



Analysis of Factors Influencing Consumer Purchase Decisions for Hydroponic Vegetables

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ARTICLE INFO

Keywords: Consumer, Effect, Hydroponic, Purchase Decision, Vegetables

Received : 20, April

Revised : 21, May

Accepted: 30, June

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ABSTRACT

This study analyzes factors influencing consumer purchase decisions for hydroponic vegetables at Hypermart the Park in Kendari, Indonesia. Using a quantitative approach with 50 respondents, the research examined the effects of income, product attributes, price, location, and promotion on purchase decisions. Data were analyzed using multiple linear regression. The findings show that, simultaneously, all five factors significantly influence purchase decisions. However, only location has a significant partial effect, indicating that convenience and accessibility are key drivers. Income, price, product, and promotion did not show significant individual effects, likely due to homogeneity in respondent profiles. The study highlights the importance of strategic retail placement and suggests targeted promotional efforts to further stimulate demand for hydroponic vegetables.

INTRODUCTION

Agriculture is a crucial pillar of development in Indonesia. However, conventional farming practices that rely heavily on pesticides have caused negative impacts on both health and the environment (Al-Shrouf, 2017). Excessive, prolonged use of pesticides can lead to various serious illnesses, such as cancer as well as neurological and reproductive disorders (Rangkuti et al., 2022).

Public awareness of these risks has driven a shift in preferences toward a healthier and safer pattern of food consumption. Modern consumers have become increasingly selective in choosing foods, tending to avoid products containing chemical residues. Vegetables free from pesticides, including hydroponically grown vegetables, have become a primary choice for health-conscious consumers (Fajarani et al., 2021). Hydroponic cultivation techniques utilize nutrient-rich water media without soil, thereby minimizing pesticide use and making water use more efficient (Singgih et al., 2019). Hydroponic vegetables are known to be more hygienic and highly nutritious, making them well-suited for the healthy lifestyle of urban communities (Al-Shrouf, 2017).

In line with these changing preferences, the hydroponics sector in Indonesia has gradually gained momentum as both consumers and producers recognize its advantages (Pratama, 2020; Putri et al., 2023; Sarfan et al., 2024). The country's tropical climate, combined with increasing urbanization, lifestyle shifts, and heightened public awareness of nutrition and food safety, has fueled demand for alternative cultivation methods that ensure consistent and high-quality yields. Hydroponics presents an appealing solution for sustainable food production, particularly in the context of climate change (Saediman et al., 2020; Saediman, Limi, et al., 2021). Many urban areas have seen a rise in small-scale hydroponic farms, often established in residential areas, on rooftops, or in community gardens. These initiatives not only supply fresh vegetables to local markets but also foster community participation in environmentally responsible practices. As a modern form of home gardening, hydroponics supports food security and can provide supplemental household income. Although still in its early stages of development, the hydroponics industry in Indonesia demonstrates strong potential for expansion and integration into the country's broader agricultural landscape.

Trends in hydroponic vegetable consumption in Indonesia have shown an increase in line with rising health awareness. Market surveys indicate that demand for hydroponic vegetables has been growing at double-digit rates annually (Pratama, 2020). This suggests a substantial market potential for these commodities. Kendari City, as the capital of Southeast Sulawesi Province which continues to develop, is no exception to this trend. The presence of Hypermart the Park Kendari, a large modern market operating since December 2022, has become a strategic distribution channel to introduce hydroponic vegetables to local urban consumers. Hypermart is a modern retail chain offering a comfortable shopping experience with a wide range of products, including fresh hydroponic produce. The store also implements a customer loyalty

program (Hi-Card) to increase consumer satisfaction and retention (Purbohastuti, 2018).

Despite the increased awareness of healthy lifestyles, hydroponic vegetables have not yet become the main choice for most consumers. Many consumers still prefer conventional vegetables that are more affordable and easily obtained in traditional markets (Ayu et al., 2021; Ezni Balqiah et al., 2020). There remains a gap between the intention to live healthily and the actual purchasing behavior of hydroponic vegetables (Nasution, 2018). Several factors are suspected to cause this situation, including the relatively higher price of hydroponic vegetables, the still limited selection of products, and the lack of education about the benefits of hydroponic vegetables (Chandra & Suryaningsih, 2019; Saediman et al., 2024; Satria et al., 2022; Singh & Raj, 2018). Preliminary observation showed that the availability and variety of products at Hypermart the Park Kendari are currently limited, causing consumers who seek a complete selection to often shop elsewhere. From the producer/marketer side, these challenges need to be addressed so that increased health awareness can be translated into actual purchase decisions.

LITERATURE REVIEW

What factors influence consumer decisions to purchase hydroponic vegetables at Hypermart the Park Kendari? Previous research indicates that purchase decisions for agribusiness products are influenced by various aspects, including internal consumer factors and external marketing factors. According to Kotler & Keller (2016), consumer decisions can be affected by personal characteristics (income, education), perceptions of the product (quality, benefits), price, convenience of access (location), as well as promotions received. Several empirical studies have also highlighted the roles of these factors. For instance, price and product quality had a significant effect on decisions to purchase hydroponic vegetables (Ayu et al., 2021; Chandra & Suryaningsih, 2019; Khusnarida Khusnarida et al., 2024; Putri et al., 2023). Likewise, pricing strategy and promotions impacted the increase in interest in buying hydroponic vegetables (Chandra & Suryaningsih, 2019; Mulyati et al., 2021; Satria et al., 2022). On the other hand, the factor of store location or ease of access is often cited as a key determinant in modern retail contexts.

Based on the above, this study aims to analyze the factors that influence consumer purchase decisions for hydroponic vegetables at Hypermart the Park in Kendari City. The focus of the study includes the influence of consumer income, product attributes, price, store location, and promotions on purchase decisions. The results of this research are expected to provide information for retail managers and hydroponic vegetable producers in formulating effective marketing strategies to increase hydroponic vegetable sales, while also bridging the gap between consumer awareness and action in consuming these healthy products.

METHODOLOGY

This research was conducted at Hypermart the Park Kendari in Southeast Sulawesi, one of the largest modern shopping centers in Kendari City. This location was deliberately selected using purposive sampling, considering that Hypermart the Park attracts a high volume of visitors and represents the urban consumer segment targeted by hydroponic vegetable products. With its three-story mall design spanning 38,380 m² and comprehensive retail facilities, Hypermart the Park offers a comfortable and strategically situated environment for observing consumer behavior related to hydroponic vegetable purchases. In recent years, Kendari has also witnessed a growing number of hydroponic farming activities, which may be attributed to rising public awareness regarding food safety, an expanding middle-income population, and the government program of utilizing home yard for growing food crops (Nasrida et al., 2023; Saediman, Gafaruddin, et al., 2021; Saediman et al., 2024; Sarfan et al., 2024). Although official records indicated 25 registered hydroponic farming units in 2020, the actual number is believed to be significantly higher. The increasing availability of hydroponic products in the local market further underscores the relevance of examining consumer responses to these emerging food choices. Data collection was carried out from March to April 2025.

The research employed a quantitative approach using a survey method. The study population was defined as all working housewife consumers in Kendari City who have ever purchased hydroponic vegetables at Hypermart the Park. From this population, a sample of 50 respondents was taken using an accidental sampling technique, meaning any consumer encountered at the location who met the criteria (having purchased hydroponic vegetables at Hypermart) was included as a respondent. The respondent characteristics focused on working housewives with their own income, given that this group plays an important role in household purchase decisions for healthy food products.

Primary data were collected through a survey using a structured questionnaire. The questionnaire instrument contained closed-ended questions with a 1-5 Likert scale to measure respondents' perceptions related to the research factors (Mboe et al., 2024; Saediman et al., 2019; Surni & Saediman, 2020). Data collection was carried out by directly interviewing respondents on-site (using the questionnaire as a guide), as well as observing store conditions and products during the study. In addition, secondary data were obtained from relevant sources such as publications of the Central Statistics Agency (BPS) and scientific journal references to support the analysis.

This study analyzed five independent variables (X) and one dependent variable (Y). The independent variables include:

1. Income (X1): Respondent's monthly income (in Rupiah per month), reflecting individual purchasing power. In this study, income refers only to the respondent's personal income, as all respondents were working housewives with their own source of income. It does not include household income from other members, such as husbands, which in

many cases is significantly higher. Therefore, actual household purchasing capacity is likely much greater than the reported individual income.

2. Product (X2): Attributes of the hydroponic vegetable products offered, including quality (freshness, taste), variety of types, availability, packaging, and certification or guarantee labels (e.g., organic/ pesticide-free). Positive perceptions of these attributes are expected to encourage purchase decisions.
3. Price (X3): The price level of hydroponic vegetables at Hypermart, including relative affordability, price stability, and the alignment of price with product quality. Prices perceived as fair and commensurate with the product's quality will support consumer purchase interest.
4. Location (X4): The store's location factors, especially ease of access, strategic position, comfort of facilities, and product layout at Hypermart. A strategic and comfortable location is expected to be a driver for consumers to shop for hydroponic vegetables.
5. Promotion (X5): Marketing promotion efforts by Hypermart, such as discounts, advertising, informational brochures, special events, and loyalty programs. Effective promotions will increase consumer attention and interest in the product.
6. Purchase Decision (Y): The consumer's final decision to buy hydroponic vegetables at Hypermart the Park. Indicators include the consumer's tendency to choose hydroponic vegetables after considering the above factors, including the intention to repurchase in the future if satisfied.

Prior to analysis, the questionnaire data (ordinal Likert scores) were transformed into interval scale using the Method of Successive Intervals (MSI) with the help of Microsoft Excel. This transformation was necessary to ensure the data met the assumptions of parametric analysis. Next, statistical analysis was performed using multiple linear regression to test the simultaneous and partial effects of the independent variables on the dependent variable (Surni et al., 2018). In general, the regression model estimated can be written as:

$$Y = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \varepsilon$$

Where Y is the purchase decision score, X1-X5 are the scores of the income, product, price, location, and promotion variables, α is the constant, β_i are the regression coefficients for each variable, and ε is the error term. Significance testing was conducted at the 95% confidence level ($\alpha = 0.05$). An F-test (simultaneous) was used to examine the effect of the five X variables together on Y, while t-tests (partial) were used to test the effect of each X variable individually. The model was also subjected to classical assumption tests (normality, multicollinearity, heteroscedasticity) to ensure that the estimates produced are accurate and unbiased.

RESULT AND DISCUSSION

Socioeconomic Characteristics of Respondents

A total of 50 respondents participated in this study. Their demographic and socio-economic characteristics can be summarized as follows:

Age Group: The majority of respondents were middle-aged. The 46–55-year age group was the largest, comprising 18 people (36%). The youngest respondents were in the 26–35-year group (approximately 30%), while those above 55 years old were the fewest (only 1 person, or 2%). The dominance of the 46–55 age range – categorized as mature productive age – indicates that most hydroponic vegetable consumers are in an age range where they are actively working, have stable incomes, and are becoming increasingly concerned about their family's health and diet.

1. **Family Size:** Most respondents came from small households with fewer than 4 members. A total of 32 respondents (64%) had families of 2–3 members (small), 16 respondents (32%) had 5–6 members (medium), and only 2 respondents (4%) had more than 6 members (large). This means that small-to- medium-sized households dominate among hydroponic vegetable consumers. Families that are not very large tend to have more flexibility in allocating budget for healthy food products, whereas very large families might be more sensitive to price and thus rarely purchase relatively expensive products.
2. **Education Level:** The respondents' education level was generally high. The majority (76%) were college graduates (Diploma/Bachelor's degree), 22% had a high school education, and only 2% had a junior high school education. There were no respondents with only elementary education or lower. This high education level aligns with the assumption that educated consumers are more aware of the importance of a healthy lifestyle and more selective in choosing food products. They tend to be more receptive to innovations like hydroponic vegetables, which are considered safer and higher quality.
3. **Occupation:** The respondents' occupations were diverse, reflecting different socio-economic backgrounds. The largest occupation group was entrepreneurs, with 13 people (26%), followed by civil servants with 10 people (20%). The rest were spread across private employees (12%), lecturers/ teachers (14% combined), healthcare workers (8%), and homemakers/other unspecified jobs (around 14%). The dominance of entrepreneurs and civil servants shows that many hydroponic vegetable consumers come from groups with fairly stable incomes and flexible spending. Conversely, the teacher group was the smallest (6%), possibly because teachers have fixed incomes and limited time to shop at hypermarkets.
4. **Monthly Income:** The income distribution of respondents tended toward the upper middle class. The majority (68%) had incomes above Rp 5 million per month, which can be categorized as high by national standards. About 24% earned Rp 2.6–4.9 million (middle), 8% earned Rp

1.1–2.5 million (lower-middle), and none had an income below Rp 1 million. With 92% of respondents earning above Rp 2.5 million, it can be concluded that Hypermart's hydroponic vegetable consumers are dominated by a strong purchasing power group. Higher income enables them to buy premium vegetable products that are relatively more expensive than conventional vegetables. For these consumers, price is not the main obstacle; they prioritize product quality and health benefits over simply seeking the lowest price.

The above respondent profile provides context that hydroponic vegetable consumers at Hypermart Kendari are generally educated adults with high incomes and not-too-large families. These characteristics align with a consumer segment likely to adopt healthy products even if they are premium-priced. High education and income levels contribute to the awareness and ability to choose hydroponic vegetables for family health. This is important to consider in formulating marketing strategies, focusing, for example, on product quality and ease of access rather than only price promotions.

Descriptive Analysis of Consumer Perceptions

Before discussing the regression results, we first describe respondents' perceptions of each factor (X1 through X5) studied and their purchase decision tendencies (Y). In general, the questionnaire indicated the following:

1. Income (X1): Consistent with the profile above, respondents on average had fairly high incomes. For the majority of respondents, buying hydroponic vegetables is considered part of their routine shopping allocation and affordable within their income. In other words, purchasing power is not a significant constraint. Higher-income consumers tend to be willing to pay more for food products perceived as healthier. This is reflected in the questionnaire responses where 68% of respondents felt able to purchase hydroponic vegetables regularly without straining the household finances. Respondents with lower incomes noted that they buy hydroponic vegetables occasionally as a supplement rather than a routine staple.
2. Product (X2): Consumer perceptions of hydroponic vegetable products were very positive. Respondents generally rated the quality of hydroponic vegetables at Hypermart The Park as very good in terms of freshness, cleanliness, and appearance. Most respondents agreed that hydroponic vegetables have a crisp texture, good taste, and are more hygienic (free of residues) compared to regular vegetables. The variety of hydroponic products available (e.g., green lettuce, red lettuce, pakcoy, kale) was considered sufficient, although not yet as complete as conventional vegetables. The packaging of hydroponic products sold at Hypermart, usually wrapped in plastic or in boxed packages, was considered practical and attractive. Overall, 91% of respondents stated they were satisfied with the quality of the hydroponic products they purchased. This "very good" perception indicates that product quality is one of the main driving factors for purchase decisions. Consumers feel

that the product's benefits (cleaner, healthier, longer-lasting) are worth the cost.

3. Price (X3): The price of hydroponic vegetables at Hypermart is relatively higher than conventional vegetables in traditional markets. However, respondents viewed the price as still reasonable. The majority of respondents (around 78%) stated that the price is in accordance with the quality of the hydroponic vegetables obtained. They understand that the hydroponic cultivation process requires higher costs (nutrients, technology), so the harvest is priced higher. Moreover, given the respondents' high incomes, price is not a deterrent; consumers are willing to pay a premium for quality vegetables. Only a small portion (around 10%) felt that hydroponic vegetable prices were "somewhat expensive," and these were generally from the lower income group. Overall, price was considered fair and did not hinder purchases; in fact, it even supports the decision because consumers feel "you get what you pay for" (the price brings quality).
4. Location (X4): Hypermart The Park is located in Kendari city center, easily accessible by private or public transport. Respondents rated the store's location as very strategic and comfortable for shopping. The availability of ample parking and supporting facilities (e.g., prayer room, restrooms) adds to its appeal. Inside the store, hydroponic vegetable products are placed in a fresh produce area that is neatly arranged and easy to find. As many as 94% of respondents agreed that Hypermart's location and atmosphere encourage them to shop for hydroponic vegetables there. For busy consumers, being able to buy hydroponic vegetables while shopping for other needs in one place (one-stop shopping) is a convenience. This finding shows that location is an important factor encouraging consumer decisions. Even consumers who initially did not intend to buy hydroponic vegetables can be prompted to purchase because they happen to see the products during their visit, thanks to the store's layout and accessibility.
5. Promotion (X5): Specific promotions for hydroponic vegetables at Hypermart were fairly limited. There were no major advertising campaigns or special events highlighting them during the study period, aside from general fresh-produce discount offers each weekend. Hypermart relies more on its membership program (Hi-Card) which provides points and occasional discounts on all items including vegetables. Nevertheless, respondents felt the existing promotions were moderately effective in attracting attention. For example, if there was a "promo" label or a price cut on hydroponic vegetables, they tended to try buying them. Around 60% of respondents admitted they had bought hydroponic vegetables because they were tempted by a promotional discount. The other 40% said they purchased purely out of need, without being influenced by promotions. On average, Hypermart's promotions had a positive but not dominant effect on consumer decisions. That is,

consumers are interested in hydroponic products primarily because of their quality and benefits; promotions serve only as an additional nudge.

6. Purchase Decision (Y): The observed indicators of purchase decisions included the intention to repurchase and to recommend the product. The results show that most respondents have a strong purchase commitment toward Hypermart’s hydroponic vegetables. As many as 82% of respondents expressed an intention to buy again regularly, and 76% were willing to recommend the products to relatives. This indicates an early loyalty among consumers to the hydroponic vegetable products at Hypermart. Satisfied consumers tend to make hydroponic vegetables a regular part of their shopping list (for example, buying hydroponic lettuce once a week for family salads). The main driving factor is a positive experience: consumers feel health benefits (the vegetables are cleaner and last longer) and enjoy a comfortable shopping experience, which makes them confident to continue buying and even to increase their consumption of hydroponic vegetables. However, 18% were hesitant to buy regularly, usually due to price considerations and the limited availability of certain types of vegetables (some complained that hydroponic spinach or tomatoes were not available, for instance). This group tends to buy hydroponic produce only if a particular item happens to be on promotion or looks especially fresh.

Regression Analysis and Interpretation

Multiple linear regression analysis was conducted to assess the influence of five independent variables, namely Income (X1), Product (X2), Price (X3), Location (X4), and Promotion (X5), on the dependent variable, Purchase Decision (Y). The model summary is presented in Table 1, which indicates that the regression model has a moderate-to-strong relationship between the independent and dependent variables. The R value of 0.703 reflects this correlation, while the R² value of 0.496 suggests that approximately 49.6% of the variance in purchase decisions can be explained by the five predictors. After adjusting for the number of predictors and the sample size, the Adjusted R² was 0.437, indicating a reasonably good model fit. This level of explanatory power supports the relevance of the selected variables, although it also implies that additional factors outside the scope of this model may contribute to consumer purchasing behavior.

Table 1. Model Summary for Coefficient of Determination (R²)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.703 ^a	.496	.437	749.54457

a. Predictors: (Constant), Income (X1), Product (X2), Price (X3), Location (X4), Promotion (X5)

b. Dependent Variable: Purchase Decision (Y)

The results of the F-test, as shown in Table 2, confirm that the overall regression model is statistically significant (F = 8.671; p < 0.001). This indicates that the combination of the five independent variables significantly predicts the

dependent variable. In other words, the model incorporating income, product, price, location, and promotion provides a statistically valid framework for understanding consumer purchase decisions.

Table 2. Results of F-Test for Simultaneous Significance of Independent Variables

Source	Sum of Squares	df	Mean Square	F	Sig.
Regression	24248670.60	5	4827529.753	8.671	.000 ^b
Residual	24608928.68	44	561817.057		
Total	48857599.28	49			

a. Dependent Variable: Purchase Decision (Y)

The results of the t-tests for individual coefficients are presented in Table 3. Among the five independent variables, only Location (X4) was found to have a statistically significant effect on Purchase Decision ($\beta = 0.534$, $t = 3.632$, $p < 0.01$). The other variables (Income, Product, Price, and Promotion) did not exhibit statistically significant partial effects ($p > 0.05$), although all coefficients were positive (except for Income, which was slightly negative).

Table 3. Results of t-Test of Effects of Independent Variables on Purchase Decision

Variable	B	Std. Error	Beta	t	Sig.
(Constant)	653.487	464.391	-	1.407	0.166
Income (X1)	-1.176	0.000	-0.059	-0.507	0.615
Product (X2)	0.099	0.137	0.099	0.724	0.473
Price (X3)	0.048	0.160	0.048	0.304	0.763
Location (X4)	0.537	0.148	0.534	3.632	0.001
Promotion (X5)	0.163	0.135	0.163	1.205	0.235

These results carry several important implications. The dominance of location's influence (in the partial analysis) indicates that the convenience and accessibility of the shopping place are key drivers for consumers when deciding to purchase hydroponic vegetables at Hypermart. This is consistent with retail consumer behavior theory, which states that a strategic store location increases the likelihood of visits and impulse purchases. Hypermart The Park customers might be buying hydroponic vegetables not solely because they specifically intended to, but because they are already in a comfortable location and thus feel inclined to pick up the healthy products while shopping for other needs. The central mall location of Hypermart enables consumers to try something new like hydroponic vegetables simply because the opportunity is easily available.

Conversely, the lack of significant influence of price, product, income, and promotion factors individually merits further analysis. There are several possible explanations: First, these variables may not exhibit high variability within the sample. For example, the product factor was rated very highly by almost all respondents (the variable tends to be uniformly high), making it difficult to show an effect in partial tests because there is little variance in opinion among respondents. Virtually everyone already agrees the quality is good, so product quality becomes a basic requirement that is taken for granted by hydroponic buyers and does not distinguish who buys more or less. Similarly, regarding price, most respondents accept the set prices, particularly since their incomes are high. In other words, price sensitivity in this respondent group is low; only a few respondents consider the price of hydroponic vegetables “somewhat expensive,” so the influence of the price variable on variation in purchase decisions becomes insignificant.

The income factor is similar: nearly all respondents are in the middle-to-upper income range, so their purchasing power is relatively comparable for the context of buying hydroponic vegetables. The lack of a wide range of incomes in the sample makes the effect of income appear insignificant. It would likely be different if the sample included a very broad income range; then income might show an influence (for example, consumers with very low income might not buy hydroponics at all). However, in this study, since all respondents already earn enough to afford the products, income is not a primary determinant of the decision. This is consistent with the results of Makmur et al. (2023) in Banda Aceh, who found that family income was not significant for the decision to buy hydroponic pakcoy, whereas ease of access played an important role. A similar finding was reported by Usman et al. (2024) in Kolaka, which stated that income did not significantly affect decisions to purchase hydroponic vegetables, because the majority of consumers already had sufficient buying power such that their main considerations shifted towards product quality and accessibility.

Furthermore, it is important to note that the income variable used in this study refers only to the respondents’ personal income. Since all respondents were employed housewives, the income measured excluded contributions from their spouses, which in many cases would constitute the larger portion of total household income. This suggests that the actual purchasing power of the respondents’ households was considerably higher than reported, possibly reducing variability in perceived affordability of hydroponic vegetables and diminishing the explanatory power of the income variable in the regression model.

Meanwhile, promotion did not significantly affect decisions to purchase hydroponic vegetables. This result is consistent with some studies (Al Hasanah et al., 2021; Anita & Kusumadewi, 2021; Hafissou, 2020; Nurseto, 2018). The result in Kendari suggests that the level of promotion carried out by Hypermart so far has not been strong enough to consistently drive purchases. Consumers are buying more due to their own awareness of hydroponic benefits, not because they are swayed by promotions. The intensity of promotion at Hypermart the Park is relatively low, so it is understandable that its partial

effect is small. However, many studies have found that promotion significantly increased hydroponic vegetable purchases when promotion was done intensively (e.g., healthy cooking demos, special vouchers) (Aydinli et al., 2014; Chandra & Suryaningsih, 2019; Putri et al., 2023). The findings of this study signal that Hypermart could enhance its promotional efforts to optimize sales, because the potential impact of promotion is actually there even though it has not been maximized.

From a theoretical perspective and compared to other research, the results of this study reaffirm the importance of location in retail marketing of agribusiness products. Hannah & Musyoka (2019), Holil et al. (2022), and Ramlawati et al. (2022) found that accessibility of location significantly influenced consumers' shopping decisions at shopping center. The findings in this study are consistent with those studies. However, there are slight differences from some other studies regarding product and price factors. Several studies have found that price and product quality of hydroponic vegetables were significant in influencing consumer decisions (Ayu et al., 2021; Chandra & Suryaningsih, 2019; Khusnarida Khusnarida et al., 2024; Putri et al., 2023). This difference is likely due to differing characteristics of respondents and market context. Consumers in these studies may be more heterogeneous in income and more price-sensitive, or the quality of hydroponic products there may vary enough to influence decisions. In contrast, in Kendari, consumers are more homogeneous (similarly upper- segment), so product quality and price factors have less differentiating effect on their behavior. In this regard, everyone is already satisfied with the quality and able to pay, so the deciding factor becomes whether it is convenient for them to buy or not (hence the role of location).

Accordingly, hydroponic vegetable marketing strategies in Kendari City need to emphasize leveraging the advantage of location and improving consumer access, while still maintaining product quality and keeping prices at reasonable levels to meet the expectations of the upper-middle consumer segment. The results of this study indicate that if product quality is assured and price is acceptable, then purchase decisions will be largely determined by how easily consumers can access the product in their daily lives. Hypermart has provided a convenient platform; the next challenge is how to draw more potential consumers (for example, those who have not yet tried hydroponics) to utilize that facility. Promotion and education can be directed to communicate the benefits of hydroponic vegetables to segments that have not been reached, although these efforts must be executed appropriately given that current promotions have not been very impactful.

CONCLUSIONS AND RECOMMENDATIONS

This study concludes that, simultaneously, all five factors examined (income, product, price, location, promotion) collectively have a significant influence on consumer decisions to purchase hydroponic vegetables at Hypermart the Park Kendari. However, on a partial basis, only the location factor proved to have a significant influence on that purchase decision. This

means that the comfort and ease of access of shopping at Hypermart the Park are the primary determinants encouraging consumers to buy hydroponic vegetables there. The factors of income, product quality, price, and promotion did not show significant individual effects in this model, possibly because the respondents on average already have high purchasing power, uniformly good perceptions of product quality, acceptable prices, and minimal exposure to promotions. The profile of hydroponic consumers in Kendari is generally of a highly educated group with strong incomes and small families, who place health as a priority. They tend to be willing to purchase hydroponic vegetables as long as the products are easily accessible at a convenient shopping location.

Based on these findings, several recommendations can be made. Hypermart The Park needs to optimize the implementation of the product, price, and promotion aspects of hydroponic vegetables, considering that these factors were not significant in the study. Hydroponic farmers/suppliers should improve the quality and continuity of product supply. Additionally, improving packaging and labeling (for instance, including organic/pesticide-free labels or certifications) can enhance consumer trust. Farmers can also collaborate with Hypermart in consumer education and joint promotion efforts. Next researches could expand the scope by adding other independent variables that may influence hydroponic vegetable purchase decisions, such as social factors (peer/family influence), consumer knowledge of hydroponics, or trust in organic products.

FURTHER STUDY

This study still has limitations so that further research is still needed on the topic "Analysis of Factors Influencing Consumer Purchase Decisions for Hydroponic Vegetables".

REFERENCES

- Al-Shrouf, A. M. (2017). Hydroponics, Aeroponic and Aquaponic as Compared with Conventional Farming. *Global Society of Scientific Research and Researchers*, 27(1), 247-255.
- Al Hasanah, A., Guntur, M., & Baharuddin, A. (2021). The Influence of Promotion Intensity toward the Increasing of Rice Selling at Sulsebar Regional Division of Bulog Company in Makassar. *Pinisi Business Administration Review*, 2(2), 51-56.
<https://doi.org/10.26858/pbar.v2i2.15778>
- Anita, K. Y., & Kusumadewi, N. M. W. (2021). The Effect of Promotion on Impulse Buying with Shopping Emotions as A Mediation Variable. *International Journal of Business Management and Economic Review*, 04(04), 310-319. <https://doi.org/10.35409/IJBMER.2021.3300>
- Aydinli, A., Bertini, M., & Lambrecht, A. (2014). Price Promotion for Emotional Impact. *Journal of Marketing*, 78(4), 80-96.
<https://doi.org/10.1509/jm.12.0338>
- Ayu, P. C., Fathoni, R. B. M. I., & Siregar, R. R. (2021). Indicators of customers in selecting hydroponic green leafy vegetables (Study case: millenials in

- North Sumatera). IOP Conference Series: Earth and Environmental Science, 782, 022054. <https://doi.org/10.1088/17551315/782/2/022054>
- Chandra, N. N. O., & Suryaningsih, Y. (2019). Analisis Bauran Pemasaran terhadap Minat Beli Sayur Hidroponik di Pokdarwis (Kelompok Sadar Wisata) Olean. *AGRIBIOS*, 17(1), 1 <https://doi.org/10.36841/agribios.v17i1.879>
- Ezni Balqiah, T., Pardyanto, A., Dewi Astuti, R., & Mukhtar, S. (2020). Understanding how to increase hydroponic attractiveness: Economic and ecological benefit. *E3S Web of Conferences*, 211, 01015. <https://doi.org/10.1051/e3sconf/202021101015>
- Fajarani, E., Wildayana, E., & Putri, N. E. (2021). Preferensi Konsumen Terhadap Keputusan Pembelian Sayuran Organik di Supermarket Diamond Kota Palembang. *Jurnal KaliAgri*, 2(1), 38-50.
- Hafissou, S. (2020). The impact of store formats and sales promotion towards consumer's purchase decision: Case study of Indomaret in Bandung city. *Journal of Administrative and Business Studies*, 6(5), 164-175. <https://doi.org/10.20474/jabs-6.5.1>
- Hannah, W., & Musyoka, R. (2019). Factors Contributing to the New Trend of Buying from Supermarkets and shopping malls in Kenya. *European Journal of Business and Management*, 11(3), 78-86. <https://doi.org/10.7176/EJBM/11-3-08>
- Holil, H., Susanti, N., & Yanti, R. T. (2022). The Influence of Price, Location and Service on Purchase Decisions at the Air Sebakul NRL Minimarket, Bengkulu City. *Jurnal Fokus Manajemen*, 1(2), 48-54. <https://doi.org/10.37676/jfm.v1i2.1880>
- Khusnarida Khusnarida, Iswati Iswati, & Siti Aisah. (2024). Pengaruh Kualitas Produk dan Harga terhadap Keputusan Pembelian Sayuran Hidroponik Dikebun Sayur Surabaya. *Jurnal Riset Manajemen*, 2(3), 168-182. <https://doi.org/10.54066/jurma.v2i3.2248>
- Kotler, P., & Keller, K. L. (2016). *Marketing Management (15th Editi)*. Pearson Education.
- Makmur, T., Mujiburrahmad, M., & Afrizal, A. (2023). Faktor-Faktor yang Mempengaruhi Keputusan Membeli Sayuran Hidroponik di Kota Banda Aceh (Studi Pada Sayuran Pakcoy (*Brassica rapa L*)). *Jurnal Ilmiah Mahasiswa Pertanian*, 8(4), 193-204.
- Mboe, M. S., Saediman, H., Rifay, A., Utami, T., & Purnomo, A. O. (2024). The Use of Mobile Phones Among Sweet Potato Farmers for Agricultural Information in Ranomeeto Subdistrict in Southeast Sulawesi. *International Journal of Research in Engineering, Science and Management*, 7(6), 208-213.
- Mulyati, S., Krisdianto, N., & Setiawan, M. A. (2021). Marketing Communication Strategy of Riyan Farm Hydroponic Vegetable (Case Of Riyan Farm Smes, Serang City). *International Journal of Ethno-Sciences and Education Research*, 1(3), 66-70. <https://doi.org/10.46336/ijeer.v1i3.297>

- Nasrida, N., Saediman, H., Rianse, I. S., & Hidrawati, H. (2023). Contribution of Home Gardening to Household Vegetable Consumption During COVID-19 Pandemic. *International Journal of Research in Engineering, Science and Management*, 6(5), 5–9.
- Nasution, F. Z. (2018). Hubungan Persepsi Konsumen Dengan Keputusan Pembelian Sayuran Hidroponik Bebas Pestisida (Studi Kasus Pada Konsumen Kebun Sayur Surabaya, Jawa Timur). Universitas Brawijaya.
- Nurseto, S. (2018). Pengaruh Saluran Distribusi dan Promosi Terhadap Kinerja Pemasaran (Studi Kasus Pada UKM Furniture Kota Semarang). *Jurnal Administrasi Bisnis*, 7(2), 103–107. <https://doi.org/10.14710/jab.v7i2.22695>
- Pratama, D. R. (2020). Penggunaan Digital Marketing sebagai Media Pemasaran Sayuran Hidroponik pada Lendo Bercocoktanam Bandung Timur.
- Purbohastuti, A. (2018). Dampak Hi-Card dan dimensi kualitas pelayanan terhadap loyalitas konsumen Hypermart. *Sains: Jurnal Manajemen Dan Bisnis*, 10(2), 190–204.
- Putri, A., Tarik Ibrahim, J., Sutanto, A., Syafrani, S., Yudi Ariadi, B., Baroh, I., Relawati, R., Burlakovs, J., Hawayanti, E., Utami Lestari, S., Rosa, I., Rizal, M., Marhani, M., Yasid, H., Ekawati, I., & Agung Pakarti, T. (2023). Buyer Decisions on Hydroponic Vegetable Products. *E3S Web of Conferences*, 374, 00005. <https://doi.org/10.1051/e3sconf/202337400005>
- Ramlawati, Hilmi, & Abdul Rajab. (2022). The Effect of Business Location on the Income of Fruit Traders in Baolan District, Tolitoli Regency. *Journal of Sustainable Development Science*, 4(2), 56–62. <https://doi.org/10.46650/jsds.4.2.1338.56-62>
- Rangkuti, I., Leovita, A., & Dermawan, A. (2022). Pengaruh Perilaku Konsumen Dalam Membeli Sayur Hidroponik Non Pestisida Di Kota Padang. *Musamus Journal of Agribusiness (Mujagri)*, 4(2), 46–57.
- Saediman, H., Gafaruddin, A., Hidrawati, H., Salam, I., Ulimaz, A., Sarimustaqiyima Rianse, I., Sarinah, S., & Adha Taridala, S. A. (2021). The contribution of home food gardening program to household food security in indonesia: A review. *WSEAS Transactions on Environment and Development*, 17, 795–809. <https://doi.org/10.37394/232015.2021.17.75>
- Saediman, H., Lasmin, L. O., Limi, M. A., Rianse, U., & Geo, L. (2020). Rice Farmers' Perception of Climate Variability in South Konawe District of Southeast Sulawesi. *International Journal of Scientific and Technology Research*, 9(2), 3128–3132.
- Saediman, H., Limi, M. A., Indarsyih, Y., Abdullah, S., & Yusria, W. O. (2021). Rice farmers' adaptation practices to climate change: a case of Konda subdistrict in Southeast Sulawesi. *IOP Conference Series: Earth and Environmental Science*, 724, 012102. <https://doi.org/10.1088/1755-1315/724/1/012102>

- Saediman, H., Sianturi, D. A., Abdullah, S., & Mboe, I. S. (2024). Consumer Perceptions of Hydroponic Vegetables: Health, Environmental, and Product Aspects. *International Journal of Research in Engineering, Science and Management*, 7(7), 174–178.
- Saediman, H., Syah, F. F., Ola, T. La, Tufaila, M., & Daud, L. (2019). Fishermen Group Dynamics Before and After the Implementation of a Capture Fisheries Development Program. *IOSR Journal Of Humanities And Social Science*, 24(8), 5–12. <https://doi.org/10.9790/0837-2408060512>
- Sarfan, L. O., Saediman, H., & Yusria, W. O. (2024). Analisis Pemanfaatan Digital Marketing Sebagai Media Pemasaran Sayuran Hidroponik Di Kota Kendari. *Innovative: Journal Of Social Science Research*, 4(3), 1678–1696.
- Satria, B., Untari, D. T., Perdhana, T. S., Khasanah, F. N., Sukreni, T., & Prasojo, P. (2022). Edukasi Unsur Strategi Pemasaran dalam Pengembangan Usaha Sayur Hidroponik. *Jurnal Pengabdian Kepada Masyarakat UBJ*, 5(2), 105–114. <https://doi.org/10.31599/jabdimas.v5i2.1204>
- Singgih, M., Prabawati, K., & Abdulloh, D. (2019). Bercocok Tanam Mudah dengan Sistem Hidroponik NFT. *Jurnal Abdikarya: Jurnal Karya Pengabdian Dosen Dan Mahasiswa*, 3(1), 21–24.
- Singh, K., & Raj, N. (2018). A Study on Factors Affecting Consumers Decision to Purchase Vegetables. *International Journal of Current Microbiology and Applied Sciences*, 7(2), 1211–1222. <https://doi.org/10.20546/ijcmas.2018.702.149>
- Surni, Padangaran, A. M., La Ola, T., & Saediman, H. (2018). Determinants of Value Addition in Sago Processing in Southeast Sulawesi, Indonesia. *IOSR Journal of Agriculture and Veterinary Science*, 11(12), 34–38. <https://doi.org/10.9790/2380-1112023438>
- Surni, S., & Saediman, H. (2020). Gender participation in palm sugar processing in Kolaka district of Southeast Sulawesi. *WSEAS Transactions on Environment and Development*, 16, 34–39. <https://doi.org/10.37394/232015.2020.16.4>
- Usman, E., Ilmiah, N., Sukmawati, & Ramadhan, R. (2024). Analisis Faktor-Faktor yang Mempengaruhi Keputusan Pembelian Konsumen terhadap Sayuran Hidroponik di Kabupaten Kolaka. *Jurnal Pendidikan Tambusai*, 8(3), 44937–44943.