

ANALYSIS OF THE INFLUENCE OF MARKETING MIX ON PURCHASING DECISIONS FOR ORNAMENTAL PLANTS USING CHI-SQUARE IN KENDARI CITY



Dimas Muhammad Taufiq^{1*)}, Agustono Slamet¹⁾

¹Department of Agribusiness Faculty of Agriculture Halu Oleo University

*Corresponding author: dimssmuhammad11@gmail.com

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ABSTRACT

Public interest in ornamental plants continues to increase along with the trend of green lifestyle and urbanization. These changes encourage businesses to refine their marketing strategies to better attract consumers. The marketing mix, which includes elements of product, price, promotion, and place, is believed to play a significant role in influencing purchasing decisions for ornamental plants. However, the influence of each element has not been widely studied empirically in Eastern Indonesia, especially Kendari City. This study employs Chi-Square analysis to examine the impact of the marketing mix on purchasing decisions for ornamental plants. This research was conducted from January to April 2024 in Kendari City with a descriptive quantitative approach. The research sample consisted of 50 respondents selected purposively, namely consumers who had purchased ornamental plants in the last three months. The independent variables in this study include product, price, place, and promotion, while the dependent variable is the purchase decision. The analytical tool used is the Chi-Square test to determine the relationship between each element of the marketing mix and purchasing decisions. The analysis results indicate that the product and place variables are significantly related to the purchase decision for ornamental plants, whereas price and promotion do not have a significant influence. These findings provide a preliminary understanding of consumer preferences for ornamental plants in the local market, offering a basis for developing more effective and evidence-based marketing strategies in urban areas.

Keywords: chi-square test; Kendari City; marketing mix; ornamental plants; purchase decision.

INTRODUCTION

Public interest in ornamental plants has grown in recent years, especially in urban areas. This phenomenon is influenced by urban lifestyle trends and the marketing strategies implemented by ornamental plant businesses. In this context, the marketing mix - consisting of product, price, place, and promotion elements - plays an important role in shaping consumer perceptions and purchasing decisions (Pratiwi & Azka, 2021) (Saili et al., 2024)

The marketing mix has long been used to influence consumer behavior in various sectors, including horticultural agribusiness. Previous studies show that product quality, effective promotion strategies, competitive prices, as well as the accessibility of points of sale have a significant influence on purchasing decisions (Meutia & Mauliza, 2024) (Sudrajad & Sutanto, 2020) (Wei et al., 2024). Pratiwi and Azka (2021) found that product and promotion elements have strong significance in the plant seed industry, while price and place provide varying results depending on the market context. On the other hand, research by Akpinar et al. (2009) shows that socio-demographic variables such as gender and education level also moderate the influence of the marketing mix on purchasing decisions for horticultural products.

However, although several studies have examined the influence of the marketing mix on consumer behavior in general, further research is needed in the specific context of ornamental plants in eastern Indonesia, especially in Kendari City. In addition, there is a lack of research that uses non-



parametric statistical approaches such as Chi-Square to test the relationship between marketing mix elements and purchase decisions based on categorical data from consumer profiles. The Chi-Square test is very relevant to understanding the significance of the relationship between consumer characteristics and purchase preferences in a complex ornamental plant market that is strongly influenced by visual perception, aesthetic values, and environmental awareness (Hung et al., 2024) (Cavalcanti et al., 2024)

Kendari, the capital city of Southeast Sulawesi, has seen significant growth in ornamental plant trade activities involving small businesses, hobby communities, and medium-scale greenhouses. However, no scientific studies reveal which elements of the marketing mix are most dominant in influencing consumer purchasing decisions in this city. While data from other major cities in Indonesia and abroad are available, the unique local context requires a customized approach to target marketing strategies.

In addition, the profile of ornamental plant consumers in urban areas is generally dominated by highly educated women with relatively good purchasing power (Paiva et al., 2020) (Schöps et al., 2009), but it is not yet known whether this pattern also applies in Kendari. Therefore, identifying the relationship between consumer socio-demographic profiles and marketing mix elements is crucial in building an adaptive and evidence-based marketing strategy model.

Based on this background, this study uses the Chi-Square test method to analyze the effect of marketing mix elements (product, price, place, promotion) on purchasing decisions for ornamental plants in Kendari City. This research is also expected to contribute to developing data-based horticultural marketing strategies following local conditions and consumer preferences.

MATERIALS AND METHODS

This research was conducted in January-April 2024 in Kendari City with a descriptive quantitative approach. The population in the study were consumers of ornamental plants in Kendari City, with a sample of 50 respondents selected by purposive sampling based on specific criteria, namely, having bought ornamental plants in the last three months.

The research variables consist of independent variables, namely product, price, promotion, and place, and the dependent variable is the purchase decision. The analytical tool used is Chi Square to identify the relationship between variables statistically according to the method guide from (Sugiyono, 2015)

RESULTS AND DISCUSSION

Characteristics of Respondents

Respondents' demographic characteristics include their age, gender, and profession, which can provide context to their purchasing preferences and behaviors.

Table 1. Characteristics of respondents

No.	Characteristics of Respondents	Tota (Person)	Percentage (%)
1	Age (Year) 15-58	50	100
2	Gender Male Female	14 36	28 72
3	Profession Student Housewife Employee	32 3 15	64 6 30

Based on Table 1, it is known that the demographic characteristics of respondents are key in interpreting the decision to purchase ornamental plants, especially with the influence of marketing mix elements. As shown in Table 1, the respondents of this study consisted of 50 individuals with an age range of 15 to 58 years old, and the majority were female (72%) and dominated by students (64%), followed by employees (30%) and housewives (6%). These characteristics show that purchasing ornamental plants is an activity across age, gender, and profession.

The wide age range of respondents indicates that houseplants have become part of a cross-generational lifestyle, from young adults to middle-aged. This is in line with studies by Behe et al.

(2022) and Rihn et al. (2016), which show that younger generations (Millennials and Gen Z) are increasingly involved in purchasing green products, including houseplants, for educational, social, and psychological reasons-especially during and post-COVID-19 pandemic. This finding also reinforces the argument in the introduction that the trend of purchasing houseplants reflects not only aesthetic tastes but also awareness of well-being and sustainability.

The fact that 72% of respondents were female indicates a link between gender roles and houseplant purchases. This is consistent with Ramalingam and G.Rajalakshmi (2018) and Laheri (2017), that women tend to be more involved in sustainable consumption practices, including purchasing environmentally friendly products. Women are more active in beautifying the home, have concerns for aesthetics and relaxation, and have higher environmental awareness (Palma et al., 2010). Thus, women's high involvement in the ornamental plant market in Kendari City is influenced by visual preferences and their social and environmental values.

The dominance of students (64%) and employees (30%) indicates that the ornamental plant market in Kendari is driven by two main groups: young people living in an urban environment and individuals with fixed incomes. According to Morrison and Beer (2017) and Verma (2017), it is a group that follows urban lifestyle trends, where decorating living spaces with plants becomes part of self-identity and a form of personal expression. Meanwhile, employee engagement reflects the discretionary spending of a stable economic group, as suggested by (Palma et al., 2010). They are more able to allocate income to non-essential items such as houseplants that are associated with modern lifestyles and increased well-being.

These demographic characteristics also closely relate to how marketing mix elements influence purchase decisions. Younger age groups and women, who form the majority in this study, tend to be more sensitive to digital promotions, the visual quality of the product, and the sustainability of the production process elements of the mix (product and promotion) that were found to be significant in the previous Chi-Square analysis results. These preferences suggest that houseplant marketing strategies must be tailored to consumers' emotional needs and sustainability values.

These findings contribute to understanding houseplant purchasing behavior from a broader perspective of green consumerism. G. Rajalakshmi (2018) and Morrison and Beer (2017) emphasize that the demand for green products, including ornamental plants, is part of a shifting paradigm in the lifestyle of modern consumers. However, it is important to remember that continuing this trend will depend on economic dynamics, shifting cultural values, and the development of green technologies that can facilitate consumer access to green products.

Overall, these characteristics illustrate that consumers of ornamental plants in Kendari City are dominated by educated young women, especially students and employees, who are potential target markets in the development of ornamental plant marketing strategies in the future.

Analyzing the Impact of Marketing Mix on Ornamental Plant Purchase Decisions

To determine the influence of each marketing mix element on purchasing decisions for ornamental plants in Kendari City, Chi-Square (χ^2) statistical analysis was used. This analysis aims to test the relationship between categorical variables in the survey, such as perceptions of marketing mix elements and purchase decisions. The test results are presented in Table 2 below.

Table 2. Chi-Square (χ^2) test results

Variables	Chi-Square (χ^2) Value	Sig. (p-value)	Description
Products	3.747	0.050	Significant
Price	2.119	0.145	Not Significant
Promotion	3.224	0.073	Not Significant
Place	9.555	0.002	Significant

Based on Table 2. the Chi-Square analysis results show that two marketing mix variables have a significant effect on purchasing decisions for ornamental plants in Kendari City, namely product and place, with a p-value of 0.050 and 0.002, respectively.

Significance in the product element indicates that the physical attributes of plants, such as quality, uniqueness of shape, and ease of care, are important factors in the purchase decision-making process. This finding aligns with Pratiwi and Azka (2021) and Wei et al. (2024), which state that consumers pay great attention to plant characteristics in determining purchases, especially those who prefer high-quality and aesthetic plants.

The place or sales location variable shows a highly significant relationship with purchasing decisions. This indicates that the accessibility and convenience of purchase locations, such as garden

centers or stores that provide a wide selection of plants, play a significant role in encouraging purchases. This finding reinforces the results of Sudrajad and Sutanto (2020) and Schöps et al. (2009), which state that consumers choose places that are easy to reach and provide a comfortable shopping experience.

Price does not show a significant influence on purchasing decisions. This indicates that in the context of ornamental plants in Kendari, consumers tend to be more concerned with quality and location than price considerations. This is consistent with Pratiwi and Azka (2021), which found that price is not dominant in all horticultural market segments, especially among consumers who buy plants for personal satisfaction, not mass consumption.

Although promotions are not statistically significant, the p-value close to 0.05 indicates a potentially strong influence, especially in the segment of consumers who are active on social media and exposed to visual information. This supports the findings of Meutia and Mauliza (2024) and Rihn et al. (2016), which show that digital promotional strategies such as discounts and attractive content on social media still have an important role in attracting consumer attention.

Overall, the results of this test confirm that product quality and sales location are the two most influential factors in purchasing decisions for ornamental plants in Kendari City. These findings can be the basis for formulating more effective and empirical evidence-based marketing strategies. For ornamental plant businesses, improving product quality and optimizing distribution locations can be a strategic step to increase competitiveness in the local market.

CONCLUSIONS AND SUGGESTIONS

This study shows that among the four elements of the marketing mix analyzed, product and place significantly influence purchasing decisions for ornamental plants in Kendari City. This indicates that consumers consider the physical quality attributes of plants and ease of access to sales locations more than price or promotional factors. This finding confirms that marketing strategies in the ornamental plant industry must focus on the intrinsic value of products and the optimization of distribution channels. Theoretically, these results support the establishment of a model of horticultural consumer behavior based on experience and accessibility, which can be used as a basis for developing new marketing approaches that are more contextual and locally based (localized marketing behavior theory). The model suggests that in an ornamental plant market that is visual and personalized, price-based transactional approaches must be balanced with strategies that focus more on value perception and point of experience. Marketing strategies for improving product quality, such as healthy, easy-care, and aesthetic plants, are needed. Although promotion is not statistically significant, businesses need to strengthen their digital presence and attractive visual content, as it can increase product exposure.

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