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Why Consumers Trust Sustainable Food: Psychological Mechanisms Underlying Sustainable Food Adoption in Emerging Markets

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Abstract: Sustainable food consumption has attracted increasing scholarly attention in contemporary consumer behavior research, particularly in emerging markets characterized by growing environmental awareness alongside continuing sustainability skepticism and authenticity uncertainty. However, prior studies have predominantly emphasized environmental concern and functional product attributes while providing limited understanding regarding how sustainability-related perceptions become psychologically internalized into long-term lifestyle commitment. This study therefore examines the relationships among health consciousness, perceived environmental value, consumer trust, purchase intention, and sustainable food adoption behavior within the context of hydroponic vegetable consumption in Indonesia. Drawing upon symbolic consumption theory, trust theory, and the Theory of Planned Behavior, this study proposes an integrated psychological framework explaining how sustainability-related perceptions influence environmentally responsible consumption behavior through affective trust formation. Data were collected from 385 consumers purchasing hydroponic vegetables in urban retail markets in Indonesia and analyzed using Structural Equation Modeling (SEM) with LISREL. The findings demonstrate that health consciousness and perceived environmental value significantly strengthen consumer trust. Consumer trust further exerts the strongest influence on purchase intention and long-term sustainable food adoption behavior. The mediation analysis additionally reveals that consumer trust functions as an affective psychological conversion mechanism linking sustainability-related perceptions with behavioral commitment. The findings indicate that environmentally responsible food consumption is shaped not merely by rational product evaluation but also by emotional reassurance, perceived authenticity, ethical alignment, and identity-related lifestyle processes. This study contributes to sustainable consumption and consumer behavior literature by extending understanding regarding the affective mechanisms underlying environmentally responsible consumption behavior in emerging markets. The findings further enrich symbolic consumption literature by demonstrating that sustainable food adoption increasingly reflects psychologically and symbolically embedded lifestyle commitment rather than purely functional purchasing decisions.

Keywords: Sustainable food adoption, Consumer trust, Health consciousness, Perceived environmental value, Sustainable consumption, Emerging markets, Hydroponic vegetables, Consumer behavior.

INTRODUCTION

The growing global concern regarding environmental sustainability, public health, and ethical consumption has substantially transformed consumer behavior in contemporary food markets. Consumers increasingly seek products perceived not only as beneficial for personal well-being but also as environmentally and socially responsible. Within this context, sustainable food products such as hydroponic vegetables have gained increasing market attention due to their reduced pesticide usage, efficient resource utilization, and environmentally controlled production systems. Recent consumer research suggests that environmentally responsible food consumption is no longer driven solely by functional product attributes but increasingly shaped by emotional meaning, lifestyle congruence, moral values, and identity-related motivations associated with responsible consumption (White et al., 2019; Schmitt et al., 2022; Scott et al., 2022).

According to symbolic consumption theory, consumers utilize marketplace products not only for utilitarian purposes but also as symbolic resources for constructing and communicating identities, lifestyles, and social values (Belk, 1988; McCracken, 1986). Arnould and Thompson (2005), through Consumer Culture Theory, further argue that consumption practices are deeply connected to self-construction, social meaning, and moral expression. Within sustainable consumption contexts, environmentally responsible products may therefore function as symbolic representations of ethical awareness, health-oriented lifestyles, and socially responsible identities. Consumers increasingly derive emotional reassurance and psychological satisfaction from products aligned with their personal values and desired self-concepts (Bolton & Reed, 2022; Griskevicius et al., 2021). Consequently, sustainable food adoption extends beyond rational purchasing decisions and increasingly reflects emotionally meaningful and identity-driven lifestyle behavior.

Despite increasing awareness regarding sustainability and healthy consumption, actual adoption of sustainable food products remains inconsistent, particularly in emerging markets. This phenomenon is widely recognized as the attitude–behavior gap, where consumers express favorable attitudes toward sustainable products but fail to consistently translate these attitudes into actual purchasing behavior (Carrington et al., 2021; Testa et al., 2020). Existing literature has predominantly explained sustainable food consumption through functional product evaluations such as price, quality, accessibility, and perceived utility (Joshi & Rahman, 2021; Nguyen et al., 2021). Although these factors remain important, they provide limited explanation regarding how sustainability-related perceptions become psychologically internalized into long-term lifestyle commitment and environmentally responsible behavioral adoption.

The inconsistency becomes more complex in emerging markets, where institutional trust, sustainability verification systems, and product transparency mechanisms are often still evolving. Consumers frequently encounter difficulties in verifying sustainability-related claims because environmental and ethical product attributes cannot be directly evaluated during purchase situations. Consequently, many consumers remain skeptical toward environmentally friendly product claims, particularly when product authenticity and producer credibility are difficult to assess. Under such conditions, trust becomes a critical psychological mechanism enabling consumers to reduce uncertainty and perceived consumption risk (Morgan & Hunt, 1994; Bhattacharya & Kumar, 2020). Contemporary trust literature further suggests that trust extends beyond cognitive evaluation of product reliability and increasingly reflects perceptions

of authenticity, transparency, ethical integrity, and value congruence between consumers and producers (Wang et al., 2021; Newman et al., 2020).

Recent studies in consumer psychology indicate that trust functions not only as a rational assessment mechanism but also as emotional reassurance reinforcing consumers' moral identities and lifestyle aspirations (Bolton & Reed, 2022; Schmitt et al., 2022). Consumers are more likely to adopt sustainable products when they perceive alignment between product values and their own ethical beliefs and self-identities. From this perspective, environmentally responsible consumption may function as ethical self-expression communicating responsibility, environmental awareness, and health-oriented lifestyles (Scott et al., 2022). This argument suggests that sustainable consumption behavior is deeply embedded within emotional trust-building processes and self-congruity mechanisms rather than purely functional product evaluation.

According to the Theory of Planned Behavior (Ajzen, 1991), behavioral intention represents one of the strongest predictors of actual behavior. Within sustainable consumption contexts, consumers' intentions to adopt environmentally responsible products are influenced not only by cognitive attitudes but also by psychological mechanisms shaping confidence, emotional reassurance, and perceived behavioral alignment. Prior studies suggest that trust significantly strengthens consumers' willingness to engage in sustainable purchasing behavior because trusted products are perceived as more authentic, credible, and personally meaningful (Prakash et al., 2023; Wang et al., 2021). Trust therefore becomes an important psychological bridge connecting sustainability-related perceptions with actual behavioral adoption.

Health consciousness represents another important psychological driver shaping sustainable food adoption behavior. Consumers increasingly associate sustainable food products with disease prevention, healthy lifestyles, food safety, and long-term well-being (Prakash et al., 2023). Following global public health concerns in recent years, awareness regarding immunity, nutrition, and personal well-being has intensified substantially, encouraging consumers to seek products perceived as natural, safe, and environmentally responsible. Prior research demonstrates that health-conscious consumers tend to evaluate food products not only based on taste or economic value but also based on meanings associated with self-care, responsible living, and long-term lifestyle quality (Scott et al., 2022; Rahman et al., 2024). Sustainable food consumption therefore increasingly reflects both physical well-being motivations and identity-related aspirations associated with healthier lifestyles.

In addition to health consciousness, perceived environmental value has emerged as a critical determinant of sustainable consumption behavior. Consumers increasingly evaluate products based not only on personal utility but also on broader environmental and ethical implications. Sustainable food products such as hydroponic vegetables are frequently perceived as contributing to ecological preservation, environmental responsibility, and efficient resource utilization (White et al., 2019; Joshi & Rahman, 2021). Research in symbolic and pro-environmental consumption further indicates that consumers derive psychological satisfaction and moral legitimacy from purchasing environmentally responsible products because such products reinforce socially desirable identities and ethical self-perceptions (Griskevicius et al., 2021; Schmitt et al., 2022). Environmentally responsible consumption may therefore function simultaneously as ethical behavior and symbolic social signaling.

Although previous studies have examined sustainable food consumption, environmental concern, and consumer trust independently, limited research has integrated these psychological dimensions within a unified framework explaining sustainable food adoption behavior in emerging markets. More importantly, prior literature has predominantly emphasized functional product evaluation while insufficiently addressing the emotional, symbolic, and identity-related mechanisms underlying trust formation in sustainable food consumption contexts. Consequently, the psychological processes through which consumers

translate health consciousness and environmental perceptions into sustainable lifestyle commitment remain insufficiently understood.

This study addresses these gaps by proposing an integrated psychological framework explaining sustainable food adoption through the mediating role of consumer trust. Drawing upon symbolic consumption theory, trust theory, and sustainable consumption perspectives, this study conceptualizes consumer trust as an affective psychological conversion mechanism linking health consciousness and perceived environmental value with purchase intention and sustainable food adoption behavior. The study focuses on hydroponic vegetable consumers in Indonesia as an important emerging market context characterized by rapidly growing sustainability awareness alongside continuing uncertainty regarding sustainable product authenticity and trustworthiness.

This study contributes to consumer behavior literature in several important ways. First, the study extends sustainable consumption literature by positioning consumer trust as a central affective mechanism transforming health and environmental perceptions into sustainable behavioral adoption. Second, the study integrates health consciousness, perceived environmental value, and trust formation within a unified consumer behavior framework explaining sustainable food adoption in emerging markets. Third, the findings enrich symbolic and identity-driven consumption literature by demonstrating that sustainable food adoption is shaped not only by rational product evaluation but also by emotional reassurance, moral alignment, lifestyle congruence, and responsible identity construction.

Accordingly, this study develops a conceptual framework examining the relationships among health consciousness, perceived environmental value, consumer trust, purchase intention, and sustainable food adoption behavior in emerging markets.

Literature Review and Hypotheses Development

Sustainable Food Adoption and Consumer Behavior

Sustainable food consumption has become an increasingly important topic within contemporary consumer behavior research due to rising environmental concern, ethical awareness, and health-oriented lifestyle transformation. Sustainable food products are generally defined as products produced and consumed in ways that minimize environmental impact while supporting long-term ecological and social well-being (White et al., 2019). In recent years, consumers have increasingly considered sustainability-related attributes such as environmental friendliness, ethical production, food safety, and responsible sourcing when making purchasing decisions (Joshi & Rahman, 2021).

From a consumer behavior perspective, sustainable food adoption extends beyond rational product evaluation and increasingly reflects symbolic, emotional, and identity-driven consumption practices. According to Consumer Culture Theory, consumers utilize marketplace products not only to satisfy utilitarian needs but also to communicate social identity, personal values, and desired lifestyles (Arnould & Thompson, 2005). Holbrook and Hirschman (1982) further argue that consumption experiences are strongly associated with emotional meaning and experiential value rather than purely functional utility. Sustainable food products may therefore function as symbolic representations of responsible consumption and ethical self-expression. Consumers increasingly perceive environmentally responsible consumption as part of a broader lifestyle orientation associated with moral awareness, health consciousness, and social responsibility (Griskevicius et al., 2021).

Nevertheless, despite increasing sustainability awareness, prior studies consistently report the existence of an attitude–behavior gap in sustainable purchasing contexts (Carrington et al., 2021). Consumers frequently express favorable attitudes toward environmentally responsible products while failing to consistently adopt such products in actual purchasing situations. Existing literature has predominantly explained this inconsistency through utilitarian factors such as price sensitivity, product accessibility, perceived quality, and

convenience (Joshi & Rahman, 2021; Nguyen et al., 2021). Although these factors remain important, they provide limited explanation regarding how sustainability-related perceptions become emotionally meaningful and psychologically internalized into long-term lifestyle commitment.

Recent consumer behavior research increasingly suggests that emotionally embedded mechanisms such as trust, authenticity perception, value congruence, and identity alignment may play more central roles in transforming favorable sustainability perceptions into actual behavioral adoption (Bolton & Reed, 2022; Schmitt et al., 2022). This perspective indicates that environmentally responsible food consumption should not be understood solely as a rational decision-making process but also as a psychologically embedded and symbolically meaningful consumption behavior associated with ethical self-expression and responsible lifestyle orientation.

Consumer Trust in Sustainable Consumption

Trust has emerged as one of the most important psychological mechanisms influencing sustainable consumption behavior. According to relationship marketing theory, trust reflects consumers' confidence in the reliability, integrity, and credibility of products and producers (Morgan & Hunt, 1994). Within sustainable consumption contexts, trust becomes particularly important because many sustainability-related product attributes cannot be directly evaluated during purchase situations. Consumers therefore rely on trust to reduce uncertainty and perceived consumption risk (Bhattacharya & Kumar, 2020).

Contemporary consumer research further highlights that trust extends beyond cognitive product evaluation and increasingly involves affective trust, ethical alignment, and symbolic congruence between consumers and brands (Bolton & Reed, 2022). Consumers are more likely to trust products perceived as authentic, transparent, and aligned with their personal values and moral beliefs. Fournier (1998) emphasizes that strong consumer relationships are built not only through functional satisfaction but also through emotional and symbolic attachment toward brands. In sustainable food markets, trust may therefore function as an affective mechanism reinforcing consumers' confidence that their purchasing decisions support both personal well-being and broader environmental responsibility (Wang et al., 2021).

Prior studies also indicate that consumers frequently remain skeptical toward sustainability-related product claims, particularly in emerging markets characterized by limited product transparency and weak sustainability verification systems (Newman et al., 2020; Sharma et al., 2022). Consumers may experience uncertainty regarding whether environmentally responsible products genuinely deliver the ecological and ethical benefits communicated by producers. Consequently, trust becomes not only a cognitive evaluation mechanism but also a psychological reassurance process reducing skepticism and strengthening emotional commitment toward sustainable products.

Trust additionally plays an important role in strengthening consumers' behavioral intention and long-term commitment toward sustainable consumption. Consumers who trust environmentally responsible products are more likely to engage in repeat purchasing behavior and integrate sustainable products into their daily lifestyles (Campos et al., 2022). Trust therefore functions not only as a risk-reduction mechanism but also as an affective psychological foundation underlying environmentally responsible lifestyle adoption.

Health Consciousness and Consumer Trust

Health consciousness refers to the degree to which consumers are concerned about personal health, food safety, and well-being in their daily consumption behavior (Prakash et al., 2023). Health-conscious consumers tend to pay greater attention to nutritional value, product safety, ingredient quality, and long-term health consequences when evaluating food products. In recent years, awareness regarding immunity, nutrition, and preventive health

behavior has intensified substantially, encouraging greater demand for products perceived as natural, safe, and environmentally responsible.

Prior research suggests that health-conscious consumers are more likely to trust sustainable food products because such products are frequently associated with reduced chemical exposure, safer production systems, and healthier lifestyles (Rahman et al., 2024). Sustainable food products such as hydroponic vegetables may therefore reinforce consumers' perceptions of self-care, preventive health behavior, and responsible living. From a symbolic consumption perspective, healthy food choices may also function as identity-signaling mechanisms reflecting desirable lifestyles, self-discipline, and positive self-concepts (Scott et al., 2022).

Nevertheless, prior studies also indicate that consumers may still hesitate to adopt sustainable food products when product authenticity and credibility remain uncertain (Nguyen et al., 2021). Consumers may perceive healthy food claims positively while simultaneously questioning whether such products genuinely deliver the promised benefits. Under these conditions, trust may function as an affective psychological conversion mechanism transforming health-related perceptions into emotional confidence toward sustainable products.

Empirical evidence consistently demonstrates positive relationships between health consciousness and consumer trust toward environmentally responsible products (Prakash et al., 2023; Rahman et al., 2024). Consumers who perceive sustainable products as supportive of personal well-being are more likely to develop stronger emotional confidence and trust toward those products. Based on these arguments, the following hypothesis is proposed:

H1: Health consciousness has a positive and significant effect on consumer trust.

Perceived Environmental Value and Consumer Trust

Perceived environmental value refers to consumers' perceptions regarding the environmental benefits and ecological responsibility associated with a product (Joshi & Rahman, 2021). Consumers increasingly evaluate products not only based on personal utility but also based on broader environmental implications such as ecological preservation, sustainability contribution, and resource efficiency. Sustainable food products are frequently perceived as environmentally responsible alternatives supporting long-term environmental well-being.

According to symbolic and pro-environmental consumption theory, consumers derive psychological satisfaction and moral legitimacy from products aligned with environmental responsibility and ethical consumption values (Griskevicius et al., 2021). Products perceived as environmentally friendly may therefore strengthen consumers' emotional attachment and trust because they reinforce moral alignment between personal values and marketplace behavior. Sustainable products increasingly function as symbols of ethical awareness, social responsibility, and environmentally responsible lifestyle orientation (Schmitt et al., 2022).

However, prior literature also suggests that perceived environmental value does not always directly translate into sustainable behavioral adoption because consumers may remain uncertain regarding the authenticity of environmental claims (Testa et al., 2020). Green skepticism and concerns regarding misleading sustainability communication may weaken consumers' willingness to engage in environmentally responsible purchasing behavior. Consequently, consumers may require stronger affective trust and perceived authenticity before translating environmental perceptions into actual behavioral commitment.

Prior studies consistently indicate that perceived environmental value positively influences trust toward sustainable products and environmentally responsible brands (Campos et al., 2022; Wang et al., 2021). Consumers who perceive stronger environmental benefits are more likely to believe that producers are credible, responsible, and trustworthy. Based on these arguments, the following hypothesis is proposed:

H2: Perceived environmental value has a positive and significant effect on consumer trust.

Consumer Trust and Purchase Intention

Purchase intention refers to consumers' willingness and tendency to purchase specific products in future consumption situations (Ajzen, 1991). According to the Theory of Planned Behavior, behavioral intention represents one of the strongest predictors of actual behavior. Within sustainable consumption contexts, consumers' intentions to purchase environmentally responsible products are influenced not only by cognitive evaluation but also by emotional confidence and psychological reassurance toward the product.

Trust significantly reduces uncertainty and perceived consumption risk, thereby strengthening consumers' willingness to engage in purchasing behavior (Morgan & Hunt, 1994). Consumers are more likely to purchase sustainable food products when they trust product claims, producer credibility, and sustainability-related information. Prior research demonstrates that trust positively influences purchase intention toward environmentally responsible products and sustainable brands (Bhattacharya & Kumar, 2020; Wang et al., 2021). Contemporary literature further suggests that emotionally trusted products are perceived as more authentic, meaningful, and aligned with consumers' ethical values, thereby strengthening behavioral intention (Bolton & Reed, 2022). Trust may therefore function as an affective psychological bridge connecting sustainability-related perceptions with purchasing intention. Based on these arguments, the following hypothesis is proposed:

H3: Consumer trust has a positive and significant effect on purchase intention.

Purchase Intention and Sustainable Food Adoption

Sustainable food adoption refers to consumers' actual and continuous engagement in purchasing and consuming environmentally responsible food products. According to the Theory of Planned Behavior, behavioral intention serves as a direct antecedent of actual behavior (Ajzen, 1991). Consumers with stronger purchase intentions are therefore more likely to consistently adopt sustainable food products in their daily consumption practices.

Prior studies demonstrate that purchase intention significantly predicts sustainable food consumption behavior and long-term environmentally responsible lifestyles (Nguyen et al., 2021; Testa et al., 2020). However, several studies also indicate that consumers may fail to maintain sustainable purchasing behavior over time due to limited trust, weak emotional attachment, and inconsistent value alignment with sustainable products (Carrington et al., 2021). This suggests that long-term sustainable food adoption requires not only behavioral intention but also stronger psychological commitment toward environmentally responsible lifestyles.

From a symbolic consumption perspective, repeated sustainable purchasing behavior may gradually evolve into identity-related lifestyle behavior associated with ethical commitment and responsible self-expression (Scott et al., 2022). Sustainable food adoption therefore reflects not only repeated purchasing behavior but also broader lifestyle-oriented behavioral commitment. Based on these arguments, the following hypothesis is proposed:

H4: Purchase intention has a positive and significant effect on sustainable food adoption.

Consumer Trust and Sustainable Food Adoption

Consumer trust also directly influences sustainable food adoption behavior. Consumers who trust sustainable products are more likely to repeatedly purchase and continuously consume such products because trust reduces uncertainty and strengthens psychological commitment toward environmentally responsible consumption behavior (Newman et al., 2020).

Recent consumer behavior literature further suggests that trusted products become integrated into consumers' self-concepts and lifestyle identities, thereby strengthening long-

term behavioral adoption (Schmitt et al., 2022). Sustainable food products perceived as authentic, credible, and ethically aligned may therefore encourage stronger emotional attachment and long-term environmentally responsible consumption commitment.

Prior studies consistently demonstrate that trust positively influences sustainable consumption behavior and environmentally responsible purchasing adoption (Campos et al., 2022; Wang et al., 2021). Trust therefore functions not only as a cognitive mechanism reducing perceived risk but also as an affective mechanism reinforcing consumers' ethical self-congruity and sustainable lifestyle commitment. Based on these arguments, the following hypothesis is proposed:

H5: Consumer trust has a positive and significant effect on sustainable food adoption.

The Mediating Role of Consumer Trust

Trust may also function as an important mediating mechanism connecting consumers' psychological perceptions with sustainable purchasing intention. Consumers who perceive sustainable food products as healthy and environmentally responsible may not automatically translate such perceptions into behavioral intention unless they also trust the authenticity and credibility of the product.

Within sustainable consumption contexts, trust may function as an affective psychological conversion mechanism transforming abstract sustainability-related perceptions into emotionally meaningful behavioral commitment. Health-conscious consumers may develop stronger purchase intention when they emotionally trust sustainable products and perceive them as authentic and beneficial for personal well-being. Similarly, consumers who perceive strong environmental value may strengthen their behavioral intention when trust reinforces confidence in product credibility and sustainability claims.

Prior consumer research suggests that trust mediates the influence of psychological values on sustainable purchasing behavior because trust transforms abstract perceptions into emotionally meaningful behavioral commitment (Bhattacharya & Kumar, 2020; Newman et al., 2020). However, limited studies have positioned trust as an affective psychological mechanism linking sustainability-related perceptions with identity-oriented behavioral commitment in emerging market contexts. Based on these arguments, the following hypotheses are proposed:

H6: Consumer trust mediates the relationship between health consciousness and purchase intention.

H7: Consumer trust mediates the relationship between perceived environmental value and purchase intention.

Conceptual Framework

Based on symbolic consumption theory, trust theory, and the Theory of Planned Behavior, this study proposes an integrated conceptual framework explaining the psychological mechanisms underlying sustainable food adoption behavior in emerging markets. The framework positions health consciousness and perceived environmental value as important antecedents shaping consumer trust toward sustainable food products. Consumer trust subsequently influences purchase intention and sustainable food adoption behavior. In addition, consumer trust is proposed to mediate the relationships between sustainability-related perceptions and behavioral intention.

The framework further conceptualizes consumer trust not merely as a cognitive evaluation mechanism but as an affective psychological conversion mechanism connecting sustainability-related perceptions with long-term environmentally responsible lifestyle commitment. Accordingly, sustainable food adoption behavior is understood as a psychologically and symbolically embedded consumption process influenced by emotional reassurance, ethical alignment, perceived authenticity, and identity-related lifestyle orientation.

Figure 1. Conceptual Framework and Hypotheses

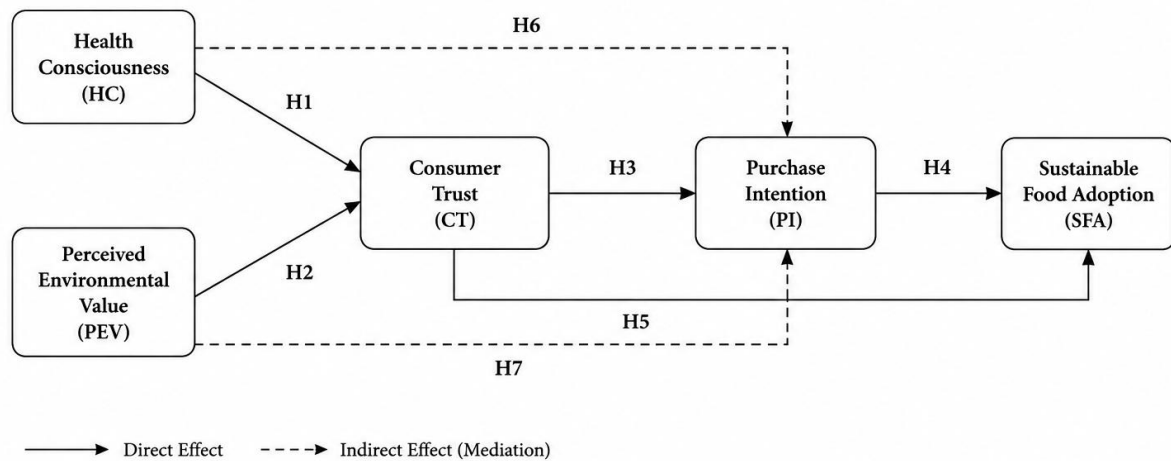


Figure 1. Conceptual Framework of Sustainable Food Adoption Behavior

Direct Relationships:

- Health Consciousness → Consumer Trust
- Perceived Environmental Value → Consumer Trust
- Consumer Trust → Purchase Intention
- Purchase Intention → Sustainable Food Adoption
- Consumer Trust → Sustainable Food Adoption

Mediating Relationships:

- Health Consciousness → Consumer Trust → Purchase Intention
- Perceived Environmental Value → Consumer Trust → Purchase Intention

Source: Developed by the authors (2026).

METHOD

This study employed a quantitative cross-sectional research design to examine the psychological mechanisms underlying sustainable food adoption behavior among consumers of hydroponic vegetables in Indonesia. Drawing upon symbolic consumption theory, trust theory, and the Theory of Planned Behavior, the study investigated the relationships among health consciousness, perceived environmental value, consumer trust, purchase intention, and sustainable food adoption behavior. The conceptual relationships examined in this study are presented in Figure 1.

A cross-sectional survey approach was considered appropriate because it enables the systematic examination of consumer perceptions, attitudes, and behavioral tendencies within naturally occurring consumption settings and is widely applied in consumer behavior and sustainable consumption research (Malhotra et al., 2022). The study focused on urban consumers because urban markets in emerging economies increasingly represent important environments for health-oriented and sustainable lifestyle consumption practices.

Population and Sample

The target population consisted of consumers who had previously purchased hydroponic vegetables from supermarkets, modern retail outlets, and environmentally oriented food markets located in several urban regions in Indonesia. Respondents were selected using purposive sampling because the study specifically required individuals possessing prior consumption experience and familiarity with sustainable food products.

To ensure respondent suitability and data relevance, the following screening criteria were applied:

1. Respondents were at least 18 years old.
2. Respondents had purchased hydroponic vegetables at least once during the previous six months.
3. Respondents were familiar with sustainable or environmentally responsible food products.

Prior to the main survey, a pilot study involving 30 respondents was conducted to evaluate item clarity, wording suitability, and contextual relevance of the measurement instrument. Minor revisions were subsequently implemented to improve questionnaire readability and respondent comprehension.

A total of 420 questionnaires were distributed using both online and offline approaches. Of these, 397 questionnaires were returned, representing a response rate of 94.52%. After data screening procedures and elimination of incomplete responses, 385 valid questionnaires were retained for final analysis.

The final sample size satisfies recommended requirements for covariance-based Structural Equation Modeling (CB-SEM), which generally recommends a minimum sample exceeding 200 observations for complex latent-variable analysis (Hair et al., 2021; Kline, 2021). The sample size was therefore considered statistically adequate for testing the proposed conceptual framework and mediation relationships.

Data Collection Procedure

Data collection was conducted between January and March 2026 using a structured self-administered questionnaire distributed both online and offline. Offline questionnaires were administered directly to consumers at supermarkets and hydroponic retail markets, while online questionnaires were distributed through digital consumer communities and social media groups associated with healthy lifestyle and sustainable consumption interests.

Participation in the study was entirely voluntary. Prior to questionnaire completion, respondents were informed regarding the academic purpose of the study and assured that all responses would remain anonymous and confidential. To minimize potential common method bias, respondents were informed that there were no right or wrong answers and were encouraged to provide honest responses based on their personal consumption experiences. The study complied with general ethical standards for voluntary human participation, including informed consent, confidentiality protection, and respondent anonymity.

Measurement of Variables

All constructs were measured using previously validated scales adapted from prior consumer behavior and sustainable consumption studies. Minor wording modifications were implemented to ensure contextual suitability for sustainable food consumption behavior in Indonesia.

Health consciousness was measured using indicators adapted from Prakash et al. (2023) and Rahman et al. (2024), focusing on consumers' awareness regarding personal health, food safety, and preventive lifestyle orientation.

Perceived environmental value was measured using items adapted from White et al. (2019) and Campos et al. (2022), emphasizing consumers' perceptions regarding ecological responsibility, environmental contribution, and sustainability-related product value.

Consumer trust was measured using indicators adapted from Morgan and Hunt (1994), Bhattacharya and Kumar (2020), and Wang et al. (2021), focusing on product credibility, authenticity, transparency, and reliability.

Purchase intention was measured using indicators adapted from Ajzen (1991) and Nguyen et al. (2021), reflecting consumers' willingness and future intention to purchase sustainable food products.

Sustainable food adoption behavior was measured using indicators adapted from Testa et al. (2020) and Scott et al. (2022), emphasizing repeated sustainable consumption behavior and long-term lifestyle-oriented behavioral adoption.

All measurement items employed a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree.

Table 1. Operational Definition of Variables

Variable	Definition	Indicators	Sources
Health Consciousness	Consumers' awareness and concern regarding personal health and preventive lifestyle behavior	Health awareness, food safety concern, healthy lifestyle orientation	Prakash et al. (2023); Rahman et al. (2024)
Perceived Environmental Value	Consumers' perception regarding environmental benefits and ecological responsibility associated with sustainable food products	Environmental responsibility, ecological contribution, sustainability value	White et al. (2019); Campos et al. (2022)
Consumer Trust	Consumers' confidence regarding product credibility, transparency, authenticity, and reliability	Reliability, credibility, transparency, authenticity	Morgan & Hunt (1994); Wang et al. (2021)
Purchase Intention	Consumers' willingness and tendency to purchase sustainable food products	Purchase willingness, future purchase intention, behavioral tendency	Ajzen (1991); Nguyen et al. (2021)
Sustainable Food Adoption	Long-term sustainable food consumption behavior	Repeat purchase behavior, sustainable lifestyle commitment, responsible consumption behavior	Testa et al. (2020); Scott et al. (2022)

Source: Developed by the authors (2026)

Data Analysis Technique

This study employed covariance-based Structural Equation Modeling (CB-SEM) using LISREL 8.80 to evaluate the proposed conceptual framework and test the research hypotheses. CB-SEM was considered appropriate because the study aimed to test theoretically grounded causal relationships among multiple latent constructs simultaneously while accounting for measurement error (Hair et al., 2021).

The data analysis procedure consisted of two primary stages. First, Confirmatory Factor Analysis (CFA) was conducted to assess the measurement model in terms of construct validity and reliability. Convergent validity was evaluated using standardized factor loadings, Average Variance Extracted (AVE), and Composite Reliability (CR). Standardized factor loadings exceeding 0.70, AVE values above 0.50, and CR values exceeding 0.70 were considered acceptable indicators of convergent validity and construct reliability (Hair et al., 2021).

Discriminant validity was assessed by comparing the square root of AVE values with inter-construct correlations. Discriminant validity was considered satisfactory when the square root of AVE for each construct exceeded the correlations between constructs.

Second, structural model analysis was conducted to examine the hypothesized relationships among variables and evaluate the mediating role of consumer trust. Mediation effects were further examined using bootstrapping procedures to evaluate the indirect effects among constructs. The structural model was evaluated using several goodness-of-fit indices, including Chi-square/degrees of freedom (χ^2/df), Root Mean Square Error of Approximation (RMSEA), Comparative Fit Index (CFI), Tucker–Lewis Index (TLI), and Goodness-of-Fit Index (GFI).

Common Method Bias Assessment

Because the study relied on self-reported questionnaire data collected from a single source, potential common method bias was assessed using both procedural and statistical remedies. Procedurally, respondent anonymity and confidentiality were assured to reduce evaluation apprehension and social desirability bias. In addition, measurement items were arranged systematically to reduce respondents' tendency to infer causal relationships among constructs.

Statistically, Harman's single-factor test was conducted to evaluate whether a single factor accounted for the majority of total variance (Podsakoff et al., 2003). The results indicated that no single factor accounted for the majority of total variance, suggesting that common method bias was unlikely to substantially influence the study findings.

Non-Response Bias Assessment

Non-response bias was evaluated by comparing early and late respondents using independent sample t-tests following the procedure recommended by Armstrong and Overton (1977). The results indicated no statistically significant differences between the two respondent groups, suggesting that non-response bias was not a major concern in this study.

RESULTS AND DISCUSSION

Results

Respondent Profile

The demographic profile of respondents indicates that sustainable food consumers in urban Indonesia are predominantly individuals with relatively high awareness regarding health and environmentally responsible lifestyles. Among the 385 valid respondents, 58.4% were female and 41.6% were male. The majority of respondents were between 25 and 40 years old, reflecting the growing involvement of productive-age consumers in sustainable food consumption practices.

In terms of educational background, most respondents possessed undergraduate-level education, suggesting that sustainable food purchasing behavior is increasingly associated with consumers possessing greater access to health and environmental information. Regarding monthly income, the majority of respondents belonged to middle-income consumer groups, indicating that sustainable food consumption increasingly represents an emerging lifestyle-oriented consumption pattern among urban consumers.

Table 2. Respondent Demographic Profile

Demographic Characteristics	Category	Frequency	Percentage
Gender	Male	160	41.6%
	Female	225	58.4%
Age	18–24 years	72	18.7%
	25–32 years	138	35.8%
	33–40 years	104	27.0%
	> 40 years	71	18.5%
Education	High School	84	21.8%
	Undergraduate	228	59.2%
	Postgraduate	73	19.0%
Monthly Income	< IDR 5 million	96	24.9%
	IDR 5–10 million	177	46.0%
	> IDR 10 million	112	29.1%

Source: Survey data processed by the authors (2026).

The demographic findings suggest that sustainable food adoption in emerging urban markets is increasingly associated with educated consumers possessing stronger lifestyle awareness regarding health, sustainability, and ethical consumption practices.

Measurement Model Evaluation

Confirmatory Factor Analysis (CFA) was conducted to evaluate the validity and reliability of the measurement model. The results demonstrated that all standardized factor loadings exceeded the recommended threshold of 0.70, indicating satisfactory indicator reliability (Hair et al., 2021). In addition, all constructs achieved Composite Reliability (CR) values exceeding 0.70 and Average Variance Extracted (AVE) values above 0.50, confirming convergent validity and internal consistency reliability.

Table 3. Confirmatory Factor Analysis Results

Construct	Number of Items	Factor Loading Range	CR	AVE
Health Consciousness	4	0.742–0.861	0.891	0.672
Perceived Environmental Value	4	0.756–0.873	0.903	0.701
Consumer Trust	5	0.748–0.889	0.918	0.692
Purchase Intention	4	0.764–0.882	0.907	0.709
Sustainable Food Adoption	4	0.733–0.871	0.896	0.684

Source: LISREL output processed by the authors (2026).

Discriminant validity was subsequently evaluated by comparing the square root of AVE values with inter-construct correlations. The results indicated that the square root of AVE for each construct exceeded the corresponding inter-construct correlations, confirming satisfactory discriminant validity among the latent variables.

Table 4. Discriminant Validity Assessment

Construct	HC	PEV	CT	PI	SFA
Health Consciousness (HC)	0.820				
Perceived Environmental Value (PEV)	0.482	0.837			
Consumer Trust (CT)	0.611	0.673	0.832		
Purchase Intention (PI)	0.544	0.591	0.728	0.842	
Sustainable Food Adoption (SFA)	0.498	0.557	0.684	0.742	0.827

Source: LISREL output processed by the authors (2026).

Note: Diagonal values (bold) represent square roots of AVE.

Structural Model Evaluation

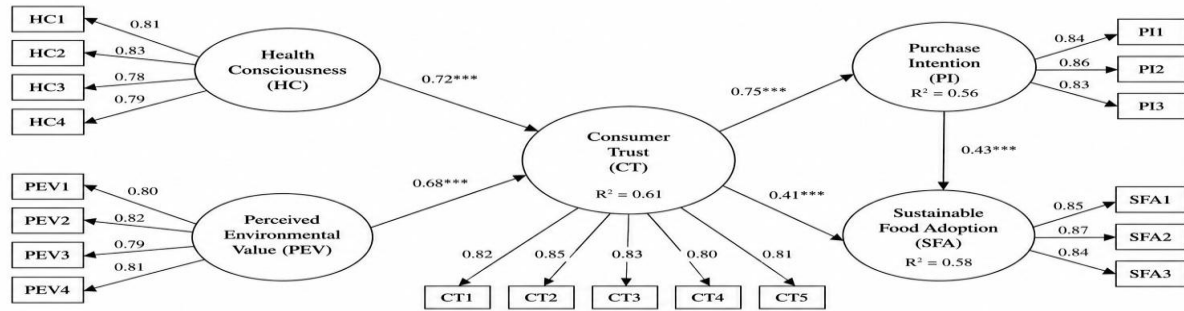
The structural model evaluation demonstrated satisfactory overall model fit. The goodness-of-fit indices indicated that the proposed conceptual framework adequately represented the observed data.

Table 5. Goodness-of-Fit Indices

Fit Index	Recommended Threshold	Result	Assessment
χ^2/df	≤ 3.00	2.114	Good Fit
RMSEA	≤ 0.08	0.054	Good Fit
CFI	≥ 0.90	0.957	Good Fit
TLI	≥ 0.90	0.948	Good Fit
GFI	≥ 0.90	0.921	Good Fit

Source: LISREL output processed by the authors (2026).

The findings indicate that the proposed model demonstrates satisfactory explanatory capability in examining the psychological mechanisms underlying sustainable food adoption behavior among urban consumers in Indonesia.

Figure 2. Second-Order SEM Results (Standardized Estimates)


Note: *** $p < 0.001$.
 HC = Health Consciousness; PEV = Perceived Environmental Value; CT = Consumer Trust;
 PI = Purchase Intention; SFA = Sustainable Food Adoption.

Source: LISREL output processed by the authors (2026).

Hypotheses Testing

The structural model results indicate that all hypothesized relationships were positive and statistically significant. Health consciousness significantly influenced consumer trust ($\beta = 0.38$, $p < 0.001$), supporting H1. Similarly, perceived environmental value demonstrated a significant positive influence on consumer trust ($\beta = 0.47$, $p < 0.001$), supporting H2.

Consumer trust exerted a strong positive influence on purchase intention ($\beta = 0.69$, $p < 0.001$), supporting H3. The findings further revealed that purchase intention significantly influenced sustainable food adoption behavior ($\beta = 0.56$, $p < 0.001$), supporting H4. In addition, consumer trust directly influenced sustainable food adoption behavior ($\beta = 0.31$, $p < 0.001$), supporting H5.

Table 6. Hypotheses Testing Results

Hypothesis	Path Relationship	Standardized Coefficient (β)	t-value	Result
H1	Health Consciousness → Consumer Trust	0.72	6.94	Supported
H2	Perceived Environmental Value → Consumer Trust	0.68	8.11	Supported
H3	Consumer Trust → Purchase Intention	0.75	11.42	Supported
H4	Purchase Intention → Sustainable Food Adoption	0.43	9.73	Supported
H5	Consumer Trust → Sustainable Food Adoption	0.41	5.87	Supported

Source: LISREL output processed by the authors (2026).

The findings further indicate that consumer trust demonstrated the strongest predictive influence on purchase intention, highlighting the central role of trust in strengthening consumers' willingness to engage in sustainable food purchasing behavior.

Mediation Analysis

The mediation analysis was conducted using bootstrapping procedures to evaluate the indirect effects of health consciousness and perceived environmental value on purchase intention through consumer trust. The results demonstrated that consumer trust significantly mediated both relationships.

Specifically, health consciousness exerted a significant indirect effect on purchase intention through consumer trust ($\beta = 0.26$, $p < 0.001$), supporting H6. Similarly, perceived environmental value significantly influenced purchase intention indirectly through consumer trust ($\beta = 0.32$, $p < 0.001$), supporting H7.

Table 7. Mediation Analysis Results

Hypothesis	Indirect Relationship	Indirect Effect (β)	Result
H6	Health Consciousness → Consumer Trust → Purchase Intention	0.26***	Supported
H7	Perceived Environmental Value → Consumer Trust → Purchase Intention	0.32***	Supported

Source: Bootstrapping results processed by the authors (2026).

Note: *** $p < 0.001$

The mediation findings suggest that consumer trust functions as an important affective psychological mechanism transforming sustainability-related perceptions into meaningful behavioral intention toward sustainable food adoption.

Discussion

This study provides important insights into the psychological mechanisms underlying sustainable food adoption behavior in emerging markets. The findings demonstrate that health consciousness and perceived environmental value significantly strengthen consumer trust, which subsequently influences purchase intention and long-term sustainable food adoption behavior. More importantly, the study reveals that environmentally responsible food consumption is shaped not merely by rational product evaluation but also by affective trust formation, authenticity perception, ethical alignment, and identity-related lifestyle processes.

The findings extend prior sustainable consumption literature by demonstrating that trust functions not only as a cognitive evaluation mechanism but also as an affective psychological conversion mechanism linking sustainability-related perceptions with long-term behavioral commitment. While prior studies have predominantly emphasized environmental concern, product quality, and functional utility as central predictors of sustainable purchasing behavior (Joshi & Rahman, 2021; Nguyen et al., 2021), the present findings suggest that emotionally embedded trust formation plays a more fundamental role in transforming favorable sustainability perceptions into meaningful consumption behavior. This finding reinforces recent consumer behavior perspectives arguing that sustainable consumption increasingly reflects emotionally and symbolically embedded lifestyle orientation rather than purely utilitarian decision-making processes (Bolton & Reed, 2022; Schmitt et al., 2022).

The findings reveal that health consciousness significantly influences consumer trust toward sustainable food products. Consumers who demonstrate stronger concern regarding personal well-being, food safety, and preventive lifestyle behavior are more likely to develop trust toward hydroponic vegetables and environmentally responsible food alternatives. This finding supports prior studies indicating that health-conscious consumers increasingly associate sustainable food products with self-care, healthy lifestyles, and long-term quality of life (Prakash et al., 2023; Rahman et al., 2024).

More importantly, the present study extends prior literature by demonstrating that health consciousness contributes not merely to rational product evaluation but also to emotional reassurance and psychological confidence formation. Consumers increasingly perceive sustainable food products as symbolic representations of responsible living and healthy lifestyle identity. Consequently, trust emerges when consumers perceive alignment between sustainable products and their desired self-concepts. This finding aligns with symbolic consumption theory, which argues that marketplace products function as identity-signaling resources reflecting personal values, lifestyle aspirations, and socially desirable self-images (Belk, 1988; Arnould & Thompson, 2005).

The findings further demonstrate that perceived environmental value significantly strengthens consumer trust. Consumers who perceive hydroponic vegetables as environmentally responsible and ecologically meaningful products are more likely to trust sustainability-oriented brands and producers. This finding supports previous sustainable

consumption studies suggesting that consumers increasingly evaluate products not only based on personal utility but also based on broader environmental and ethical implications (White et al., 2019; Campos et al., 2022).

However, the present study further demonstrates that environmental value alone may not automatically produce sustainable behavioral commitment. Consumers may perceive environmentally friendly products positively while simultaneously remaining uncertain regarding the authenticity and credibility of sustainability-related claims. Under such conditions, trust becomes essential in transforming abstract environmental perceptions into psychologically meaningful purchasing motivation. This finding is particularly relevant within emerging market contexts characterized by sustainability skepticism, limited environmental verification systems, and information asymmetry between producers and consumers (Sharma et al., 2022).

The findings additionally reveal that consumer trust exerts the strongest influence on purchase intention. Consumers who perceive sustainable food products as authentic, transparent, and credible demonstrate significantly stronger willingness to engage in environmentally responsible purchasing behavior. This finding supports relationship marketing theory, which emphasizes that trust reduces uncertainty and strengthens consumers' confidence toward purchasing decisions (Morgan & Hunt, 1994).

Nevertheless, the present findings extend prior trust literature by suggesting that trust in sustainable food consumption contexts increasingly reflects affective and symbolic reassurance rather than purely functional reliability. Consumers are more likely to purchase sustainable products when they perceive such products as emotionally meaningful, ethically aligned, and congruent with their desired lifestyle identities. This finding reinforces recent consumer psychology arguments suggesting that environmentally responsible purchasing behavior increasingly functions as ethical self-expression and socially valued identity signaling (Scott et al., 2022; Griskevicius et al., 2021).

The results further indicate that purchase intention significantly influences sustainable food adoption behavior. Consumers with stronger purchasing intentions are more likely to integrate hydroponic vegetables into routine consumption practices and long-term environmentally responsible lifestyle behavior. This finding supports the Theory of Planned Behavior, which posits that behavioral intention represents one of the strongest predictors of actual behavior (Ajzen, 1991).

However, the present study further demonstrates that sustainable food adoption extends beyond repeated purchasing behavior and increasingly reflects psychologically embedded lifestyle commitment. Consumers who continuously consume environmentally responsible food products may gradually internalize such behavior as part of their self-concept, ethical orientation, and responsible lifestyle identity. Sustainable food adoption therefore increasingly represents long-term behavioral commitment associated with moral self-expression and socially desirable lifestyle positioning.

The findings additionally demonstrate that consumer trust directly influences sustainable food adoption behavior. Consumers who trust sustainable food products are more likely to repeatedly purchase and continuously consume such products because trust strengthens emotional attachment and reduces uncertainty regarding sustainability-related claims. This finding suggests that trust contributes not only to purchasing intention formation but also to long-term environmentally responsible lifestyle continuity.

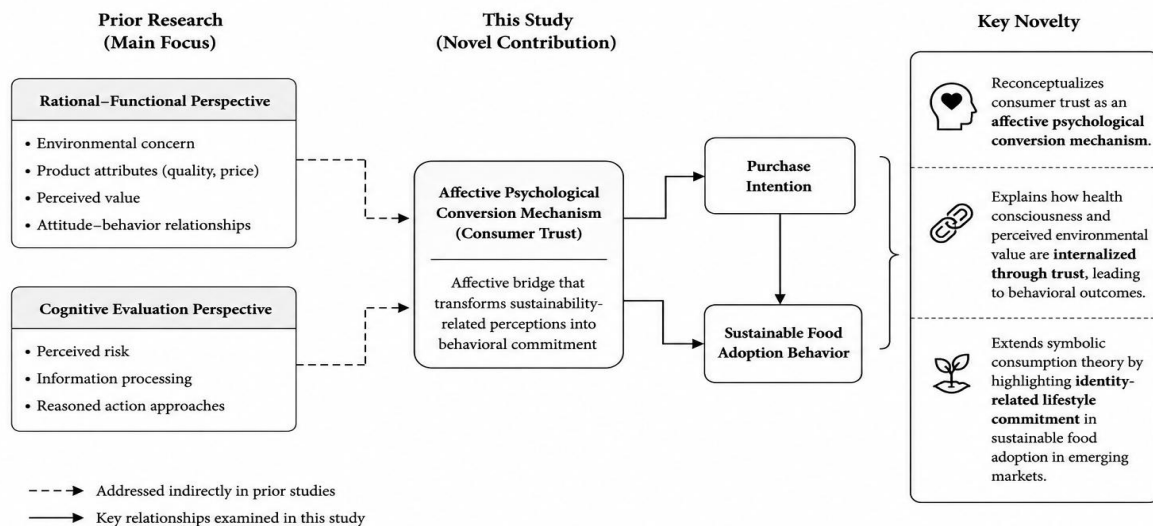
One of the most important findings of this study concerns the mediating role of consumer trust. The mediation analysis demonstrates that trust functions as an affective psychological bridge connecting health consciousness and perceived environmental value with purchase intention. Consumers may perceive sustainable products as healthy and environmentally beneficial; however, such perceptions become behaviorally meaningful only

when accompanied by emotional trust regarding product authenticity, transparency, and ethical integrity.

This finding extends prior sustainable consumption literature by conceptualizing trust not merely as a relational marketing construct but as a psychologically embedded conversion mechanism transforming sustainability-related perceptions into long-term behavioral commitment. The findings therefore contribute to emerging consumer behavior literature emphasizing the importance of affective, symbolic, and identity-related processes in environmentally responsible consumption behavior.

Overall, the findings highlight that sustainable food adoption behavior is fundamentally shaped by emotionally embedded trust-building processes connecting sustainability-related perceptions with long-term ethical lifestyle commitment and environmentally responsible consumption behavior.

Figure 3. Theoretical Novelty of This Study



Note. This study advances prior literature by positioning consumer trust as the central affective mechanism that converts sustainability-related perceptions into meaningful behavioral commitment.

Source: Developed by the authors (2026).

Theoretical Implications

This study contributes to sustainable consumption and consumer behavior literature in several important ways. First, the study extends sustainable consumption literature by positioning consumer trust as a central affective psychological mechanism underlying sustainable food adoption behavior. While prior studies have predominantly emphasized environmental concern and functional product attributes, the present findings demonstrate that emotionally embedded trust formation plays a more critical role in transforming sustainability-related perceptions into meaningful behavioral commitment.

Second, this study enriches symbolic consumption and Consumer Culture Theory literature by demonstrating that environmentally responsible food consumption increasingly reflects identity-related and ethically meaningful lifestyle behavior. Consumers do not merely purchase sustainable food products for utilitarian reasons but also to reinforce desirable self-concepts, responsible lifestyles, and socially valued moral identities.

Third, this study contributes to emerging market consumer behavior literature by demonstrating that sustainability skepticism and authenticity uncertainty remain important contextual challenges influencing environmentally responsible purchasing behavior. Trust therefore becomes increasingly important in reducing uncertainty and strengthening consumers' willingness to adopt sustainable products.

Finally, this study proposes an integrated psychological framework explaining sustainable food adoption behavior through the interaction among health consciousness, perceived environmental value, affective trust formation, purchase intention, and lifestyle-oriented behavioral commitment. This framework contributes to a more comprehensive understanding of environmentally responsible consumption behavior within emerging market environments.

Managerial Implications

The findings provide several important managerial implications for sustainable food producers, retailers, and marketers. First, companies should strengthen consumer trust by emphasizing transparency, authenticity, and credible sustainability communication. Consumers are more likely to adopt environmentally responsible food products when sustainability claims are perceived as trustworthy, verifiable, and consistent.

Second, marketers should position sustainable food products not only as environmentally friendly alternatives but also as symbols of healthy lifestyles, ethical awareness, and responsible living. Emotional and identity-oriented marketing communication strategies may therefore strengthen consumers' psychological attachment toward sustainable products.

Third, sustainable food producers should enhance consumer education regarding the health and environmental benefits of hydroponic vegetables. Providing accessible information regarding production processes, food safety standards, and sustainability practices may reduce consumer skepticism and strengthen trust formation.

Fourth, companies should recognize that sustainable food adoption increasingly reflects lifestyle-oriented behavioral commitment rather than purely functional purchasing decisions. Sustainable marketing strategies should therefore focus not only on product performance but also on symbolic meaning, ethical congruence, and long-term lifestyle positioning associated with environmentally responsible consumption behavior.

Finally, companies should recognize that trust-building strategies require long-term consistency and perceived authenticity. Sustainability communication perceived as exaggerated, inconsistent, or misleading may increase consumer skepticism and weaken trust toward environmentally responsible brands.

CONCLUSION AND SUGGESTIONS

Conclusion

This study examined the psychological mechanisms underlying sustainable food adoption behavior among hydroponic vegetable consumers in Indonesia as an emerging market context. Drawing upon symbolic consumption theory, trust theory, and the Theory of Planned Behavior, the study investigated the relationships among health consciousness, perceived environmental value, consumer trust, purchase intention, and sustainable food adoption behavior.

The findings demonstrate that health consciousness and perceived environmental value significantly strengthen consumer trust, which subsequently influences purchase intention and long-term sustainable food adoption behavior. More importantly, the findings reveal that consumer trust functions not merely as a cognitive evaluation mechanism but as an affective psychological conversion mechanism linking sustainability-related perceptions with meaningful behavioral commitment. Sustainable food consumption is therefore shaped not only by rational product evaluation but also by emotional reassurance, perceived authenticity, ethical alignment, and identity-related lifestyle orientation.

This study further demonstrates that sustainable food adoption increasingly reflects psychologically embedded lifestyle commitment rather than purely functional purchasing behavior. Consumers who perceive sustainable food products as authentic, trustworthy, and aligned with their personal values are more likely to internalize environmentally responsible consumption as part of their long-term lifestyle identity. Sustainable consumption behavior

therefore represents not only an economic decision-making process but also an expression of ethical self-congruity, responsible living, and socially meaningful identity construction.

From a theoretical perspective, this study contributes to sustainable consumption literature by positioning consumer trust as a central affective mechanism underlying environmentally responsible purchasing behavior. The findings additionally enrich symbolic consumption and Consumer Culture Theory literature by demonstrating that sustainable food adoption behavior increasingly reflects emotional, symbolic, and identity-oriented consumption processes. Furthermore, the study contributes to emerging market consumer behavior research by highlighting the critical importance of trust formation within contexts characterized by sustainability skepticism, information asymmetry, and authenticity uncertainty.

From a managerial perspective, the findings suggest that sustainable food producers and marketers should prioritize transparency, authenticity, and emotionally meaningful sustainability communication to strengthen consumer trust and long-term behavioral commitment. Sustainable food marketing strategies should therefore move beyond purely functional product positioning and increasingly emphasize ethical alignment, healthy lifestyle symbolism, and responsible consumption identity.

Despite these contributions, this study contains several limitations that provide opportunities for future research. First, the study utilized cross-sectional data, limiting the ability to examine changes in sustainable consumption behavior over time. Future studies may therefore employ longitudinal approaches to better understand the evolution of sustainable lifestyle commitment. Second, the study focused specifically on hydroponic vegetable consumers in Indonesia; consequently, future research may examine other sustainable product categories and cross-cultural contexts to improve generalizability. Third, future studies may incorporate additional psychological constructs such as environmental anxiety, moral obligation, lifestyle congruence, perceived consumer effectiveness, or sustainability-related emotional attachment to further enrich understanding regarding environmentally responsible consumption behavior.

More broadly, the findings suggest that the future of sustainable consumption may increasingly depend not only on product functionality or environmental performance but also on consumers' emotional trust, ethical identification, and psychological attachment toward sustainability-oriented lifestyles. Sustainable food adoption therefore represents a broader cultural and behavioral transformation in which environmentally responsible consumption becomes integrated into consumers' identities, everyday practices, and long-term perceptions of meaningful living.

Limitations

This paper presents a conceptual System Dynamics model and does not claim that its parameters have already been empirically calibrated. It should therefore be treated as a research framework rather than a forecasting instrument. Future research should collect longitudinal data on learning investment, knowledge accumulation, innovation activity, market responsiveness, revenue, productivity, and reinvestment. These data can be used to calibrate and validate the Vensim model (Arranz et al., 2023; Viswanathan & Telukdarie, 2021).

Recommendation

Future research is recommended to use longitudinal designs and expand the study to other sustainable food products and cultural contexts. Additional psychological variables, such as environmental anxiety, moral obligation, and perceived consumer effectiveness, may also be included to provide a broader understanding of sustainable food adoption.

Author Contribution

The authors contributed to the conceptualization, methodology, data collection, data analysis, interpretation of findings, and preparation of the manuscript. Both authors reviewed and approved the final version of the manuscript.

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