

Value Orientation and Ecoliteracy as Key Factors in Green Product Purchase Decisions

Orientasi Nilai dan Ekoliterasi sebagai Faktor Kunci dalam Keputusan Pembelian Produk Hijau

**Avivah Rahmaningtyas*, Nur Indah Cahyaningtyas, Levana Masitajasmin Putri,
Muhammad Luthfie Fadhillah, Restie Novitaningrum, Irma Fauziah,
Liska Simamora**

Program Studi S1 Agribisnis Fakultas Peternakan dan Pertanian, Universitas Diponegoro

Jl. Prof. Soedarto, SH Tembalang, Semarang

*Email: avivahrahmaningtyas@lecturer.undip.ac.id

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ABSTRACT

Consumer awareness regarding health and environmental sustainability has increased interest in green products. Companies now recognize the importance of understanding consumer behavior in purchasing eco-friendly products, as trust and perceptions of safety significantly influence market success. This study aims to analyze how consumer ecoliteracy and value orientation affect purchasing decisions for Chocolate Monggo's green products, providing insights to support effective marketing strategies for sustainable food brands. This study was conducted using ecoliteracy and value orientation as independent variables and purchase decision as the dependent variable. Data were collected via a Google Form and analyzed through Structural Equation Modelling (SEM) using Partial Least Squares (PLS) in SmartPLS 4.0. The findings reveal that ecoliteracy and value orientation are significant to consumers' purchasing decisions for Chocolate Monggo. These results suggest that Chocolate Monggo should focus on strategies to elevate public ecoliteracy and promote the personal and social benefits associated with green product consumption.

Keywords: Ecoliteracy, Green Product, Purchasing Decision, Value Orientation

ABSTRAK

Kesadaran konsumen terhadap kesehatan dan keberlanjutan lingkungan telah meningkatkan minat terhadap produk hijau. Perusahaan kini menyadari pentingnya memahami perilaku konsumen dalam membeli produk ramah lingkungan, karena kepercayaan dan persepsi terhadap keamanan produk sangat memengaruhi keberhasilan di pasar. Penelitian ini bertujuan menganalisis bagaimana ecoliteracy dan orientasi nilai konsumen memengaruhi keputusan pembelian produk hijau Chocolate Monggo, serta memberikan wawasan untuk mendukung strategi pemasaran yang efektif bagi merek makanan berkelanjutan. Penelitian ini dilakukan dengan menggunakan ecoliteracy dan orientasi nilai sebagai variabel independen, serta keputusan pembelian sebagai variabel dependen. Data dikumpulkan melalui Google Form dan dianalisis dengan Structural Equation Modelling (SEM) berbasis Partial Least Squares (PLS) menggunakan SmartPLS 4.0. Hasil penelitian menunjukkan bahwa ecoliteracy dan orientasi nilai berpengaruh signifikan terhadap keputusan pembelian konsumen terhadap Chocolate Monggo. Temuan ini menunjukkan bahwa Chocolate Monggo perlu berfokus pada strategi untuk meningkatkan ecoliteracy publik dan mempromosikan manfaat pribadi maupun sosial yang terkait dengan konsumsi produk hijau.

Kata kunci: Ecoliteracy, Keputusan Pembelian, Orientasi Nilai, Produk Hijau

INTRODUCTION

Nowadays, the internet provides vast amounts of information that empower consumers to make smarter choices about the products they buy. It helps people become more mindful when choosing the best food for their bodies. They are also starting to care about the environmental impact of production processes. As consumers become more aware, industries are facing stronger demands to integrate sustainable practices. Marques-McEwan et al. (2023) stated that people's awareness of using natural resources has grown over the past few decades. Businesses that fail to respond to this trend may risk losing consumer trust and their position in the market. As a result, it led the food

industry to adapt circular economy principles as an effort to support environmental sustainability (Manzoor et al., 2024; Zhang et al., 2022). According to Li and Xu (2022), circular economy is a system which products or materials can be reprocessed to minimize a waste. This is aligned with the green product concept, which is designed to minimize environmental harm and promote sustainability. Green product is one of key element in green marketing, explaining that this aspect is important to attract consumers.

Eco-friendly product campaigns are widely implemented across various product lines, such as vehicle (Moustafa, 2024), meat (Sonoda et al., 2018), other food items (Manzoor et al., 2024; Cruecha-Em et al., 2025), and clothing material (Jacobs et al., 2018; Kim and Seock, 2019). Companies need to understand how consumers make purchasing decisions related to green products. Hence, promoting a brand as environmentally responsible has become a key marketing tactic. Businesses that share the same sustainability goals as their consumers are more likely to earn trust and strengthen their position in the market. Consumer trust is crucial for food producers with green product branding, as it is closely related to how the product is processed and the assurance that it is safe for consumption. The study of consumer behavior in buying green products is frequently used in research, as it can be used to assess the effectiveness of green marketing strategies (Chang et al., 2020; Cruecha-Em et al., 2025; Gaddekar and Brandão, 2025; Kim and Seock, 2019; Marcon et al., 2022).

The study conducted by Chang et al. (2020) reveals that individuals with higher education levels are more decisive in buying eco-friendly products. The reason is because they are more likely to know about the advantages of green product. Syah et al. (2021) explained ecoliteracy as the ability to understand how natural systems operate and encourage global environmental awareness to build sustainable living. Therefore, individuals' levels of ecoliteracy regarding eco-friendly products can serve as an important factor in assessing their purchasing behavior towards green products. According to Fatmawati and Kayati (2024), ecoliteracy can enhance environmental awareness, which in turn may influence individuals' behavior when making decisions that take environmental values into account. Green product awareness in food item relates to understanding the ingredients, choosing eco-friendly packaging, and identifying logos or certifications that assure safety for humans and the environment.

An eco-friendly lifestyle has become a trend among consumers. Sony and Ferguson (2017) stated that environmentally friendly practices are no longer perceived as niche or alternative but are increasingly becoming integrated into mainstream societal behavior. These days, people use shopping bags, bring their water bottles, and carefully choose eco-friendly packaging. These attitudes can be reflected on how they perceive the value of green products. Consumers' value orientation toward eco-friendly products may stem either from environmental concern or from a desire for social recognition (Shi et al., 2018). Both motives remain relevant in analyzing green product purchasing decisions.

Chocolate Monggo is one of the companies that prioritizes environmentally friendly production processes to create green products. Their production takes place in rooms with minimal use of air-conditioning and some technology is powered by solar energy. In addition, their packaging is made from biodegradable materials. These eco-friendly practices have long been implemented and are an integral part of their branding strategy. Chocolate Monggo has started branding itself as a green product, yet not many food companies have followed the same approach. One reason is that food products have a limited shelf life, whereas green products are often more expensive than conventional ones. Most business owners are unwilling to take the risk if there is uncertainty about the product's marketability. This higher price is caused by the use of high-quality ingredients and additional operational costs. Effective strategies are essential for agricultural products to compete in the market, which involves understanding consumer behavior (Adawiya et al., 2025). Understanding these challenges highlights the importance of exploring the factors that shape consumer decisions toward green products. This study aims to analyze how consumer ecoliteracy and value orientation can influence purchasing decisions of the green product Chocolate Monggo to help the company in developing effective strategies.

RESEARCH METHOD

This research was conducted at the Chocolate Monggo Yogyakarta, known as a pioneer in dark chocolate production. The study employed a quantitative research method, with ecoliteracy and value

orientation as independent variables, and purchase decision as the dependent variable. The sampling method used was non-probability sampling, due to the unknown total population and unequal chances for individuals in the population to be selected as samples. Data were collected using a Google Form questionnaire. The data analysis was designed using Structural Equation Modelling (SEM) based on Partial Least Squares (PLS), processed with SmartPLS 4.0.

The standard for determining whether a manifest variable has a significant correlation with its measured latent variable is that the t-statistic in the outer loading table must exceed a t-value of 1.960, corresponding to a significance level of 0.05. There are two evaluations used to assess validity, which are convergent validity and discriminant validity. Instrument reliability testing in PLS is evaluated based on the resulting composite reliability values. Before examining the validity and reliability results, if any manifest variable in the model has a loading factor below 0.5, it should be eliminated from the analysis. There are two hypotheses in this study. First, ecoliteracy has a significant influence on the purchasing decision for Chocolate Monggo's green products. Second, value orientation significantly affects the purchasing decision for Chocolate Monggo's green products.

RESULTS AND DISCUSSIONS

Results

Loading Factor Evaluation

The loading factor test was conducted prior to the outer evaluation and inner model evaluation. The evaluation of loading factors was performed twice in this study to ensure that indicator values exceeded 0.5. In the first round of calculation, indicators X1.a, X1.c, X2.b, Y1.b, Y1.d, and Y1.e were eliminated. As illustrated in Figure 1, those indicators were below 0.5. By the second round, all remaining indicators had met the criteria. Based on Figure 2, the indicators that satisfied the requirements and could be analyzed using PLS-SEM were X1.b, X1.d, X1.e, X2.a, X2.c, X2.d, Y1.a, Y1.c, Y1.f, Y1.g.

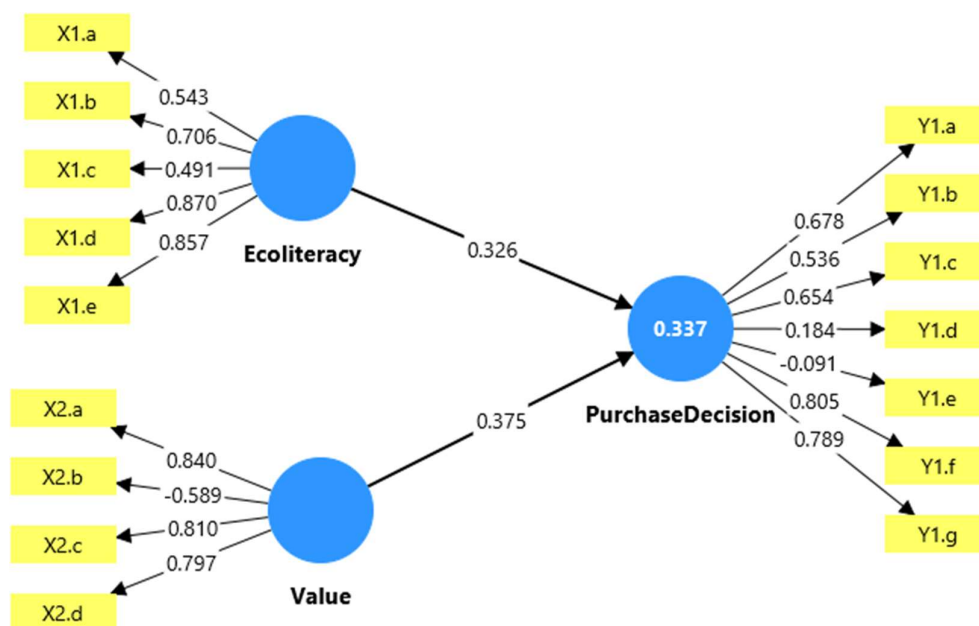


Figure 1. Loading Factors before Elimination

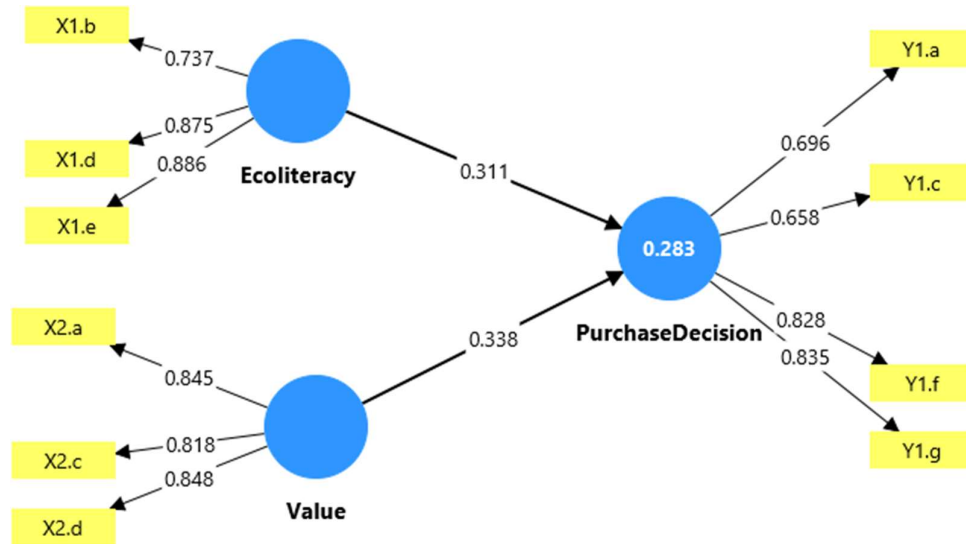


Figure 2. Loading Factors Final Result

Outer Evaluation

As shown in Table 1, all variables have AVE values greater than 0.5, demonstrating that convergent validity has been achieved. Discriminant validity was assessed by comparing the square root of the AVE with the inter-construct correlations presented in Tables 1 and Table 2. The correlation coefficients in Table 2 are lower than the corresponding square root of AVE values from Table 1, confirming that discriminant validity is established in the model. In addition, Table 3 indicates that the composite reliability values for all constructs exceed 0.7, suggesting that the model possesses adequate reliability.

Table 1. The AVE Value and the Square Root of AVE

Latent Variable	AVE	Square Root of AVE
Ecoliteracy	0.698	0.835
Value Orientation	0.700	0.836
Purchasing Decision	0.575	0.758

Source: Primary Data Analysis (2025)

Table 2. Correlation Between Latent Variables

Latent Variable	Ecoliteracy	Value Orientation	Purchasing Decision
Ecoliteracy	1.000	0.340	0.426
Value Orientation	0.340	1.000	0.444
Purchasing Decision	0.426	0.444	1.000

Source: Primary Data Analysis (2025)

Table 3. Composite Reliability

Latent Variable	Composite Reliability
Ecoliteracy	0.873
Value Orientation	0.875
Purchasing Decision	0.843

Source: Primary Data Analysis (2025)

Inner Evaluation

The R-square value reflects the impact of certain exogenous latent variables on endogenous latent variables. As shown in Table 4, the R-square value for purchase decisions is 0.283, indicating that Ecoliteracy and Value Orientation account for 28.3% of the variance in Purchasing Decision, while the remaining 71.7% is explained by variables not included in the model.

Table 4. R-square Value

Latent Variable	R-square
Purchasing Decision	0.283

Source: Primary Data Analysis (2025)

Hypothesis Testing

Hypothesis testing in this study was conducted using the bootstrapping method. The t-statistic values in the path coefficient table serve as the basis for determining whether to accept or reject the research hypotheses. At a 5% significance level, the critical t-value is 1.960. The analysis revealed that Ecoliteracy and Value Orientation significantly affect Purchasing Decision for green product Chocolate Monggo. Specifically, the t-statistic for Ecoliteracy is 3.774 and for Value Orientation is 4.478, both exceeding the threshold of 1.960. These results are presented in Table 5.

Table 5. T-statistic

Latent Variable	T-statistic
Ecoliteracy	3.774
Value Orientation	4.478

Source: Primary Data Analysis (2025)

Discussions

Ecoliteracy towards Purchasing Decision

The T-statistic for the effect of the ecoliteracy variable on the purchase decision variable is 3.774, which is greater than 1.960. This indicates that the study supports the hypothesis that ecoliteracy has a significant influence on the purchasing decision for green product Chocolate Monggo. The result showed that individuals with higher ecoliteracy tend to make stronger purchasing decisions regarding Chocolate Monggo, whereas limited understanding of eco-friendly concepts corresponds with lower consumer willingness to purchase the product. This result is in line with findings from other studies exploring how ecoliteracy shapes consumer attitudes and intentions toward green product purchases. The research conducted by Bhutto et al. (2020) indicate that ecoliteracy, as a moderating variable, strengthens the relationship between consumer attitudes and purchase intention. Moreover, the higher an individual's level of eco-literacy, particularly among those with higher educational attainment in Lithuania, the fewer barriers they perceive in purchasing organic food (Bhutto et al., 2020). This phenomenon can be attributed to the complex interplay between education, environmental awareness, and sustainable values. Consumers who are able to recognize eco-friendly certifications on packaging, understand safe product ingredients, and identify environmentally friendly packaging materials are more likely to develop positive attitudes toward Chocolate Monggo. Additionally, Chocolate Monggo engages in activities such as tree-planting campaigns as part of its environmental commitment, which further influences consumers exposed to this information to form positive intentions to purchase the product. Several studies have also confirmed that ecoliteracy has a positive influence on the intention to purchase green products (Matin et al., 2021; Tiwari, 2023). This highlights the importance for Chocolate Monggo to enhance public ecoliteracy regarding its green products. Given the challenges frequently faced by producers of environmentally friendly products, additional efforts are required to promote the advantages of green products. As noted by Bhutto et al. (2020) that people tend to purchase conventional food more frequently and consistently because they are already familiar with it, whereas the purchase of organic food remains inconsistent due to its lower level of familiarity among many consumers. Among the indicators of the ecoliteracy variable, the persuasive action indicator (X1.e) has the highest score, which is 0.886. This suggests that persuasive actions exert the strongest influence on consumers when deciding to purchase Chocolate Monggo. However, the scores of the other indicators are not significantly different, with the use of natural products indicator (X1.b) scoring 0.737, and the form of concern indicator (X1.d) scoring 0.875. This indicates that all indicators effectively influence consumers in their decision to buy green product Chocolate Monggo.

Value Orientation towards Purchasing Decision

The research findings indicate that value orientation has a significant influence on purchasing decisions. This is indicated by the T-statistic value of 4.478, which is greater than 1.960. This result is consistent with several studies. The findings from Shi et al. (2018) study indicate that social value orientation influences ecological consumption behavior, with group identification acting as a

mediating variable. Shi et al. (2018) explained that social values, such as the desire to belong to a particular group, motivate individuals to engage in environmentally friendly consumption. These results are consistent with the study conducted by Sony and Ferguson (2017), which found a positive relationship between consumers' value orientation and green lifestyle behavior, where the primary drivers are egoistic values and social-altruistic orientation. This means that consumers buy Chocolate Monggo because they can gain more value for themselves. For instance, they may feel a sense of pride when they are perceived as individuals who support environmental sustainability through an eco-friendly lifestyle. Moreover, consumers who are driven by social-altruistic values tend to view green product purchases as contributions to the welfare of society and the environment. Individuals motivated by egoistic values may perceive eco-friendly products as a means to enhance their personal image or gain social recognition. The alignment between personal values and sustainable practices strengthens consumer loyalty and willingness to pay premium prices for green products. Previous research has shown that highlighting social and personal benefits in marketing messages can effectively appeal to consumers' value orientations. Hence, Chocolate Monggo should launch campaigns aimed at boosting consumers' self-assurance following their purchase. Among the indicators within the value orientation variable, the cultural influence indicator (X2.d) has a score of 0.848. However, the differences compared to the other indicators are minimal, as the freedom to choose indicator (X2.a) scores 0.845, and the group opinion (X2.c) indicator scores 0.818. This indicates that all selected indicators under value orientation hold relatively equal importance in influencing consumers' decisions to purchase Chocolate Monggo. The culture surrounding consumers influences their decision-making processes, as culture often becomes an integral part of a person's identity. When the culture around a consumer promotes the consumption of green products, they are more likely to be influenced by similar values. Meanwhile, the freedom to choose products enhances consumers' confidence, as it allows them greater autonomy in making decisions. Group opinions also play a role in shaping consumers' internal values, motivating them to purchase green products. This is supported by previous research, which has shown that social values have a significant impact on individuals' decision-making.

CONCLUSION

The study concludes that higher levels of ecoliteracy significantly strengthen consumers' purchasing decisions toward Chocolate Monggo, aligning with previous research on green consumer behavior. Value orientation also plays an important role, as individuals motivated by egoistic or social-altruistic values are more inclined to adopt eco-friendly consumption. Social identification further mediates these effects, encouraging environmentally responsible choices when individuals seek a sense of belonging. Despite these positive influences, purchasing consistency for green products remains lower than for conventional products due to lower familiarity. Therefore, Chocolate Monggo should invest in campaigns to enhance public ecoliteracy and reinforce consumers' confidence in choosing green products. Such efforts are crucial to overcoming barriers and positioning Chocolate Monggo as a trusted, sustainable brand. Future research should consider incorporating additional variables to complement previous studies in examining consumer behavior related to purchasing green products.

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