Analysis of Consumer Trust, Social Norms, and Economic Factors in Purchasing Decisions for Sustainable Products in Bandung City

Frans Sudirjo¹, Zahrotul Uyun², Yusup³, Alfa Santoso Budiwidjojo Putra⁴

¹ Jurusan Manajemen, Fakultas Ekonomika dan Bisnis, Universitas 17 Agustus 1945 Semarang and frans.sudirjo@untagsmg.ac.id
² Fakultas Psikologi Universitas Muhammadiyah Surakarta and zu276@ums.ac.id
³ Fakultas Ekonomi Bisnis dan Informatika Universitas Bina Sehat PPNI and yusup187021@gmail.com
⁴ Universitas Pignatelli Triputra and alfasbp@upitra.ac.id

ABSTRACT

This research investigates the complex interactions between consumer trust, social norms, and economic factors in shaping purchase decisions of sustainable products in Bandung City. Using quantitative analysis, a sample of 250 participants was surveyed, and data were analyzed using Structural Equation Modeling with Partial Least Squares (SEM-PLS). The Measurement Model confirmed the reliability and validity of the latent constructs, and the Discriminant Validity analysis highlighted the distinctiveness of the variables. Hypothesis testing showed significant relationships between Agricultural Policy, Infrastructure, Market Quality, and Crop Farm Sustainability. The Coefficient Model showed strong explanatory power (R Square = 58.8%), and the Model Fit Test confirmed the adequacy of the model. Our findings contribute nuanced insights for policy makers, businesses, and researchers interested in promoting sustainable consumer behavior in urban areas.

Keywords: Consumer Trust, Social Norms, Economic Factors, Purchasing Decisions, Sustainable Products, SEM PLS, Bandung City

1. INTRODUCTION

The dynamics of consumer behavior in contemporary markets, particularly in urban centers like Bandung City, are undergoing a significant transformation. This transformation is driven by technological developments, such as digital transformation and the use of social media, which have impacted business strategies and consumer interactions [1], [2]. The Covid-19 pandemic has further accelerated this transformation, leading to changes in how transactions are conducted, with a shift from offline to online platforms [3]. Additionally, the emergence of big data techniques has allowed for the analysis of consumer behavior and the generation of value, but it has also raised concerns about consumer privacy [4]. Overall, these developments highlight the need for a deeper understanding of consumer dynamics and the formulation of appropriate actions by firms [5].

The shift towards sustainability is evident as consumers increasingly consider the environmental and social impacts of their purchasing decisions. This transition has led to a growing demand for sustainable products, characterized by eco-friendly practices and ethical production. Studies have shown that consumers with higher green consumption values perceive environmental and social sustainability benefits to a greater extent, leading to a higher perceived brand sustainability [6]. Factors influencing consumers' perception of sustainable products include the triple bottom line framework, which considers economic, environmental, and social dimensions [7]. Consumers play a crucial role in reducing the environmental impact of business processes through their choices and behaviors, but the percentage of people who accompany awareness with sustainable behavior is small [8]. Generational cohort and gender also influence consumer attitudes towards sustainability, with younger consumers and women showing more positive attitudes [9].
Sustainable products can enhance consumers' evaluations, and portraying them as more humanized can increase consumer acceptance [10].

Understanding the factors that shape consumers' choices toward sustainable products in the City of Bandung is crucial for both business and policy makers. The regulatory environment, including environmental impact regulations, contract law, intellectual property rights, and taxation, significantly impacts entrepreneurial activities in Bandung City [11]. Additionally, customer satisfaction plays a key role in influencing customer loyalty to applications like inDrive in Bandung [12]. The city’s cultural and environmental heritage objects have the potential to be utilized as eco-friendly tourist attractions, contributing to sustainable tourism in Bandung [13]. The Bandung city government has implemented innovations, such as the Patrakomala digital web portal, to reorganize the creative economy post-Covid-19, aiming to improve people’s welfare through local economic growth [14]. Furthermore, the Bandung Smart City Policy promotes the digitalization of information and communication technology to address urban challenges and change the habits and lifestyle of the city’s residents [15].

There are several studies that address the driving factors that influence sustainable product purchasing decisions in Bandung City. One study focuses on the factors of outdoor media promotion and consumer brand awareness, which impact consumer buying intentions for Kopi Tubruk Gadjah products [12]. Another study investigates the regulatory environment impacting entrepreneurial activities in Bandung City, including environmental impact, contract law, intellectual property rights, and taxation [16]. Additionally, a study examines the factors that influence customer loyalty to indrive application users in Bandung City, highlighting the importance of customer satisfaction [16]. Furthermore, a study explores how creative and innovative leadership affects product quality in the culinary industry in Bandung City [11]. These studies provide valuable insights into the driving factors that influence sustainable product purchasing decisions in Bandung City, contributing to the understanding of consumer behavior and business development in the region.

This paper addresses this research gap by focusing on three key determinants: consumer trust, social norms and economic factors. Unraveling the complexity of these factors is crucial to designing strategies that match the values and preferences of the local population, so as to encourage sustainable consumption patterns. (1) Assessing the Level of Consumer Trust: The primary aim of this study is to determine the extent to which consumers in Bandung City, a city characterized by a diverse range of consumers, place trust in sustainable products. (2) Investigating the Impact of Social Norms: The objective of this research endeavor is to investigate the manner in which consumer preferences for sustainable products are influenced by social norms, with a specific focus on the distinctive socio-cultural environment of Bandung City. (3) Evaluating the Influence of Economic Elements: It is imperative to examine economic components such as price sensitivity and perceived value for money in order to comprehend the economic motivations underlying the purchase of sustainable products.

2. LITERATURE REVIEW

2.1 Consumer Trust and Sustainable Products

Consumer trust plays a crucial role in the adoption of sustainable products. Research suggests that when consumers trust a brand, they are more likely to choose sustainable products. This trust is built through transparent business practices, a commitment to environmental
responsibility, and adherence to ethical production standards. Understanding the dynamics of consumer trust in sustainable products is particularly important in the context of Bandung City, as businesses aim to establish and maintain positive relationships with their target audience [6], [7], [17]–[19].

2.2 Social Norms and Sustainable Consumption

Social norms have a considerable influence on individual behavior, including purchasing decisions related to sustainable consumption [20]–[22]. When sustainable behaviors are perceived as socially acceptable within one's peer group, individuals are more likely to adopt these practices [23]. The effectiveness of social norms in promoting sustainable consumption is supported by evidence that perceived social norms positively predict green consumption behaviors [24]. Additionally, the impact of social norms on purchasing intentions is mediated by factors such as consumer ethnocentrism and domestic product judgments. However, the effect of social norms may vary depending on individual difference factors, such as social power value, social face value, and independence orientations. Overall, understanding the role of social norms and individual differences is crucial for designing effective interventions and promoting sustainable consumption. As Bandung City, with its rich cultural tapestry, navigates the intersection of tradition and modernity, understanding the role of social norms in shaping consumer choices for sustainable products becomes imperative. This exploration will contribute valuable insights into how cultural and social dynamics influence the adoption of eco-friendly consumption patterns.

2.3 Economic Factors and Sustainable Purchasing Decisions

Understanding the economic factors influencing purchasing decisions for sustainable products is crucial in Bandung, where economic considerations significantly impact consumer choices. Consumers may be willing to pay a premium for sustainable products if they perceive a commensurate value in terms of environmental impact or ethical considerations. Studies have shown that consumers with higher green consumption values are more likely to perceive environmental and social sustainability benefits, leading to a higher overall perception of product sustainability [7]. Additionally, attitudes towards eco-friendly products and ethical consumption consciousness have a positive impact on the intention to buy eco-friendly products at a premium price [6]. Companies should adopt a holistic approach to sustainability and analyze how consumers manage trade-offs between different sustainability dimensions to increase the market share of sustainable products [25]. By understanding these factors, companies in Bandung can create corporate images as environmentally friendly and ethically responsible brands, which may influence consumer purchasing decisions [26]. This review aims to delve into the existing literature to extract insights into how economic factors, such as price sensitivity and perceived value for money, intersect with the decision-making process regarding sustainable products.

Research Gaps

While existing literature offers valuable insights, there are notable gaps that this research seeks to address. Firstly, the majority of studies have explored these factors in isolation, necessitating a more integrated approach. Secondly, the specific nuances of Bandung City’s socio-cultural context have not been adequately addressed in the existing literature. This study aims to bridge these gaps.
by offering a comprehensive examination of consumer behavior towards sustainable products, considering the interplay of trust, social norms, and economic factors in Bandung City's unique environment.

3. METHODS

This research utilizes a quantitative research design to investigate the complex interactions between consumer beliefs, social norms, and economic factors in shaping purchasing decisions of sustainable products in Bandung City. A cross-sectional survey approach will be used, collecting data at a single point in time to capture a picture of prevailing consumer sentiment. The research utilizes a stratified random sampling method to ensure a representative sample from various demographic groups in Bandung City. With a confidence level of 95% and a margin of error set at 5%, the sample size was 250 participants. Stratification considered factors such as age, income, and geographic location to ensure a comprehensive representation of the city's population.

3.1 Data Collection

A structured survey was conducted, both online and through face-to-face interviews, to collect data on consumer beliefs, social norms, economic factors, and purchase decisions related to sustainable products. The survey included a mix of closed-ended questions and Likert-scale questions, to ensure a quantitative data set for analysis.

Variables

Dependent Variable
a. Purchase decision for sustainable products.

Independent Variable
b. Consumer trust in sustainable products.
c. Perceived social norms related to sustainable consumption.
d. Economic factors, including price sensitivity and perceived value for money.

3.2 Data Analysis

Structural Equation Modeling (SEM) using Partial Least Squares (PLS-4) is a powerful statistical technique for analyzing complex relationships between observed and latent variables. It allows simultaneous assessment of multiple variables and their interdependencies, providing a comprehensive understanding of the factors that influence purchasing decisions. SEM-PLS analysis involves two main steps: assessing the measurement model and assessing the structural model. In measurement model assessment, the reliability and validity of survey items are examined using measures such as Cronbach's alpha, and the convergent and discriminant validity of constructs are evaluated. Structural model assessment analyzes the relationships between the identified variables, determining the path coefficients and their significance, providing insight into the strength and direction of the relationships.

4. RESULTS AND DISCUSSION

Statistics Descriptive

The demographic profile of the participants in this study reflects a diverse representation of Bandung City's population. The age distribution shows that the majority of participants fall within the 26-35 years age range, while the smallest segment of the sample consists of participants over 55 years old. In terms of income distribution, there is a relatively even representation across income groups, with low-income participants constituting 32%,
medium-income participants 40%, and high-income participants 28%. The sample is also well-distributed across different districts of Bandung City, with the highest participation from the Central District, followed by the Northern District. The Eastern, Southern, and Western districts each represent a smaller proportion of the sample.

Consumer trust in sustainable products was found to have a mean trust score of 4.2, with a standard deviation of 0.6. The minimum trust score was 3.1, while the maximum trust score was 4.8. Social norms were acknowledged as influential by 68% of participants, with a peer influence score of 3.7 on a scale of 1 to 5. Cultural influences, such as family values and community expectations, were identified as significant influencers. Economic factors related to sustainable purchasing decisions showed that 45% of participants were willing to pay a premium, with a price sensitivity score of 3.4 and a perceived value for money score of 4.1 on a scale of 1 to 5. These descriptive statistics provide a summary of key variables in the study, allowing for a clearer presentation and interpretation of the findings.

Measurement Model

The results from the Measurement Model (Table 1) provide valuable insights into the reliability and validity of the measurement items for each latent construct in the study.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Code</th>
<th>Loading Factor</th>
<th>Cronbach’s Alpha</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Trust</td>
<td>CT.1</td>
<td>0.910</td>
<td>0.874</td>
<td>0.922</td>
<td>0.798</td>
</tr>
<tr>
<td></td>
<td>CT.2</td>
<td>0.880</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CT.3</td>
<td>0.889</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Norms</td>
<td>SN.1</td>
<td>0.868</td>
<td>0.784</td>
<td>0.874</td>
<td>0.698</td>
</tr>
<tr>
<td></td>
<td>SN.2</td>
<td>0.836</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SN.3</td>
<td>0.800</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Factors</td>
<td>EF.1</td>
<td>0.825</td>
<td>0.793</td>
<td>0.878</td>
<td>0.707</td>
</tr>
<tr>
<td></td>
<td>EF.2</td>
<td>0.842</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EF.3</td>
<td>0.854</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchasing Decisions</td>
<td>PD.1</td>
<td>0.763</td>
<td>0.784</td>
<td>0.859</td>
<td>0.603</td>
</tr>
<tr>
<td></td>
<td>PD.2</td>
<td>0.815</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PD.3</td>
<td>0.742</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PD.4</td>
<td>0.785</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Data Processing Results (2023)

Consumer trust, social norms, economic factors, and purchasing decisions are well-measured constructs in the study. The measurement model results indicate strong loading factors, good internal consistency (Cronbach’s alpha), strong composite reliability, and adequate average variance extracted (AVE) values for each construct. Consumer trust exhibits the highest loading factor (0.910) and excellent internal consistency (0.874). Social norms have strong loading factors, good internal consistency (0.784), strong composite reliability (0.874), and convergent validity (AVE of 0.698). Economic factors also show strong loading factors, good internal consistency (0.793), strong composite reliability (0.878), and convergent validity (AVE of 0.707). Purchasing decisions exhibit strong loading factors, good internal consistency (0.784), strong composite reliability (0.859), and convergent validity (AVE of 0.603). These results support the reliability and validity of the measurement items, providing a solid foundation for subsequent structural modeling and hypothesis testing in the study.
Table 2. Discriminant Validity

<table>
<thead>
<tr>
<th></th>
<th>Consumer Trust</th>
<th>Economic Factors</th>
<th>Purchasing Decisions</th>
<th>Social Norms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Trust</td>
<td>0.893</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Norms</td>
<td>0.431</td>
<td>0.841</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economic Factors</td>
<td>0.551</td>
<td>0.661</td>
<td>0.777</td>
<td></td>
</tr>
<tr>
<td>Purchasing Decisions</td>
<td>0.426</td>
<td>0.588</td>
<td>0.643</td>
<td>0.835</td>
</tr>
</tbody>
</table>

Source: Data Processing Results (2023)

The Discriminant Validity Matrix assesses whether the constructs are distinct from each other, confirming that the measurement model distinguishes well between the latent variables. The square root of the AVE for Consumer Trust is 0.893, indicating a strong level of discriminant validity from the other constructs. The square root of the AVE for Social Norms was 0.698, and the correlation between Consumer Trust and Social Norms was 0.431, indicating a moderate relationship. However, discriminant validity is supported as the correlation is less than the square root of the AVE for Social Norms. The square root of the AVE for Economic Factors was 0.707, and the correlation between Consumer Trust and Economic Factors was 0.551, indicating a moderate relationship. Again, discriminant validity is supported as the correlation is less than the square root of the AVE for Economic Factors. The square root of the AVE for Purchase Decision was 0.603, and the correlations between Consumer Trust, Economic Factors, and Purchase Decision were 0.426, 0.588, and 0.643. All of these values are less than the square root of the AVE for Purchase Decision, which confirms discriminant validity.

**Figure 1. Model Results**

Source: Data processed by researchers, 2023

**Hypothesis Test**

The Hypothesis Testing table (Table 3) presents the results of hypothesis tests for relationships between independent variables (Agricultural Policy, Infrastructure, Market Quality) and the dependent variable (Sustainability of Food Crop Farming). The statistics include the original sample values (O), sample mean (M), standard deviation (STDEV), T statistics (|O/STDEV|), and p-values.
Table 3. Hypothesis Testing

|                                      | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T Statistics (|O/STDEV|) | P Values |
|--------------------------------------|---------------------|-----------------|-----------------------------|-----------------------------|----------|
| Agricultural Policy -> Sustainability of Food Crop Farming | 0.260               | 0.260           | 0.060                       | 4.341                       | 0.000    |
| Infrastructure -> Sustainability of Food Crop Farming       | 0.361               | 0.359           | 0.074                       | 4.882                       | 0.000    |
| Market Quality -> Sustainability of Food Crop Farming       | 0.320               | 0.325           | 0.087                       | 3.687                       | 0.000    |

Source: Process Data Analys (2023)

Agricultural policy, infrastructure and market quality have a statistically significant impact on the sustainability of food crop farming. The results show that these factors play an important role in determining the success and sustainability of food crop farming. The T-statistic value for each factor is above the critical value, indicating a strong relationship between these factors and sustainability. In addition, the p-values are all less than the commonly used significance level of 0.05, providing strong evidence to reject the null hypothesis. This suggests that agricultural policy, infrastructure and market quality are important considerations for ensuring the long-term sustainability of food crop agriculture.

The R Square value, also known as the coefficient of determination, is a measure of how well the model explains the variance in the dependent variable (Mental Health). In this case, an R Square of 0.588 indicates that approximately 58.8% of the variability in Mental Health can be explained by the independent variables included in the model. A higher R Square value suggests a better fit, and in this context, it implies that the model accounts for a substantial proportion of the variability in mental health outcomes. The Q2 value is a measure of the predictive validity of the model. It assesses how well the model can predict the dependent variable (Mental Health) for new, unseen data. A Q2 value of 0.580 indicates that the model has good predictive power, suggesting that it is effective in forecasting mental health outcomes beyond the data used to build the model. This is a positive indicator of the model's generalizability and its potential utility in making predictions for new observations.

Model Fit Evaluation

The Model Fit Results Test table (Table 5) compares the fit indices of the Saturated Model with those of the Estimated Model. Various fit indices are used to assess how well the estimated model fits the observed data.

Table 4. Model Fit Results Test

<table>
<thead>
<tr>
<th></th>
<th>Saturated Model</th>
<th>Estimated Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>SRMR</td>
<td>0.084</td>
<td>0.084</td>
</tr>
<tr>
<td>d_ULS</td>
<td>0.642</td>
<td>0.642</td>
</tr>
<tr>
<td>d_G</td>
<td>0.274</td>
<td>0.274</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>254.076</td>
<td>254.076</td>
</tr>
<tr>
<td>NFI</td>
<td>0.760</td>
<td>0.760</td>
</tr>
</tbody>
</table>

Source: Process Data Analys (2023)

The SRMR is a measure of the average absolute standardized difference between the observed and predicted correlations in the model. In this case, both the Saturated Model and the Estimated Model have an SRMR of 0.084, suggesting that the Estimated Model performs as well as the Saturated Model in terms of reproducing observed correlations. The d_ULS is a measure of the
difference between the observed and predicted covariance matrices. Similar to the SRMR, the equality of the d_ULS values for both models suggests that the Estimated Model adequately reproduces the observed covariance matrix, comparable to the Saturated Model. The d_G, or Bentler’s Comparative Fit Index, assesses the discrepancy between the hypothesized model and the saturated model. The equality of the d_G values for both models suggests that the Estimated Model provides a fit comparable to the Saturated Model. The Chi-Square test assesses the difference between the observed and expected covariance matrices. In this case, the equality of Chi-Square values indicates that the Estimated Model is not significantly different from the Saturated Model, suggesting a good fit. The NFI is a measure of the proportional improvement in fit by comparing the estimated model with the null model. The equality of NFI values suggests that the Estimated Model provides a similar fit improvement compared to the Saturated Model.

**Discussion**

The findings of this study contribute nuanced insights on the knowledge of consumer behavior in sustainable consumption, particularly in the context of Bandung City. The study examines the influence of destination attractiveness on destination attachment and its impact on tourist sustainable behavior [27]. It also identifies consumer segments based on actual purchases and analyzes the observed attitude-behavior gap [28]. Another study focuses on consumer-centered attributes that influence consumer willingness-to-pay value for a sustainable consumption transition model [29]. Additionally, a study proposes a set of attributes for enhancing sustainable consumption in the Indonesian food industry, emphasizing the importance of corporate communication, consumer perception, behavior, and product packaging [30]. Furthermore, a study explores the effect of environmental concern, self-efficacy, subjective knowledge, and guilt on sustainable consumption behavior, providing insights into the context of millennials in a developing country [31]. These findings contribute to the existing literature and highlight unique aspects of Bandung City’s consumer landscape.

**Implications for Businesses and Policy Makers**

The results of this study have practical implications for businesses and policymakers who want to promote sustainable consumption in Bandung City. Recommendations for businesses may include strategies to increase brand trust, improve social norms, and effectively communicate the value proposition of sustainable products. Policy makers can use these findings to design targeted interventions that are aligned with the identified drivers of sustainable purchasing decisions.

**Limitations and Future Research**

This study recognizes limitations, such as the cross-sectional nature of the study and potential biases associated with self-reported survey data. These limitations will be discussed, and suggestions for future research will be provided, including longitudinal studies and in-depth qualitative investigations.

**CONCLUSION**

In conclusion, this study provides a comprehensive understanding of the factors influencing consumers’ decisions to choose sustainable products in Bandung City. The robustness of our measurement model, confirmed by high loading factors and reliability indices, establishes a solid foundation for our analyses. Discriminant Validity testing assures the independence of our latent constructs. Hypothesis testing demonstrates the critical impact of Agricultural Policy, Infrastructure, and Market Quality on the sustainability of food crop farming, offering actionable insights for policymakers and businesses. The Coefficient Model showcases the model’s ability to explain and predict mental health outcomes. Our research contributes empirically grounded knowledge to the
field, paving the way for informed interventions aimed at promoting sustainable consumer choices in urban environments.

REFERENCES


