To counteract these shortcomings, polyculture cropping patterns can be implemented by growing multiple types in the same region. ([Tutupary et al., 2004](#) in ([Arianti et al., 2019](#))). Numerous studies have demonstrated that cultivated varieties have varying pest resistance ([Tutupary et al., 2004](#) ([Arianti et al., 2019](#))). Planting various plant species in the exact location might deter plant-damaging organisms. In this study, this planting concept will be used for chili growing. Both monoculture and polyculture cropping systems (mix of types) yield products with distinct advantages and disadvantages, particularly in terms of shape, size, and regularity. The challenge at hand is deciding which variety of chili is preferred by clients. Farmers can use this information to determine and select the type of chili cultivation.

Cayenne pepper is cultivated in numerous tropical,

subtropical, and temperate locations worldwide, including Indonesia (Bosland et al., 2012; Tong & Bosland, 1999). The price of chili in Indonesia changes significantly due to volatility in chili output and market availability. Anthracnose disease, caused by *Colletotrichu* sp., is one of the most severe and significant causes of 10 to 80% yield loss in chilies (Asare-Bediako et al., 2015; Diao et al., 2017).

The color attribute is one that buyers consider while making purchase decisions. This research is consistent with Arianti et al. (2019) 's findings that the attribute assessed is based on its ranking on the preference of red chili shape (which is straight), which ranks third after skin color (dark red), size (medium), skin surface (smooth), hardness (slightly complicated), and spiciness (spicy). According to Adiyoga and Nurmalinda (2012), the form characteristic ranks sixth after skin color, type, price, and surface. In addition to flavor and color, Muzdalifah (2012) asserts that farmers should be encouraged to make the same product or a consistent shape to promote product competitiveness.

Price appears to have the most significant impact on the purchasing of a product, according to the study's findings. It is noteworthy to note that the price of a product is commonly seen as a sensitive aspect when purchasing items. According to the current findings, earlier research has demonstrated that a price that is too low can create issues about the product's quality (Chouichom et al., 2013; Khayru et al., 2021). As a result, customers choose moderate pricing when selecting to purchase products. This result supports the conclusion reached by Kramchote et al. (2008), namely that enterprises should set reasonable prices. These findings bolster Xian-hui et al. (2017) 's conclusion that buyers are prepared to pay extra for a superior product. Thus, it may be concluded that the price of a product does not appear to influence the purchase of goods by customers, so long as they receive a product of sufficient quality.

Regarding the product's flavor, most respondents prefer hot and sweet chilies. The explanation is that most participants preferred spicy flavors with a hint of sweetness. This finding is also consistent with the findings of Burgess (2014) and Jeasakul & Suwonsichon (2013), who discovered that flavor influences purchasing decisions. Nonetheless, the findings of the present study contradict prior research by Burgess (2014), which reveals that those unfamiliar with spicy food tend to favor a mild chili sauce and a combination of garlic, sugar, and lime. This study supports Jeasakul and Suwonsichon's (2013) assertion that consumers favor medium-spicy, sweet, and sour flavors. This conclusion can be explained by the fact that customers may not enjoy the pure spiciness of chili, preferring chilies with a subtle blend of sweet and sour qualities. The chili used to make chili sauce falls within the range of these three characteristics. Previous research has demonstrated consumers' willingness to pay for organic items (Garcia-Yi, 2015; Harrison et al., 2002; Toiba et al.,

2012). It is possible to imply that customers are aware of the potentially hazardous chemicals that may be applied to plants. Consequently, people are willing to pay a premium for organic goods.

The data could help producers better comprehend consumer preferences. Most consumer preferences are determined by the product qualities offered to them. Most Bali customers are price-conscious and frequently associate product price with product quality. Because the price is tied to quality, things of high quality must be reasonably priced (Kiran et al., 2012). Therefore, if a product is inexpensive, people will doubt its quality. Therefore, a fair pricing system is crucial for products supplied in the Bali province. This demonstrates that people enjoy the sauce's qualities, such as cleanliness and flavor. Flavor is of secondary importance, as consumers tend to prefer a hot degree.

7. IMPLICATIONS

7.1 Theoretical Implications

8. The importance of this study's theoretical ramifications stems from its added current information and conclusions on consumer preference to the existing body of literature. Earlier research on consumer behavior was not examined from the perspective of product characteristics. This study contributes to the literature by demonstrating that while purchasing chili, consumers in Indonesia are more concerned with the product's color and characteristics. In addition, the findings of this study contribute to the literature by suggesting that marketers should focus on the product's features, while this notion was mainly ignored in past studies. In addition, the literature on consumer preference would not be complete without the contribution of this study, which emphasizes the crucial importance of product performance and aesthetics in attracting consumers. In this regard, this contribution to the corpus of knowledge would boost the comprehension of future studies about decision-making to advance consumer behavior in chili product purchases. This study's substantial literature deserves adequate understanding because it discusses in depth the nature and perception of chili product consumers.

8.1 Practical Implications

The study examines the features that form consumer preferences in chili purchasing decisions and the attributes that consumers in Bali Province evaluate most when making chili purchasing decisions. Before this, numerous research had solely examined consumer preferences regarding purchase decisions, but chili had received little attention. Consequently, this research will provide additional insight into consumer preferences on purchasing decisions and the features that customers evaluate most when purchasing chili. In addition, marketers can enhance the product's qualities with efficient marketing campaigns and give consumers all relevant information for better comprehension. In this sense, the objective of this study would be met if various chili-selling businesses embraced the implications with a proper

understanding of their customers. Similarly, the findings of this study can be expanded, and greater emphasis could be placed on enhancing the performance of products while highlighting their characteristics following consumer preferences. Therefore, this study strengthens the role of marketers in enhancing corporate performance through effective product management, and the display of product attributes according to client preferences.

9. CONCLUSIONS

The study aimed to identify the characteristics that influence consumers' chili purchasing decisions. It was also designed to determine which characteristics people in Bali Province value most while purchasing chili. Utilizing a quantitative research methodology, Likert-scale questionnaires were used to collect data on the effects of understanding the characteristics and decision-making processes of consumers who purchase red chili peppers. The survey showed that consumers in Bali prefer cayenne peppers with a high spicy flavor, a vivid red color, and a smooth, shiny skin surface. Spiciness (15.34), color (13.32), and skin surface are the three characteristics that people value most when purchasing chili peppers (12.69).

10. LIMITATIONS AND FUTURE DIRECTION

Indeed, this study has covered the significant elements of Indonesian consumers' product-purchasing preferences. This study investigates the aspects of consumer preferences in chili purchase decisions and the attributes that consumers in Bali Province consider most while purchasing chili. Consumers in the province of Bali want cayenne peppers with a strong spicy flavor, a bright red color, and smooth, glossy skin. Consequently, future authors must emphasize additional factors that influence chili purchase preferences. Similarly, this study's sample size is relatively small; therefore, future research must focus on a slightly bigger sample size to examine the relationship between different variables.

REFERENCES

- Adiyoga, W., & Nurmalinda, N. (2012). Analisis Konjoin Preferensi Konsumen terhadap Atribut Produk Kentang, Bawang Merah, dan Cabai Merah. *Jurnal Hortikultura*, 22(3), 292-302.
- Afrianus, G., Ni Gst.Ag.Gde Eka, M., Ida Ayu Made Dwi, S., & Ni Putu Eka, P. (2022). Analisis Pendapatan dan Efisiensi Usaha Tani dan Pemasaran Cabai Rawit di Kecamatan Dikabua. *AGRIMETA : Jurnal Pertanian Berbasis Keseimbangan Ekosistem*, 12(23), 39-45. Retrieved from <https://ejournal.unmas.ac.id/index.php/agrimeta/article/view/3822>
- Ahn, J., & Kwon, J. (2022). The role of trait and emotion in cruise customers' impulsive buying behavior: an empirical study. *Journal of Strategic Marketing*, 30(3), 320-333. doi:<https://doi.org/10.1080/0965254X.2020.1810743>
- Alriksson, S., & Öberg, T. (2008). Conjoint analysis for environmental evaluation. *Environmental Science and Pollution Research*, 15(3), 244-257. doi:<https://doi.org/10.1065/espr2008.02.479>
- Arianti, N. N., Ganefianti, D. W., & Sutrawati, M. (2019). Consumer Preferences On New Chilli Varieties Of Bengkulu University. *Jurnal AGRISEP: Kajian Masalah Sosial Ekonomi Pertanian dan Agribisnis*, 18(2), 331-342. Retrieved from <https://ejournal.unib.ac.id/index.php/agrisep/article/view/7711>
- Asare-Bediako, E., Addo-Quaye, A., Boakye, B., Sarbah, J., Asante, P., & Dorm, E. (2015). Incidence and severity of viral and fungal diseases of chili pepper (*capsicum frutescens*) in some districts in Ghana. Retrieved from <http://hdl.handle.net/123456789/4738>
- Aw, E. C.-X., Kamal Basha, N., Ng, S. I., & Ho, J. A. (2021). Searching online and buying offline: Understanding the role of channel-, consumer-, and product-related factors in determining webrooming intention. *Journal of Retailing and Consumer Services*, 58, 102328. doi:<https://doi.org/10.1016/j.jretconser.2020.102328>
- Bosland, P. W., Votava, E. J., & Votava, E. M. (2012). Peppers: vegetable and spice capsicums Cabi., 22.
- Burgess, P. J. (2014). Modification of a traditional Korean food product (Gochujang) to enhance its consumer acceptability as an ethnic food. *Journal of Ethnic Foods*, 1(1), 13-18. doi:<https://doi.org/10.1016/j.jef.2014.11.005>
- Chouichom, S., Liao, L. M., & Yamao, M. (2013). General View Point, Perception and Acceptance of Organic Food Products Among Urban Consumers in the Thai Marketplace. In M. Behnassi, O. Pollmann, & G. Kissinger (Eds.), *Sustainable Food Security in the Era of Local and Global Environmental Change* (pp. 187-201). Dordrecht: Springer Netherlands.
- Cohen, T. (2022). *The consumer behaviour and environmental consciousness of domestic air travellers within a South African context*. Retrieved from <https://hdl.handle.net/10500/28897>
- De Pelsmaeker, S., Dewettinck, K., & Gellynck, X. (2013). The possibility of using tasting as a presentation method for sensory stimuli in conjoint analysis. *Trends in Food Science & Technology*, 29(2), 108-115. doi:<https://doi.org/10.1016/j.tifs.2012.10.001>
- Deliza, R., Rosenthal, A., Hedderley, D., & Jaeger, S. R. (2010). Consumer perception of irradiated fruit: a case study using choice-based conjoint analysis. *Journal of Sensory Studies*, 25(2), 184-200. doi:<https://doi.org/10.1111/j.1745-459X.2009.00250.x>
- Di Crosta, A., Ceccato, I., Marchetti, D., La Malva, P., Maiella, R., Cannito, L., . . . Verrocchio, M. C. (2021). Psychological factors and consumer

- behavior during the COVID-19 pandemic. *PloS one*, 16(8), e0256095. doi:<https://doi.org/10.1371/journal.pone.0256095>
- Diao, Y.-Z., Zhang, C., Liu, F., Wang, W.-Z., Liu, L., Cai, L., & Liu, X.-L. (2017). Colletotrichum species causing anthracnose disease of chili in China. *Persoonia-Molecular Phylogeny and Evolution of Fungi*, 38(1), 20-37. doi:<https://doi.org/10.3767/003158517X692788>
- Fathoni, M. A., Suryani, S., & Sumilir, S. (2022). Determinant of Consumer Awareness Toward Halal Food During The Covid-19 Pandemic: Evidence from Indonesia. *IQTISHODUNA: Jurnal Ekonomi Islam*, 11(1), 67-84. doi:<https://doi.org/10.54471/iqtishoduna.v11i1.1319>
- Garcia-Yi, J. (2015). Willingness to pay for organic and fairtrade certified yellow chili peppers. *British Food Journal*, 117(2), 929-942. doi:<https://doi.org/10.1108/BFJ-11-2013-0321>
- Green, P. E., & Srinivasan, V. (1978). Conjoint analysis in consumer behavior: Status and outlook. *J. Consumer Res*, 5, 103-123.
- Green, P. E., & Srinivasan, V. (1990). Conjoint Analysis in Marketing: New Developments with Implications for Research and Practice. *Journal of Marketing*, 54(4), 3-19. doi:<https://doi.org/10.1177%2F00222429900540402>
- Gulfraz, M. B., Sufyan, M., Mustak, M., Salminen, J., & Srivastava, D. K. (2022). Understanding the impact of online customers' shopping experience on online impulsive buying: A study on two leading E-commerce platforms. *Journal of Retailing and Consumer Services*, 68, 103000. doi:<https://doi.org/10.1016/j.jretconser.2022.103000>
- Gustafsson, A., Ekdahl, F., & Bergman, B. (1999). Conjoint analysis: A useful tool in the design process. *Total Quality Management*, 10(3), 327-343. doi:<https://doi.org/10.1080/0954412997866>
- Han, H. (2021). Consumer behavior and environmental sustainability in tourism and hospitality: a review of theories, concepts, and latest research. *Journal of Sustainable Tourism*, 29(7), 1021-1042. doi:<https://doi.org/10.1080/09669582.2021.1903019>
- Hao, S. (2011). *Notice of Retraction: From customer satisfaction index to service quality: A new quality concept in the e-government performance evaluation*. Paper presented at the 2011 International Conference on E-Business and E-Government (ICEE).
- Harrison, R. W., Stringer, T., & Prinyawiwatkul, W. (2002). An Analysis of Consumer Preferences for Value-Added Seafood Products Derived from Crawfish. *Agricultural and Resource Economics Review*, 31(2), 157-170. doi:<https://doi.org/10.1017/S106828050000397>
- Herbas Torrico, B., & Frank, B. (2019). Consumer desire for personalisation of products and services: cultural antecedents and consequences for customer evaluations. *Total Quality Management & Business Excellence*, 30(3-4), 355-369. doi:<https://doi.org/10.1080/14783363.2017.1304819>
- Hoe, L. C., & Mansori, S. (2018). The effects of product quality on customer satisfaction and loyalty: Evidence from Malaysian engineering industry. *International Journal of Industrial Marketing*, 3(1), 20. Retrieved from <https://d1wqtxts1xzle7.cloudfront.net/57888289/>
- Imran, M., Hamid, S., Aziz, A., & Hameed, W. (2019). The contributing factors towards e-logistic customer satisfaction: a mediating role of information Technology. *Uncertain Supply Chain Management*, 7(1), 63-72. Retrieved from <http://dx.doi.org/10.5267/j.uscm.2018.5.002>
- Islam, T., Islam, R., Pitafi, A. H., Xiaobei, L., Rehmani, M., Irfan, M., & Mubarak, M. S. (2021). The impact of corporate social responsibility on customer loyalty: The mediating role of corporate reputation, customer satisfaction, and trust. *Sustainable Production and Consumption*, 25, 123-135. doi:<https://doi.org/10.1016/j.spc.2020.07.019>
- Jain, P. K., Saravanan, V., & Pamula, R. (2021). A Hybrid CNN-LSTM: A Deep Learning Approach for Consumer Sentiment Analysis Using Qualitative User-Generated Contents. *ACM Trans. Asian Low-Resour. Lang. Inf. Process.*, 20(5), Article 84. doi:<https://doi.org/10.1145/3457206>
- Jang, Y.-T., & Hsieh, P.-S. (2021). Understanding consumer behavior in the multimedia context: incorporating gamification in VR-enhanced web system for tourism e-commerce. *Multimedia Tools and Applications*, 80(19), 29339-29365. doi:<https://doi.org/10.1007/s11042-021-11149-8>
- Jeasakul, P., & Suwonsichon, T. (2017). Buying decision factors and sensory classification of chili sauce. *Proceedings of the 51st Kasetsart University Annual Conference, Bangkok, Thailand*, 5-7. Retrieved from <https://www.cabdirect.org/cabdirect/abstract/20133409545>
- Jeong, S. W., & Chung, J.-E. (2022). Enhancing competitive advantage and financial performance of consumer-goods SMEs in export markets: how do social capital and marketing innovation matter? *Asia Pacific Journal of Marketing and Logistics*, ahead-of-print(ahead-of-print). doi:<https://doi.org/10.1108/APJML-05-2021-0301>
- Kessels, R., Goos, P., & Vandebroek, M. (2008). Optimal designs for conjoint experiments. *Computational Statistics & Data Analysis*, 52(5), 2369-2387. doi:<https://doi.org/10.1016/j.csda.2007.10.016>

- Khan Khayru, R., Darmawan, D., & Munir, M. (2021). Analysis of Product Preference of Chitato and Lay's Potato Chips. *MARGINAL. Journal of Management, Accounting, General Finance and International Economic*, 1(1), 10-15. doi:<https://doi.org/10.55047/marginal.v1i1.7>
- Khatri, J., Marín-Morales, J., Moghaddasi, M., Guixeres, J., Giglioli, I. A. C., & Alcañiz, M. . (2022). Recognizing Personality Traits Using Consumer Behavior Patterns in a Virtual Retail Store. *Frontiers in psychology*, 13, 752073. doi:<https://doi.org/10.3389/fpsyg.2022.752073>
- Kiran, V., Majumdar, M., & Kishore, K. (2012). Innovation in in-store promotions: effects on consumer purchase decision. *European Journal of Business and Management*, 9(4). Retrieved from <https://d1wqtxts1xzle7.cloudfront.net/80683170/2214->
- Kramchote, S., Srilaong, V., & Kanlayanarat, S. (2008). Perspective of Postharvest Handling Consideration of Vegetables in Thailand. 65–73.
- Kutaula, S., Gillani, A., Leonidou, L. C., & Christodoulides, P. (2022). Integrating fair trade with circular economy: Personality traits, consumer engagement, and ethically-minded behavior. *Journal of Business Research*, 144, 1087-1102. doi:<https://doi.org/10.1016/j.jbusres.2022.02.044>
- Lakmali, S., & Kajendra, K. (2021). The role of personality traits in promoting customer citizenship behaviour: special reference to the homestay tourism context in Sri Lanka. *South Asian Journal of Marketing*, 2(2), 148-167. doi:<https://doi.org/10.1108/SAJM-03-2021-0024>
- Lancaster, K. J. (1966). A New Approach to Consumer Theory. *Journal of Political Economy*, 74(2), 132-157. doi:<https://doi.org/10.1086/259131>
- Liu, X. S., Shi, Y., Xue, N. I., & Shen, H. (2022). The impact of time pressure on impulsive buying: The moderating role of consumption type. *Tourism Management*, 91, 104505. doi:<https://doi.org/10.1016/j.tourman.2022.104505>
- López-Sanz, J. M., Penelas-Leguía, A., Gutiérrez-Rodríguez, P., & Cuesta-Valiño, P. (2021). Sustainable Development and Consumer Behavior in Rural Tourism—The Importance of Image and Loyalty for Host Communities. *Sustainability*, 13(9), 4763. doi:<https://doi.org/10.3390/su13094763>
- Mariani, M. M., Perez-Vega, R., & Wirtz, J. (2022). AI in marketing, consumer research and psychology: A systematic literature review and research agenda. *Psychology & Marketing*, 39(4), 755-776. doi:<https://doi.org/10.1002/mar.21619>
- Menon, B. (2018). Influence of Customer Tech Savviness and Proneness to Social Media, Facilitating Online Purchase Intention, Supplemented Through Firms' Content Generation in Facebook. *Drishtikon: A Management Journal*, 9(1), 1-18. Retrieved from <https://d1wqtxts1xzle7.cloudfront.net/60744486/220190930-122009>
- Mukherjee, S., & Chatterjee, S. (2021). Webrooming and showrooming: a multi-stage consumer decision process. *Marketing Intelligence & Planning*, 39(5), 649-669. doi:<https://doi.org/10.1108/MIP-08-2020-0351>
- Murad, M., Bhatti, A., Bakar, A., Ahmad, R., & Khan, A. J. . (2022). Exploring the Relationship between Effective Management & Social Equity: A CSR Perspective. *Journal of South Asian Studies*, 10(1), 103–111. doi:<https://doi.org/10.33687/jsas.010.01.4180>
- Muzdalifah, M. (2012). Kajian Preferensi Konsumen terhadap Buah-Buahan Lokal di Kota Banjarbaru. *AGRIDES: Jurnal Agribisnis Perdesaan*, 2(4). Retrieved from <https://www.neliti.com/publications/9256>
- Peterson, M., Minton, E. A., Liu, R. L., & Bartholomew, D. E. (2021). Sustainable Marketing and Consumer Support for Sustainable Businesses. *Sustainable Production and Consumption*, 27, 157-168. doi:<https://doi.org/10.1016/j.spc.2020.10.018>
- Rita, P., Oliveira, T., & Farisa, A. (2019). Sustainable Marketing and Consumer Support for Sustainable Businesses. Sustainable Marketing and Consumer Support for Sustainable Businesses. *Heliyon*, 27, 157-168. doi:<https://doi.org/10.1016/j.spc.2020.10.018>
- Salamat, N., Farahani, A., & Salamat, F. (2018). Customer satisfaction in private and public fitness clubs in north of Iran. *African Journal of Business Management*, 7(18), 1826–1832. Retrieved from <https://academicjournals.org/journal/AJBM/article-full-text-pdf/3FD5DCF15388>
- Sari, R. K., Utama, S. P., & Zairina, A. (2021). The Effect of Online Shopping and E-Wallet on Consumer Impulse Buying. *Asia Pacific Management and Business Application*, 9(3), 233–244. Retrieved from <https://www.apmba.ub.ac.id/index.php/apmba/article/view/419>
- Schiessl, D., Korelo, J., & Dias, H. B. A. (2022). How online shopping experiences shape consumer webrooming behavior. *Marketing Intelligence & Planning*, ahead-of-print(ahead-of-print). doi:<https://doi.org/10.1108/MIP-08-2021-0254>
- Šerić, M., & Šerić, M. (2021). Sustainability in Hospitality Marketing during the COVID-19 Pandemic. Content Analysis of Consumer Empirical Research. *Sustainability*, 13(18), 10456. doi:<https://doi.org/10.3390/su131810456>
- Shamim, K., & Islam, T. (2022). Digital influencer marketing: How message credibility and media credibility affect trust and impulsive buying. *Journal of Global Scholars of Marketing Science*, 1-26.

- doi:<https://doi.org/10.1080/21639159.2022.2052342>
- Shankar, A., & Jain, S. (2021). Factors affecting luxury consumers' webrooming intention: A moderated-mediation approach. *Journal of Retailing and Consumer Services*, 58, 102306. doi:<https://doi.org/10.1016/j.jretconser.2020.102306>
- Sigalet, D. L. (2012). Nonruminant Nutrition Symposium: The role of glucagon-like peptide-2 in controlling intestinal function in human infants: Regulator or bystander? . *Journal of Animal Science*, 90(4), 1224-1232. doi:<https://doi.org/10.2527/jas.2011-4704>
- Submitter, G., Jitkuekul, P., & Khamtanet, S. (2020). A Conjoint Analysis of Consumer Preferences for Chili Products: A Case Study on Chili Sauce. *Journals and Jitkuekul, Premruedee and Khamtanet, Sirinna, A Conjoint Analysis of Consumer Preferences for Chili Products: A Case Study on Chili Sauce (December 31, 2020). Reference to This Paper Should Be Made as Follows: Jitkuekul*, 226–233. doi:<https://doi.org/10.35609/jmmr>
- Sun, Y., Wang, Z., Yan, S., & Han, X. (2022). Digital showroom strategies for dual-channel supply chains in the presence of consumer webrooming behavior. *Annals of Operations Research*. doi:<https://doi.org/10.1007/s10479-021-04475-5>
- Taghikhah, F., Voinov, A., Shukla, N., & Filatova, T. (2021). Shifts in consumer behavior towards organic products: Theory-driven data analytics. *Journal of Retailing and Consumer Services*, 61, 102516. doi:<https://doi.org/10.1016/j.jretconser.2021.102516>
- Toiba, H., Umberger, W. J., & Minot, N. (2012). Exploring Indonesian Consumers' willingness To Pay For High-Value Agricultural Products. *IV International Symposium on Improving the Performance of Supply Chains in the Transitional Economies.*, 397–404. doi:<https://doi.org/10.17660/ActaHortic.2013.1006.50>
- Tong, N., & Bosland, P. W. (1999). Capsicum tovarii, a new member of the Capsicum baccatum complex. *Euphytica*, 109(2), 71-77. doi:<https://doi.org/10.1023/A:1003421217077>
- Trimurti, C. P., & Utama, I. (2021). Bali Tourism Destination Structural Loyalty Model from Consumer Behavior Perspective. *Christimulia Purnama Trimurti, I Gusti Bagus Rai Utama.(2021). Bali Tourism Destination Structural Loyalty Model from Consumer Behavior Perspective. Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(4), 494–505. Retrieved from <https://ssrn.com/abstract=3824796>
- Widayat, W., Praharjo, A., Putri, V. P., Andharini, S. N., & Masudin, I. (2022). Responsible Consumer Behavior: Driving Factors of Pro-Environmental Behavior toward Post-Consumption Plastic Packaging. *Sustainability*, 14(1), 425. doi:<https://doi.org/10.3390/su14010425>
- Winarsunu, T. (2017). Statistik dalam penelitian psikologi dan pendidikan *UMMPress*, 1.
- Xian-hui, G., Kai-yuan, C., Ai-jian, W. E. I., & Ying-heng, Z. (2017). Market competition of fresh vegetables between supermarket and wet market in China based on the difference of quality and price. doi:<http://dx.doi.org/10.22004/ag.econ.284876>
- Yalley, A. A., & Issau, k. (2021). Effect of Consumer Economic Nationalism on Consumer Attitudinal and Behavioral Response to the Marketing of Locally Produced Foods. *GNOSI: An Interdisciplinary Journal of Human Theory and Praxis*, 4(3), 199-218. Retrieved from <http://www.gnosijournal.com/index.php/gnosi/article/view/143>
- Yaqub, R. M. S., Azhar, M. S., Hameed, W. U. L., & Murad, M. (2022). Role of Web Design, E-Payment and E-Traceability with Mediating Role of Consumer Behavior to Develop Customer Satisfaction for Emerging Bricks and Clicks Business Model Trends in South Punjab. *Review of Education, Administration & Law*, 5(2), 123-135. doi:<http://dx.doi.org/10.47067/real.v5i2.224>