

CONSUMER PERCEPTIONS AND PURCHASING BEHAVIOR  
TOWARD ECO-FRIENDLY FMCG: EVIDENCE FROM NAKHON  
RATCHASIMA, THAILAND

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Abstract

Growing environmental concerns have encouraged the fast-moving consumer goods (FMCG) industry to expand its eco-friendly product offerings. Yet consumer adoption remains limited due to price premiums, restricted availability, and uncertainty about the credibility of environmental claims. This study examines consumer perceptions and purchasing responses toward eco-friendly FMCG products in Nakhon Ratchasima, Thailand. Drawing on the Theory of Planned Behavior (TPB) and perspectives from impulse buying, qualitative data were collected through semi-structured email interviews with 13 consumers familiar with eco-friendly products. Results show generally positive attitudes and recognition of environmental benefits, but practical barriers—especially cost and access—limit regular purchases. Concerns about greenwashing further reduce trust. Conversely, appealing packaging, social influence, and clear eco-labels appear to strengthen purchase intentions. The

study proposes six propositions emphasizing awareness, trust, emotional engagement, and accessibility. Findings highlight the need for coordinated efforts among firms and policy-makers to improve the credibility, affordability, and availability of sustainable FMCG products.

**Key words:** eco-friendly FMCG, consumer behavior, sustainable consumption, Theory of Planned Behavior, Thailand, green marketing, impulse buying

## Introduction

Climate change and resource depletion are increasingly shaping sustainability priorities in both government and industry (Behera & Reddy, 2002; Grunert, 1993). Growing awareness of the environmental consequences of industrialization and consumerism—such as biodiversity loss, rising greenhouse gas emissions, and ecosystem degradation—has intensified global interest in sustainable consumption. The fast-moving consumer goods (FMCG) sector, which includes daily essentials like food, beverages, and personal care products, has become a key focus of these efforts due to its high consumption levels and significant environmental impact.

The FMCG industry has responded to rising demand for environmentally responsible products by introducing eco-friendly alternatives characterized by sustainable sourcing, lower production impacts, and certified environmental standards (Pavan, 2010; Sdrolia & Zarotiadis, 2018). However, adoption remains limited due to low consumer awareness, price sensitivity, perceived value issues, and inconsistent sustainability information. While interest in green products is growing, actual purchasing behavior

still varies significantly across regions and cultural contexts (Kong et al., 2014; Lavuri & Kumar, 2020).

Thailand's rapid industrialization and urbanization have heightened environmental concerns, with economic growth and rising consumption contributing to deforestation, waste generation, and pollution (Shrestha, 2020). Nakhon Ratchasima, a major commercial hub, reflects these challenges through increasing FMCG usage and generally low awareness of environmental impacts. As environmental consciousness grows—especially in urban areas—Thai consumers are gradually shifting toward more sustainable consumption (Mahapatra, 2013; Thapa, 2019). Understanding consumer attitudes toward eco-friendly FMCGs is therefore essential for supporting the transition to greener products. Factors such as environmental awareness, perceived product quality, pricing, and marketing effectiveness shape consumer decisions, while cultural norms, community values, and economic considerations remain influential. These dynamics highlight the need for context-specific strategies to promote sustainable purchasing behavior in Thailand.

This study examines eco-friendly FMCG consumption in Nakhon Ratchasima, Thailand—an understudied semi-urban context often overlooked in sustainability research. By applying and extending the Theory of Planned Behavior with insights from impulse buying, the study reveals how rational and emotional factors jointly shape green purchasing decisions. Key determinants include product accessibility, pricing, labeling clarity, trust, and social influence. The findings offer practical guidance for businesses and policy-makers aiming to improve the adoption of eco-friendly products.

#### Research Objectives

This study employs a qualitative research approach to investigate consumer perceptions, attitudes, and behaviors regarding eco-friendly Fast-Moving Consumer Goods (FMCGs) in Nakhon Ratchasima, Thailand. This approach is chosen for its ability to explore how individuals understand and respond to sustainable consumption within their personal and cultural contexts. Given the subjective and emotional dimensions of eco-friendly purchasing behavior, qualitative methods effectively capture the complexity of consumer experiences. The exploratory nature of the study seeks to generate insights, as prior research in semi-urban Thai regions is limited, allowing the researcher to delve deeply into the phenomenon and prioritize participant voices that are often overlooked in quantitative studies. Ultimately, the study aims to provide a comprehensive understanding of sustainable consumption that reflects the realities of these consumers.

This study explores the dynamics of eco-friendly Fast-Moving Consumer Goods (FMCGs) consumption in semi-urban regions, specifically Nakhon Ratchasima, Thailand. It addresses a gap in existing research, which has largely focused on consumers in developed countries or large urban areas, highlighting the intersection of global sustainability interest and local consumer behavior.

#### Literature Review

##### *Fast-Moving Consumer Goods*

Sustainability is defined as meeting present needs without jeopardizing future generations' ability to meet their own. Key to this concept is Triple Bottom Line Accounting, which addresses environmental, economic, and social dimensions. In the fast-moving consumer goods (FMCG) industry, sustainability efforts focus on reducing resource use, minimizing environmental damage, and promoting ethical supply chains. Sustainable FMCGs adopt practices like ethical sourcing, eco-friendly packaging, and low-carbon manufacturing, aligning with consumer demand for products that reflect environmental and social values (Sulfi et al., 2023). Green products are specifically designed to limit environmental impact throughout their life cycle.

Features like the use of recyclable or renewable materials, biodegradability, minimal toxicity, and effective resource usage are frequently used to identify green products (Patil & Hasalkar, 2021). The well-known "Reduce, Reuse, Recycle" (3Rs) paradigm, which is crucial in

influencing consumer attitudes toward sustainability, supports these traits. In addition to their benefits for the environment, green products are linked to improved health and safety since they rely less on dangerous chemicals. However, issues like increased production costs, which typically result in higher retail pricing, frequently impede the mainstream acceptance of green products. This pricing issue can be a significant barrier in price-sensitive regions, such as Nakhon Ratchasima, Thailand, where cost considerations heavily influence consumer choices (Mahapatra, 2013).

A wide range of psychological, social, and cultural factors influence customer attitudes on fast-moving consumer goods (FMCGs) that are ecologically friendly. Environmental awareness is one of these. People who are better knowledgeable about environmental issues are typically more likely to select sustainable options (Sulfi et al., 2023). Another important consideration is perceived product quality, since consumers frequently evaluate green products' dependability, performance, and durability in relation to their conventional equivalents (Kong et al., 2014).

The adoption of green FMCGs is also influenced by price sensitivity. Although some customers are prepared to pay a "green premium" for environmentally friendly goods, this willingness is usually restrained by the perceived value and the magnitude of the price difference in comparison to conventional solutions (Patil & Hasalkar, 2021).

Overall, the adoption of eco-friendly FMCG products presents a promising outlook. Key factors include enhancing distribution networks to improve access, particularly in areas like Nakhon Ratchasima, and government interventions such as subsidies or tax incentives to reduce consumer costs. Additionally, community initiatives like recycling programs can raise awareness and promote sustainable consumption practices.

#### Climate Change and Eco-friendliness

The impacts of climate change present serious challenges for Thailand, evident in rising temperatures, extended droughts, increased flooding, and coastal erosion. These changes significantly affect key sectors like agriculture, fisheries, public health, and tourism, with the northeastern region, particularly Nakhon Ratchasima, being particularly vulnerable. Erratic weather patterns in this area jeopardize livelihoods and food security, intensifying existing regional vulnerabilities (UNDP, 2024; UNFCCC, 2024; Chivanno, 2009).

Agriculture is crucial to Thailand's economy but is increasingly affected by irregular weather patterns that reduce agricultural yields. Farmers face challenges such as water scarcity and decreased rice and fishery production, impacting economic stability and heightening socioeconomic inequalities in rural areas. Additionally, urban health issues related to climate change, such as heat stress and waterborne diseases, are on the rise, while coastal towns suffer from rising sea levels and increased salination, particularly

impacting Bangkok and its vicinity. (Marks, 2011; UNFCCC, 2024; IPCC, 2007).

The Thai government has initiated various strategies to address climate change, including sustainable water management, disaster risk reduction, and renewable energy promotion. However, these efforts face challenges such as fragmented policies, limited institutional capacity, and conflicts between environmental and economic goals, particularly at the local level in climate-sensitive areas like Nakhon Ratchasima, where coordinated action and community engagement are crucial yet insufficiently developed (UNDP, 2024; Marks, 2011; Chinvano, 2009).

As awareness of climate change increases, consumer preferences are shifting towards eco-friendly products, particularly among well-educated individuals. Research shows that environmental concerns significantly influence purchasing decisions, especially in areas like Nakhon Ratchasima, where climate change impacts are felt directly. Consumers are more inclined to value sustainability in fast-moving consumer goods (FMCG), opting for eco-friendly choices that possess a lower environmental impact as a way to contribute to climate change mitigation.

The adoption of eco-friendly FMCG products encounters challenges like high costs, limited availability, and consumer skepticism about environmental claims. Strategies such as transparent marketing, subsidies, and awareness campaigns can help build consumer trust. Aligning with

eco-conscious trends not only meets consumer expectations but also aids climate change mitigation. Businesses should integrate sustainability into their operations, secure credible green certifications, and highlight environmental benefits in their marketing. Collaborative efforts among businesses, policymakers, and communities are vital for promoting sustainable consumption, especially in regions like Nakhon Ratchasima.

### *Related Theories*

Theory of Planned Behavior (TPB).

Ajzen's (1991) Theory of Planned Behavior (TPB) provides a framework for understanding factors influencing consumer behavior towards environmentally friendly FMCG in Nakhon Ratchasima, Thailand. TPB outlines three constructs: attitude toward the behavior, subjective norms, and perceived behavioral control, all affecting behavioral intent and actual conduct. Attitudes reflect consumers' perceptions of eco-friendly FMCGs, influenced by beliefs about environmental benefits and concerns over costs and efficacy, potentially leading to distrust. This study aims to explore how perceptions of product quality, pricing, and environmental impact affect purchasing decisions.

Subjective norms, which are the social constraints affecting consumer decisions, significantly influence consumption habits in Nakhon Ratchasima. Cultural and social influences from family, friends, and community leaders are crucial, with marketing efforts and endorsements from local environmental organizations

potentially enhancing this social impact. This study aims to explore the role of these norms in shaping customer intention. (Ajzen & Fishbein, 1980; Kalafatis et al., 1999).

Perceived behavioral control relates to a consumer's view of how easily they can purchase environmentally friendly FMCG products, influenced by factors like availability, accessibility, cost, and product knowledge. Issues such as limited availability and unclear eco-labeling can reduce perceived control (Ajzen, 1991). Ajzen emphasized identifying barriers and facilitators of purchasing decisions, with behavioral intention being a strong predictor of actual purchases. Nonetheless, external factors like financial limitations and product availability may hinder consumers from fulfilling their intentions, as explored in Nakhon Ratchasima (Ajzen, 1985; Kalafatis et al. 1999).

#### *Application of Theoretical Framework to Buying Behavior in the Eco-Friendly Retail Environment*

Eco-friendly FMCG items appeal to consumers' desires for personal fulfillment through environmentally responsible behavior, often leading to impulsive purchases. (Puri, 1996).

The enjoyment derived from such purchases aligns with the ideal self-image of eco-conscious consumers. Discrepancies between actual behavior and aspirational ideals, like lower carbon footprints, can trigger impulsive buying for self-satisfaction. Despite being perceived as simple

and functional, their association with social responsibility elevates eco-friendly products to 'aspirational commodities,' further enhancing impulsive buying behavior. (Hoch & Loewenstein, 1991).

Marketing stimuli significantly influence consumer behavior. Sustainable packaging that highlights biodegradability or recyclability can evoke positive emotional responses, potentially triggering impulsive purchases. Additionally, promotional strategies like discounts and limited-time offers create a sense of urgency, further driving impulsive behavior. (Puri, 1996)

To leverage impulsive purchase behavior for eco-friendly FMCG products in Nakhon Ratchasima, marketers should enhance product accessibility by prominently displaying such items in stores. Emotional engagement through storytelling and branding that highlights environmental and social issues can drive purchases (Dittmar et al. 1995). Dynamic promotions during environmentally-themed events may further encourage impulsive buying (Mattila & Wirtz, 2008). Additionally, designing store layouts around sustainability themes aligns customer beliefs with products. A theoretical framework for impulsive purchasing behavior illustrates the influence of internal motives, external stimuli, and situational contexts on consumer decisions, enabling merchants to align strategies with consumer perceptions and promote spontaneous buying for sustainable consumption.

The conceptual framework builds on the Theory of Planned Behavior (TPB),

adapting it to the specific contextual factors affecting consumer behavior in Nakhon Ratchasima, Thailand. It emphasizes the mediation role of psychological constructs—attitude toward eco-friendly products, subjective norms, and perceived behavioral control—between external variables and the intention and behavior of consumers towards purchasing

eco-friendly Fast-Moving Consumer Goods (FMCGs).

Price sensitivity emerged as a major barrier to the purchase of environmentally friendly products, despite positive consumer attitudes. Cost considerations affected willingness to buy, especially given diverse household incomes. Effective

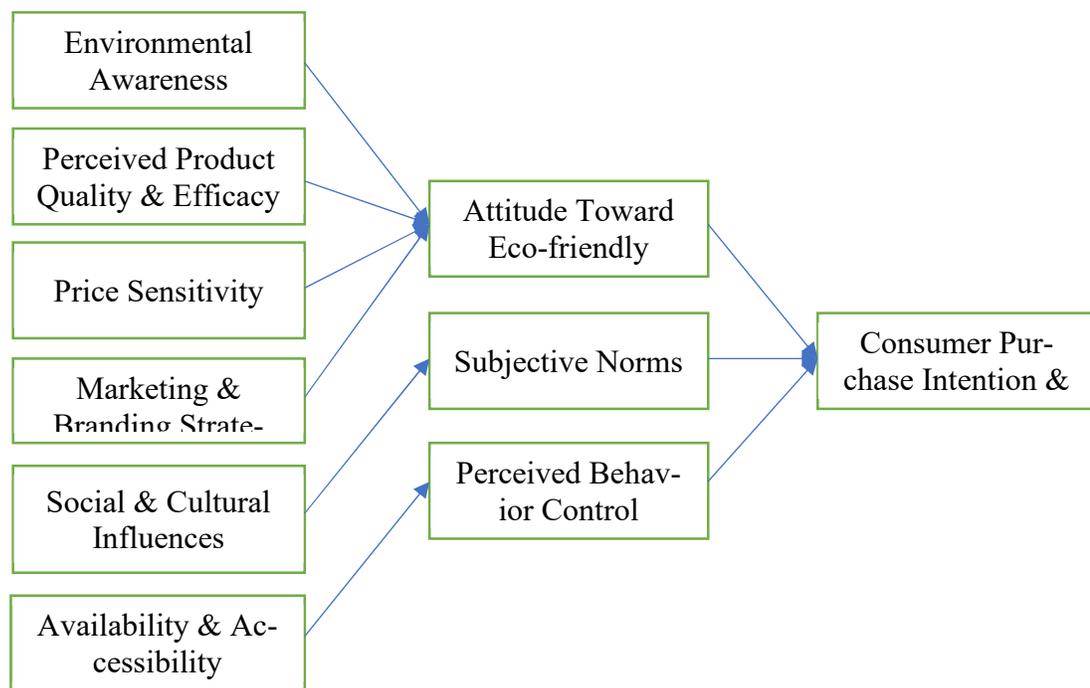


Figure 1. Conceptual Framework

The accessibility of eco-friendly products significantly impacts consumer purchase intentions. Despite intentions to buy green, consumers often face barriers due to the limited availability of these products, which relates to perceived behavioral control in the Theory of Planned Behavior (TPB). This framework's three

constructs—attitude, subjective norms, and perceived behavioral control—collectively affect buying intentions, bridging the gap between intention and actual purchase behavior. Notably, structural factors like affordability and distribution can hinder this translation. Ultimately, consumer behavior includes both rational

decisions and impulse buys influenced by marketing that resonates with their values.

By integrating established behavioral theory and context-specific variables, this framework provides insights into consumer behavior in emerging markets such as Thailand. It highlights that promoting the adoption of eco-friendly FMCGs necessitates consumer education alongside structural, social, and emotional supports to facilitate sustainable actions.

### Research Method

This study employs a qualitative research approach to assess customer attitudes towards environmentally friendly fast-moving consumer goods (FMCG) in Nakhon Ratchasima, Thailand. It emphasizes collecting detailed individual responses (Creswell, 2014) to better understand consumers' interactions with eco-friendly FMCG in their daily lives.

The study employs semi-structured interviews to gather qualitative data, emphasizing the insights participants offer through their descriptions of experiences and beliefs. This method is chosen for its flexibility in exploring complex consumer perspectives, particularly regarding eco-friendly Fast-Moving Consumer Goods (FMCGs). Conducted via email, the interviews allow participants to respond thoughtfully and mitigate biases associated with face-to-face interactions (Opdenakker, 2006). This format preserves original responses and accommodates participants from diverse geographical backgrounds, facilitating an in-depth

understanding of their motivations and perceptions (Meho, 2006).

### *Data Collection and Procedures*

Participants were recruited via an email outlining the study's purpose and consent requirements. Following consent, they received semi-structured interview questions exploring four main themes: awareness and understanding of eco-friendly FMCG products, factors influencing purchasing decisions, perceptions of environmental benefits, and barriers to sustainable consumption. These themes were based on the study's conceptual framework and existing literature on consumer behavior and sustainability.

The semi-structured format effectively balanced guided inquiry with open-ended exploration, allowing participants to provide detailed, thoughtful responses aligned with the study's research questions (Bryman, 2016). Follow-up emails clarified responses, enriching the dataset. This email-based interview approach enhanced response rates by allowing flexibility and facilitated accurate data collection in its original form, reducing transcription errors.

This email-based interview method provided participants with the flexibility to respond at their convenience, increasing response rates and promoting thoughtful contributions. The written format facilitated data collection in its original form, improving accuracy and reducing transcription errors (Creswell, 2014).

The interview framework aimed to gather detailed insights into consumer perceptions of eco-friendly fast-moving consumer goods (FMCGs) in Nakhon Ratchasima. It was structured around five thematic areas, facilitating a mix of guided questioning and open exploration of participants' knowledge, attitudes, behaviors, and challenges related to sustainable consumption. Initially, participants received an overview of the study, emphasizing voluntary participation and confidentiality to foster a conversational atmosphere. The first theme assessed awareness and recognition of eco-friendly products, while the second focused on consumer attitudes, including emotional and ethical dimensions related to brand credibility. The third area analyzed factors influencing purchase decisions, such as price, packaging, health impacts, and social norms, seeking to understand the motivations behind consumer choices. Overall, the framework encouraged candid discussions to reveal unique consumer experiences with sustainable products. The fourth area identifies barriers such as financial constraints, availability, skepticism about environmental claims, lack of information, and perceived inconvenience that create a disconnect between positive attitudes and actual purchasing behavior. The fifth area emphasizes the responsibility of businesses and policymakers in promoting sustainable consumption, suggesting actions like clearer labeling, affordability initiatives, public education, and regulatory enforcement to enhance consumer choices and influence behavior at individual and community levels.

### *Sampling Strategy*

Purposive sampling was employed in this study to incorporate diverse insights on eco-conscious consumption in a semi-urban Thai context. The focus was on developing a contextual understanding of consumer behavior rather than generalizing to a larger population. Thirteen participants were chosen, aligning with qualitative research norms that favor depth of insight. This sample size facilitated comprehensive thematic analysis, reflecting varied perspectives across age, income, and occupational backgrounds.

### *Data Analysis and Finding*

The research investigates consumer perceptions of eco-friendly Fast-Moving Consumer Goods (FMCGs) in Nakhon Ratchasima, Thailand, focusing on purchasing decisions, barriers to adopting sustainable products, and support needed from businesses and policymakers. Five major categories were identified from the analysis of interview data using a semantic coding approach.

Overall the respondent cohort reflects a diverse mix of occupations, statuses, income levels, and ages, with a stronger representation of working professionals in mid-to-late career positions. This diversity provides a rich foundation for the analysis of consumer perceptions and behaviors, regarding eco-friendly FMCGs in a semi-urban Thai environment. These categories include awareness and understanding of eco-friendly FMCG products, consumer attitudes and

Table. 1 Demographic information

No.	Participant	Gender	Occupation	Age Range	Monthly Income (Thai Bath)
1	A	Female	Full-time Employee	12-29	1 – 9,999
2.	B	Female	Full-time Employee	45-59	>50,000
3.	C	Female	Full-time Employee	45-59	40,000 – 49,999
4.	D	Female	Full-time Employee	45-59	>50,000
5.	E	Female	Freelancer	45-59	30,000 – 39,999
6.	F	Male	Full-time Employee	45-59	>50,000
7.	G	Female	Full-time Employee	12-29	10,000 – 19,999
8.	H	Female	Full-time Employee	12-29	10,000 – 10,999
9.	I	Female	Full-time Employee	30-44	>50,000
10.	J	Female	Full-time Employee	45-59	40,000 – 49,999
11.	K	Female	Full-time Employee	45-59	>50,000
12.	L	Female	Full-time Employee	30-44	>50,000
13.	M	Male	Full-time Employee	30-44	30,000 – 39,999

perceptions, factors influencing purchase decisions, barriers to adoption, and the role of businesses and policymakers in

promoting sustainable consumption. Subsequent sections provide detailed findings, featuring direct quotes and

synthesized themes from interviews, highlighting both shared and unique perspectives on eco-friendly consumption in a semi-urban Thai context.

An empirical analysis from semistructured interviews with consumers in Nakhon Ratchasima, Thailand, is presented, utilizing the Theory of Planned Behavior (TPB) alongside insights from impulse buying behavior theory. This analysis develops six key propositions that elucidate relationships regarding consumer perceptions, motivations, barriers to purchasing, and purchasing decisions related to eco-friendly fast-moving consumer goods (FMCG). These propositions aim to serve as a framework for academic research and managerial practice to promote sustainable consumer habits.

*Proposition one: Environmental awareness significantly enhances positive attitudes toward eco-friendly FMCG products.*

The study reveals that participants with greater awareness of environmental issues—such as climate change, pollution, and resource depletion—tend to have more favorable attitudes toward eco-friendly products. This aligns with Ajzen's Theory of Planned Behavior (1991), indicating that attitudes significantly influence behavioral intentions. The research also notes considerable variation in understanding ecological and sustainability issues among consumers, suggesting that mere exposure is not enough. Emotional and cognitive internalization of these issues is essential, indicating that localized environmental

education campaigns could effectively enhance attitudes and promote sustainable purchasing behaviors.

*Proposition Two: Trust in environmental claims and eco-labels is a precondition for purchase intention toward eco-friendly FMCGs.*

A primary obstacle to purchase decisions is skepticism regarding the authenticity of green claims. Concerns about the reliability of environmental certifications and marketing messages, associated with greenwashing (Peattie and Crane, 2005), diminish the effectiveness of green marketing when credibility is compromised. This skepticism, highlighted by the Theory of Planned Behavior, creates a lack of trust that complicates environmentally responsible choices. To enhance consumer confidence and influence purchasing behavior positively, mechanisms such as third-party certifications, transparent product life cycle information, and credible eco-labels are essential.

*Proposition Three: Price sensitivity remains a dominant obstacle that inhibits eco-friendly FMCG purchases, despite positive attitudes*

Participants generally show positive attitudes toward environmental issues but are often limited in their purchasing behavior by economic factors. Many are willing to buy eco-friendly products if the price is low, but higher costs deter them, illustrating the "attitude-behavior gap" in sustainable consumption (Vermeie and Verbeke, 2006). While the Theory of Planned Behavior (TPB) emphasizes attitudes and

perceived controls, economic rationality significantly influences behavior. Interventions such as price promotions and subsidies are necessary to convert intentions into actual purchases.

*Proposition Four: Greater product availability and enhanced visibility within retail environments positively influences impulse purchases and pre-planned eco-friendly FMCG purchases.*

Several participants indicated that eco-friendly products are often hard to find or available in limited varieties, which affects both planned and spontaneous purchasing. Enhanced product accessibility and strategic placement can boost impulse purchases, aligning with Ajzen's (1991) theory that perceived behavioral controls influence purchasing intentions and actions. When eco-friendly products are easily accessible and prominently displayed, consumers are more likely to act on their intentions, highlighting the crucial role retailers play in making green products visible in mainstream stores.

*Proposition Five: Social influence, particularly from close networks such as family and friends, strongly affects eco-friendly FMCG purchasing behavior.*

The importance of subjective norms in the Theory of Planned Behavior (TPB) is prominent among Thai consumers, influencing their purchasing decisions through personal recommendations and observed behaviors of peers and family. Thøgersen (2006) notes that social norms strongly

impact pro-environmental actions, especially in collectivist societies where conformity is significant. To promote green consumption, engaging influential social groups through community involvement, social marketing, and peer advocacy can enhance eco-friendly buying behaviors on a larger scale.

*Proposition Six: Emotional rewards derived from eco-friendly consumption reinforce consumer loyalty and repeat purchase behavior*

Participants in eco-friendly product purchases experience emotional rewards like satisfaction and pride, which motivate future buying behaviors. Niinimäki (2010) emphasizes that these emotional connections are crucial for developing sustainable habits. Marketing strategies focusing on emotional satisfaction can enhance consumer loyalty and encourage repeat purchases.

The text outlines the relationship between consumer factors, including awareness, trust, price, social influences, emotional resonance, and product availability in eco-friendly FMCG behavior. Interviews underscore the necessity of considering both rational and emotional factors. Subsequent sections propose theoretical implications and actionable recommendations for promoting eco-friendly consumption in urban settings, specifically Nakhon Ratchasima, Thailand.

The study findings support the Theory of Planned Behavior (TPB), highlighting that consumer attitudes, subjective norms, and perceived behavioral control signif-

icantly impact the intention to purchase eco-friendly Fast-Moving Consumer Goods (FMCGs). Participants showed positive attitudes toward sustainability and acknowledged the environmental benefits of eco-friendly products in mitigating issues like climate change and pollution, a trend observed in other emerging markets. Despite these positive dispositions, barriers such as price sensitivity hinder the adoption of eco-conscious purchasing, as many consumers are willing to buy eco-friendly products only if prices are comparable to conventional options. This gap between positive environmental attitudes and actual purchasing behavior is emphasized by previous research noting affordability as a key factor in green consumption decisions.

Perceived behavioral control significantly impacts sustainable behavior, as participants noted the difficulty in finding eco-friendly products in both retail and online settings. This reduced accessibility hampers their sustainable intentions, aligning with Slabá (2020), who emphasizes the necessity of effective distribution networks for green product adoption. Ajzen (1991) further supports that decreased perceived control, stemming from product unavailability or unclear labeling, diminishes the conversion of behavioral intention into action.

This study reinforces aspects of impulse buying theory alongside the TPB framework, highlighting the influence of emotional triggers such as attractive packaging, personal values, and ethical branding on eco-friendly product purchases. This aligns with Mattila and Wirtz (2008),

whose research indicates that emotional stimuli and environmental cues can stimulate impulse buying. Participants reported feelings of pride and moral gratification when choosing eco-friendly products, suggesting that emotional rewards enhance consumer loyalty, corroborating Niinimäki (2010)'s emphasis on the importance of identity and emotion in sustainable consumption.

Consumers in Nakhon Ratchasima show increasing awareness and positive attitudes towards eco-friendly FMCGs; however, their purchasing behaviors are limited by structural barriers such as price, accessibility, and skepticism toward green claims. Opportunities for intervention arise from strong emotional, social, and identity-driven motivations. Collaborations among businesses and policymakers are essential to bridge the gap between consumer intention and action by improving product affordability, visibility, and credibility of eco-labels, as well as developing effective marketing strategies. This can foster a more supportive environment for sustainable consumption in Thailand's semi-urban areas.

## Conclusions

The findings indicated that most participants understood eco-friendly FMCG products as those that are biodegradable, have recyclable packaging, feature low toxicity, and cause minimal environmental harm. This understanding aligns with previous research suggesting that greater environmental awareness often leads to more positive attitudes towards sustainable consumption. Participants recognized

the environmental benefits of green products and expressed a willingness to support them. However, the study also identified an "attitude-behavior gap," where economic concerns, particularly the price premium of green alternatives, hindered purchasing decisions. Affordability emerged as a significant barrier, highlighting the necessity for businesses and policymakers to mitigate cost issues to encourage wider adoption of eco-friendly products.

Accessibility of eco-friendly fast-moving consumer goods (FMCGs) was a significant barrier identified by participants, impacting their behavioral control and pro-environmental actions. This reflects Ajzen's (1991) view that perceived behavioral control is crucial for intentions to lead to action and aligns with Slabá (2020) regarding limited product availability hindering market penetration. Additionally, emotional and social influences played vital roles, with participants expressing that feelings of satisfaction and ethical alignment affected their eco-friendly purchases, consistent with impulse buying literature (Mattila & Wirtz, 2008; Niinimäki, 2010). Social factors, including influences from family and friends, reinforced purchasing behavior, underscoring the importance of subjective norms in the Theory of Planned Behavior (TPB) (Thøgersen, 2006).

### Implications

The study underscores essential managerial implications for businesses and policymakers in semi-urban Thailand concerning eco-friendly Fast-Moving

Consumer Goods (FMCGs). It identifies that understanding consumer attitudes is vital to bridging the intention-behavior gap and fostering sustainable consumption. A significant factor is product affordability; higher prices deter purchases despite consumer intentions. Businesses are encouraged to adopt pricing strategies to improve financial accessibility, like offering smaller sizes or discounts.

Trust in green branding is crucial, as doubts about eco-friendly labels and the risk of greenwashing can impede consumer engagement. Companies should build trust through transparency and reliable information about environmental impact, while emotional motivations such as pride can stimulate sustainable choices and loyalty. Marketing should also resonate emotionally, highlighting values like family well-being and ethical responsibility.

The study stresses enhancing the availability and visibility of eco-friendly FMCGs by integrating them into mainstream displays and broadening their online and offline reach. Social norms play a significant role in purchasing decisions, with influences from peers and online figures being substantial. Businesses can leverage this by encouraging user-generated content and community initiatives, framing sustainable consumption as a collective value.

Policymakers are essential in promoting green consumption by reducing financial barriers, which are a primary concern for consumers adopting sustainable

behaviors. Suggested measures include tax breaks for eco-friendly businesses, subsidies for sustainable materials, and vouchers for low-income families. Additionally, regulatory oversight for eco-friendly labeling is important to address consumer skepticism about greenwashing; clear standards and independent certifications are necessary to build trust. Public awareness campaigns emphasizing the emotional and social benefits of sustainable living should employ relatable narratives and local role models. Moreover, integrating environmental education into formal systems and community initiatives can promote a responsible culture. Policymakers should encourage collaboration between sectors to foster sustainable development and innovation in green practices.

#### Research Limitations and Future Directions

One significant limitation of the study is its small sample size of thirteen participants, which restricts the generalizability of findings to the broader Thai population and introduces selection bias, as participants predominantly come from middle-to high-income backgrounds. The study's narrow geographic focus on Nakhon Ratchasima may overlook regional variations in environmental attitudes and consumption patterns influenced by socio-cultural factors. Future research should

diversify sample demographics and regions to better understand consumer behaviors toward eco-friendly Fast-Moving Consumer Goods (FMCGs). Moreover, the use of email for semi-structured interviews has strengths and weaknesses, impacting the depth of responses. The study also faces challenges from self-reported data, often influenced by social desirability bias, leading to discrepancies between reported and actual behaviors. It calls for a multimethod approach in future research, incorporating behavioral evidence to enhance credibility. Additionally, key factors like digital media algorithms, cultural values, and gender norms that affect sustainable consumer choices remain underexplored in the current study.

Future research in sustainable consumption should address identified gaps through diverse methodologies, broader contexts, and deeper theoretical inquiry. The interplay of individual, social, cultural, and structural influences shape sustainability-related behavior, necessitating an interdisciplinary approach. Incorporating qualitative and quantitative methods, expanding demographic and regional focus, and building on previous scholarly insights will enhance understanding of eco-friendly consumer motivations and barriers. The outlined recommendations will guide researchers in contributing to sustainable consumption studies.

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