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Factors influencing of green logistics on green brand image of retail enterprises in Ho Chi Minh City from the perspective of young consumers

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Abstract

Green logistics is increasingly regarded as a strategic factor in the context of enterprises striving toward sustainable development and enhancing brand value. However, in Vietnam, the relationship between green logistics and brand image remains underexplored, particularly from the perspective of young consumers that is a demographic known for its heightened environmental awareness and environmentally driven consumption behavior. Based on this context, the present study aims to develop a theoretical model of green logistics factors influencing the brand image of retail enterprises in Ho Chi Minh City, from the perspective of young consumers, specifically university students. A qualitative research approach was adopted, combining literature review and expert interviews, to identify the core components of green logistics, including green transportation, green warehousing, green packaging, and green technology. The findings of this study contribute to the clarification of conceptual frameworks, theoretical foundations, and the linkage between green logistics and brand image, while addressing an existing research gap in the Vietnamese context. This serves as a critical foundation for future studies to empirically test the proposed model using appropriate quantitative methods.

Keyword: Green logistics, green brand image, young consumers, retail enterprises

Introduction

Amid globalization and the rapid expansion of e-commerce, logistics has become a vital element in the retail supply chain. However, conventional logistics practices contribute significantly to environmental issues such as air pollution, energy overuse, and carbon emissions (Dekker *et al.*, 2012) ^[12]. In response, green logistics has emerged as a strategic approach to reducing environmental impacts while enhancing efficiency and brand reputation (Sbihi & Eglese, 2007) ^[56]. Srivastava (2007) ^[60] emphasizes that green logistics not only aligns with sustainable development goals but also helps firms gain competitive advantage, especially as consumers grow more environmentally conscious.

In Vietnam particularly in Ho Chi Minh City, the nation's economic hub the green consumption trend is gaining traction, notably among young consumers. A Nielsen Vietnam (2021) survey revealed that over 80% of young Vietnamese are willing to pay more for eco-friendly products, indicating high environmental awareness and support for sustainability-oriented businesses. Despite this growing interest, green logistics remains a relatively new concept in Vietnam, and its impact on brand image in the retail sector remains underexplored. Existing studies (Nguyen Thi Hong Hanh, 2020; Tran Quoc Trung *et al.*, 2021) ^[42, 64] have largely focused on adoption drivers, overlooking the consumer perspective, particularly among youth. Therefore, this study aims to develop a theoretical model to assess how green logistics influences the green brand image of retail enterprises, with a focus on young consumers in Ho Chi Minh City an increasingly influential demographic in shaping sustainable consumption.

Conception and Theoretical Framework

Conception

Green Brand Image: Green brand image reflects the extent to which consumers perceive, evaluate, and positively associate a brand based on the company's environmentally responsible actions. According to Chen (2010) ^[11], a brand is considered "green" when it actively implements sustainable production and business strategies, such as using eco-friendly materials, controlling emissions, and participating in community-based environmental protection initiatives. This image not only fosters goodwill but also builds trust and promotes customer loyalty, particularly among younger consumers who exhibit a strong sense of responsible consumption (Delgado *et al.*, 2019) ^[13]. In the highly competitive retail sector, possessing a green brand image serves as a strategic advantage, enabling firms to differentiate themselves and strengthen customer engagement.

Environmentally Friendly Warehousing

Environmentally friendly warehousing is a critical component of green logistics, comprising facilities designed and operated to optimize energy use, reduce emissions, and improve environmental efficiency. Agyabeng-Mensah *et al.* (2020) ^[4] identify key elements such as the use of renewable energy (e.g., solar power), warehouse layout optimization, energy-efficient climate control and lighting systems, and the implementation of automated warehouse management systems (WMS). Additionally, waste management and material reuse are core aspects of green warehouse operations (Castillo *et al.*, 2022) ^[9, 10]. Retailers such as Amazon and Coopmart in Vietnam have started adopting green warehousing solutions to reduce costs and enhance brand perception among environmentally conscious consumers.

Biodegradable and Recyclable Packaging

Biodegradable and recyclable packaging is a vital element of green logistics strategies, aiming to minimize solid waste and environmental impact. Green packaging typically utilizes renewable and biodegradable materials such as cornstarch, sugarcane pulp, or recycled paper (Maziriri, 2020) ^[34]. Packaging design also emphasizes minimalism to conserve resources. According to Chen *et al.* (2010) ^[11], the use of eco-friendly packaging not only contributes to environmental protection but also positively influences consumer attitudes and purchasing behavior. Young consumers, in particular, tend to value brands that adopt sustainable packaging and clearly communicate their environmental commitments.

Green Transportation and Distribution

Green transportation and distribution refer to the use of environmentally friendly vehicles and delivery solutions, such as electric vehicles, hybrids, or those powered by biofuels. In addition, route optimization and the application of route management technologies help reduce emissions and fuel consumption (Zhang *et al.*, 2021) ^[76]. Rodrigue *et al.* (2020) ^[52] emphasize that green transportation plays a crucial role in improving operational efficiency and enhancing the perceived value of brands among consumers. Enterprises in Ho Chi Minh City, such as Saigon Co.op,

have launched green transportation initiatives, reflecting their commitment to sustainability and attracting support from young, eco-conscious customers.

Environmental Policies in Logistics

Environmental policies in logistics encompass internal regulations, guidelines, and standards developed by enterprises to embed sustainability across the entire supply chain. According to Harris *et al.* (2014) ^[23], these policies include environmental criteria for supplier selection, waste management procedures, vehicle operation regulations, and standardized, energy-efficient warehouse practices. A well-articulated sustainability policy not only ensures compliance with legal requirements but also enhances transparency and builds customer trust particularly among young consumers who are sensitive to ethical and social values.

Green Logistics Communication

Green logistics communication refers to how enterprises disseminate information, visuals, data, or reports related to their environmental protection efforts in logistics to shape positive public perceptions. Delgado *et al.* (2019) ^[13] note that effective communication increases awareness, trust, and motivation for sustainable consumption behaviors. Communication channels include social media, sustainability reports, promotional videos, and community engagement. When consumers perceive environmental messages as transparent and consistent, they are more likely to develop long-term brand loyalty (Maziriri, 2020) ^[34]. Hence, communication is not merely a public relations tool but a core strategy in cultivating a green brand image.

Theoretical Framework

Consumer Behavior Theory (Kotler, 1967)

Consumer Behavior Theory, developed by Kotler (1967), explains how individuals or groups make decisions in selecting, using, and evaluating products or services to satisfy their needs and desires. According to Kotler and Keller (2016), consumer behavior is influenced by four main categories: personal (e.g., age, occupation, income), psychological (e.g., motivation, perception, attitudes), social (e.g., family, reference groups), and cultural (e.g., societal values, beliefs, social class). The "Black Box Model" illustrates how external stimuli (such as product, price, distribution, and communication) are processed internally and lead to specific purchasing behaviors.

In the context of this study, green logistics practices (such as biodegradable packaging, low-emission transport, and energy-efficient warehousing) can be viewed as marketing stimuli that influence the perception and attitude of students, a group of young consumers highly sensitive to environmental values (Delgado *et al.*, 2019) ^[13]. Consequently, their purchase behavior and brand loyalty are shaped by how brands demonstrate environmental responsibility through logistics activities.

Theory of Planned Behavior (Ajzen, 1991) ^[5]

The Theory of Planned Behavior (TPB), introduced by Ajzen (1991) ^[5], extends the Theory of Reasoned Action (TRA) by explaining human behavior through three main constructs: (1) attitude toward the behavior, (2) subjective norms, and (3) perceived behavioral control. These factors

jointly influence behavioral intention, which in turn predicts actual behavior. Attitude reflects an individual's positive or negative evaluation of the behavior; subjective norms indicate perceived social pressure; and perceived behavioral control refers to the ease or difficulty of performing the behavior (Ajzen, 1991) ^[5].

Applied to this study, young consumers are more likely to support green logistics brands if they hold favorable attitudes toward eco-friendly practices, receive social support from peers or community, and perceive green products as accessible and viable (Paul *et al.*, 2016) ^[46]. Thus, TPB offers a robust framework to explain the linkage between green logistics perceptions and brand-related behavioral intentions among young consumers.

Literature Review and Research Gap

Literature Review

Environmentally Friendly Warehousing is a critical component of green logistics, aimed at reducing energy consumption, lowering greenhouse gas emissions, and enhancing operational efficiency. Based on the synthesis of studies by Seme *et al.* (2011) ^[57], Agyabeng-Mensah *et al.* (2020) ^[4], Castillo *et al.* (2022) ^[9, 10], Harris *et al.* (2014) ^[23], and Torabizadeh *et al.* (2019) ^[63], five key components can be identified: (1) Use of Renewable Energy and Energy Optimization: Proposed by Seme *et al.* (2011) ^[57] and Harris *et al.* (2014) ^[23], with solutions such as solar power, energy storage batteries, fast-charging systems, and replacing fossil fuels with electricity or hydrogen; (2) Eco-Friendly Warehouse Design and Layout: Emphasized in the works of Agyabeng-Mensah *et al.* (2020) ^[4] and Castillo *et al.* (2022) ^[9, 10], including energy-saving infrastructure and spatial arrangements that minimize resource consumption; (3) Application of Smart Technologies and Management Systems: Highlighted by Castillo *et al.* (2022) ^[9, 10] and Torabizadeh *et al.* (2019) ^[63], involving the use of warehouse management systems (WMS), mechanized equipment, smart grid integration, and digital technologies for operational optimization; (4) Sustainable Waste and Resource Management: Noted by Agyabeng-Mensah *et al.* (2020) ^[4] and Torabizadeh *et al.* (2019) ^[63], focusing on material reuse, emission reduction, and inventory control to minimize waste; (5) Human Resource Development and Supply Chain Collaboration: Suggested by Torabizadeh *et al.* (2019) ^[63] and Agyabeng-Mensah *et al.* (2020) ^[4], underscoring the importance of warehouse staff and inter-organizational coordination to implement green warehousing practices aligned with sustainability goals.

Biodegradable and Recyclable Packaging

Biodegradable and Recyclable Packaging is a core element of green logistics, contributing to pollution reduction, resource conservation, and enhanced brand image. Based on the synthesis of studies by Maziriri (2020) ^[34], Wandosell *et al.* (2021) ^[67], Zhang and Zhao (2012) ^[76], Trangita *et al.* (2024) ^[65], and Wang *et al.* (2020) ^[68], five key components can be identified: (1) Environmentally Friendly Materials: Utilization of recycled and biodegradable substances such as polylactic acid (PLA) and cellulose, which are also safe for human health (Maziriri, 2020; Wandosell *et al.*, 2021) ^[34, 67]; (2) Eco-Design and Reusability: Packaging designed for minimalism, extended product life cycle, ease of recycling,

and efficient classification throughout usage stages (Zhang & Zhao, 2012; Wang *et al.*, 2020) ^[76, 68]; (3) Energy and Cost Efficiency: Production processes that minimize energy consumption, offer cost-effective solutions, and create economic value through packaging optimization (Maziriri, 2020; Wang *et al.*, 2020) ^[34, 68]; (4) Integration with Green Logistics Systems: Packaging incorporated into logistics systems, enabling streamlined sorting, recovery routing, and sustainable processing (Trangita *et al.*, 2024; Wang *et al.*, 2020); ^[65, 68] (5) Alignment with Sustainable Development Goals: Contributing to corporate social responsibility, brand reputation, and competitive advantage amid rising demand for eco-conscious living (Wandosell *et al.*, 2021; Trangita *et al.*, 2024) ^[67, 65].

Green Transportation and Distribution

Green Transportation and Distribution is a vital component of green logistics, contributing to the reduction of greenhouse gas emissions, improving operational efficiency, and fostering a sustainable brand image. Based on the synthesis of studies by Zaleckienė *et al.* (2021) ^[74], McKinnon (2010) ^[36], Nicoletti and Appolloni (2024) ^[43], Rakhmangulov *et al.* (2018) ^[48], and Fahimnia *et al.* (2015) ^[15], five key components can be identified: (1) Route Optimization and Green Logistics Network Design: Minimizing travel distance, reducing emissions, and improving network efficiency (Zaleckienė *et al.*, 2021; Fahimnia *et al.*, 2015) ^[74, 15]; (2) Use of Sustainable Vehicles and Fuels: Adoption of electric, hybrid, compressed natural gas (CNG) vehicles, and alternative fuels to lower carbon intensity (McKinnon, 2010; Fahimnia *et al.*, 2015) ^[36, 15]; (3) Packaging Waste Reduction and Green Operations Management: Implementation of reverse logistics, reusable packaging, and environmentally driven inventory optimization (Nicoletti & Appolloni, 2024; Rakhmangulov *et al.*, 2018) ^[43, 48]; (4) Application of Smart Technologies: Integration of AI, Intelligent Transportation Systems (ITS), and location-based technologies to optimize operations and monitor emissions (Nicoletti & Appolloni, 2024; Fahimnia *et al.*, 2015) ^[43, 15]; (5) Integration of Sustainability Across the Supply Chain: Linking all stages from suppliers to end consumers through social-environmental alignment, intermodal distribution, and decision-support technologies (Rakhmangulov *et al.*, 2018) ^[48].

Environmental Protection Policies in Logistics

Environmental Protection Policies in Logistics play a critical role in corporate sustainability strategies and the overall supply chain system. Based on the synthesis of studies by Rodrigue *et al.* (2001) ^[51], Abbasi *et al.* (2024) ^[1], Karagülle (2012) ^[29], and Zheng and Zhang (2010) ^[77], six major components can be identified: (1) Waste Management and Reverse Logistics: Including recycling, returns processing, green material flows, and reverse logistics systems (Rodrigue *et al.*, 2001; Zheng & Zhang, 2010) ^[51, 77]; (2) Environmental Regulations and Carbon Taxation: Policies such as carbon taxes and emissions pricing designed to influence corporate operational behavior (Abbasi *et al.*, 2024) ^[1]; (3) Vehicle and Fuel Emission Control: Emission reduction through the selection of eco-friendly vehicles and alternative fuels (Rodrigue *et al.*,

2001; Karagülle, 2012) ^[51, 29]; (4) Eco-Oriented Logistics Infrastructure Planning: Optimizing land use and designing warehouses, distribution centers, and ports with ecological principles in mind (Karagülle, 2012) ^[29]; (5) Adoption of Environmental Management Systems: Implementing standards such as ISO 14000 and EMAS to enhance transparency and monitor environmental impact (Rodrigue *et al.*, 2001; Karagülle, 2012) ^[51, 29]; (6) Promotion of Circular Economy and Green Technologies: Integrating Industry 4.0, circular economy (CE) practices, and supply chain collaboration to improve logistics efficiency (Liu *et al.*, 2023; Zheng & Zhang, 2010) ^[77]. These factors encompass both governmental regulatory frameworks and internal corporate initiatives, forming a solid foundation for advancing green logistics and sustainable brand image.

Green Logistics Communication

Green Logistics Communication plays a vital role in raising awareness, ensuring environmental transparency, and strengthening sustainable brand image. Based on the synthesis of studies by Negara *et al.* (2020) ^[40], Karia and Asaari (2016) ^[30], Gruchmann (2018) ^[20], Ozturkoglu (2016) ^[45], five key components can be identified: (1) Green Brand Image Communication: Encompassing customer perceptions, brand associations, trust, and positive attitudes toward logistics enterprises (Negara *et al.*, 2020; Nguyen Dinh Tho, 2011) ^[40]; (2) Customer Satisfaction and Brand Affection: Built through trust and long-term relationships fostered by responsible green initiatives (Karia & Asaari, 2016) ^[30]; (3) Technology-Driven and Data-Based Communication: Utilization of Green Decision Support Systems (GDSS), carbon emission transparency, and environmental data sharing (Gruchmann, 2018) ^[20]; (4) Digital Supply Chain Data Integration: Application of EDI/Web-EDI platforms to coordinate and standardize environmental information across the supply chain (Gruchmann, 2018) ^[20]; (5) Stakeholder Engagement in Sustainability Commitment: Including green advertising, eco-labeling, consumer education, and two-way communication (Ozturkoglu, 2016) ^[45]. Effective communication not only encourages sustainable consumption behaviors but also lays the foundation for a green brand image in modern logistics.

Green Brand Image of Retail Enterprises

Green Brand Image of Retail Enterprises is a critical factor in shaping customer perceptions and influencing purchasing decisions in the logistics and retail sectors. Based on the synthesis of studies by Świtała *et al.* (2018) ^[61], Balmer *et al.* (2020) ^[7], Yener *et al.* (2012) ^[73], Santoso (2021) ^[54], and Febrianto *et al.* (2023) ^[16], five key components can be identified: (1) Reliability and Fulfillment of Commitments: The brand consistently delivers on its promises and provides dependable service, forming the foundation of customer trust (Świtała *et al.*, 2018; Balmer *et al.*, 2020) ^[61, 7]; (2) Relationships with Customers and Partners: Characterized by effective collaboration, goodwill, and long-term relationship building (Balmer *et al.*, 2020; Santoso, 2021) ^[7, 54]; (3) Industry Reputation and Credibility: Reflected in the brand's operational history, recognition, and evaluations by the public and business partners (Świtała *et al.*, 2018; Santoso, 2021) ^[61, 54]; (4) Positive Customer Perceptions and

Associations: Emotional value, brand associations, and favorable impressions of product quality and experience (Febrianto *et al.*, 2023; Yener *et al.*, 2012) ^[16, 73]; (5) Influence on Decision-Making Behavior: The brand significantly impacts customers' purchasing decisions and supplier preferences (Febrianto *et al.*, 2023) ^[16]. These factors not only define a green brand image but also foster customer loyalty, favorable attitudes, and supportive behavior toward environmentally responsible enterprises.

The relationship between environmentally friendly warehousing and green brand image

Recent studies have consistently demonstrated a positive relationship between environmentally friendly warehousing practices and the green brand image in the retail sector. According to Rani and Purohit (2024) ^[49, 50], green warehousing enhances brand awareness, fosters favorable perceptions, and promotes customer loyalty, particularly among young consumers. Tantra and Dadhich (2023) ^[62] and Wycher (2016) ^[70] affirm that the use of renewable energy, waste management, and temperature optimization in warehouses significantly strengthen brand image and attract environmentally conscious customers. Iyalolo *et al.* (2024) ^[26] emphasize that companies implementing green logistics, especially in warehousing are perceived as more transparent and socially responsible. Solehati *et al.* (2023) ^[59] also reveal that green warehousing positively influences consumer behavior by indirectly shaping brand image. In summary, environmentally friendly warehousing is not only a sustainable operational solution but also a strategic tool that enhances brand image and provides competitive advantages for retail enterprises.

The relationship between biodegradable-recyclable packaging and green brand image

Recent studies highlight a clear positive relationship between biodegradable, recyclable packaging and green brand image. According to Sarmah *et al.* (2024) ^[55], eco-friendly packaging enhances brand awareness, builds trust, and fosters loyalty by reinforcing consumers' belief in a company's social responsibility. Rani and Purohit (2024) ^[49, 50] emphasize that brands adopting recycled packaging such as Tata and Mahindra are highly regarded for their ethical values and attract loyal customers. Nada (2022) ^[39] points out that green packaging supports brand repositioning after crises and improves brand recognition. Babu *et al.* (2024) ^[6] and Gazil *et al.* (2024) ^[17] confirm that environmentally conscious young consumers tend to respond positively and are more willing to support brands that use sustainable packaging. In summary, biodegradable and recyclable packaging not only reduces environmental impact but also serves as an effective tool for enhancing brand image, particularly as consumers increasingly prioritize sustainability.

The relationship between green transportation-distribution and green brand image

Recent studies have consistently shown a positive relationship between green transportation and distribution practices and the green brand image of retail enterprises. According to Hanus (2024) ^[22] and Bhujbal (2022) ^[8], consumers especially younger generations highly appreciate

and are more willing to support businesses with environmentally friendly delivery policies. Yang *et al.* (2017) ^[72] found that when green transportation is effectively implemented, it enhances brand credibility and consumer trust. Erkal (2017) ^[14] and Modley (2024) ^[37] affirm that green transportation fosters positive brand perception, particularly when supported by effective education and communication. However, unclear communication or excessive costs may diminish consumers' favorable perceptions of the brand.

In summary, green transportation and distribution not only contribute to environmental objectives but also serve as a strategic element in building a sustainable brand image and attracting eco-conscious consumers.

The relationship between environmental protection policies in logistics and green brand image

Studies have consistently shown that environmental policies in logistics positively influence green brand image. According to Yang *et al.* (2024) ^[72] and Shafiqhi (2022) ^[58], green innovation and environmentally friendly logistics enhance brand awareness, trust, and consumer preference. Harrison and Seiler (2011) ^[24] suggest that green certifications can increase brand value, although their effectiveness depends on the broader socio-political context. Acer *et al.* (2020) ^[2] and Mbokani (2024) ^[35] highlight the importance of consumer awareness and socio-economic factors in the public's reception of corporate environmental policies. However, when such policies lack transparency or are merely symbolic, they may backfire and damage brand perception.

In summary, environmental protection policies in logistics not only strengthen brand image but also serve as a value-creation strategy that resonates with sustainability-minded consumer segments.

The relationship between green logistics communication and green brand image

Studies have shown that green logistics communication positively impacts the green brand image of retail enterprises. According to Kalmaz and Vardarlier (2020) ^[28] and Moreau *et al.* (2011) ^[38], effective communication reinforces positive brand associations, enhances brand value, and strengthens consumer goodwill. Demonstrated that transparency and green commitment in communication (such as Starbucks' efforts to reduce plastic use) can significantly increase brand loyalty. Hernández *et al.* (2020) ^[25] and Gorton *et al.* (2024) ^[18] confirmed that CSR communication and supply chain reputation are closely linked to brand image and serve as protective factors during times of crisis.

In summary, green logistics communication not only raises awareness but also helps position the brand as a responsible and sustainable organization in the eyes of modern consumers.

Research Gap

Based on the current literature synthesis, several important research gaps can be identified:

- There is a lack of integrated studies that simultaneously assess multiple components of green logistics (e.g., warehousing, packaging, transportation,

communication, policies) and their collective impact on brand image in the retail sector.

- No existing research in Ho Chi Minh City has focused on the perspective of university students—a demographic with high environmental awareness and strong influence on consumption trends in evaluating green logistics and brand image.
- There is an absence of studies that measure the relative impact of each green logistics component on brand image from the viewpoint of young consumers.
- Comparative studies between university students and other consumer groups are missing, limiting understanding of the unique role young generations play in advancing green branding.

Hypothesis Development and Research Model

Green warehousing is not only a technical solution but also a clear representation of a company's commitment to sustainable development. In Ho Chi Minh City, several retail enterprises have begun implementing measures such as renewable energy usage, spatial optimization, and emission reduction in warehouse operations. However, the impact of these practices on students' perceptions who represent a highly environmentally conscious consumer group has not been sufficiently assessed. Therefore, this study includes environmentally friendly warehousing as an independent variable to examine its influence on brand image in the retail sector.

Hypothesis H1: Environmentally friendly warehousing has a positive impact on brand image

In the context of increasing green consumption, university students have shown strong interest in brands that use environmentally friendly packaging. The transition from plastic bags to recycled and biodegradable packaging not only helps reduce plastic waste but also strengthens consumer trust, especially among young consumers who view such practices as indicators of corporate ethics. Accordingly, this study incorporates biodegradable and recyclable packaging into the model to assess its impact on the brand image of retail enterprises in Ho Chi Minh City.

Hypothesis H2: Biodegradable and recyclable packaging has a positive impact on brand image

According to WinCommerce (2024) ^[69], the implementation of electric trucks and optimized distribution routes has improved operational efficiency for retail systems like WinMart while also creating a positive impression among students and young consumers. This demographic values brands with environmentally responsible operations, and such perceptions play a crucial role in shaping brand image. Therefore, this study includes green transportation and distribution in the model to test its effect on retail brand image.

Hypothesis H3: Green transportation and distribution have a positive impact on brand image

At the Vietnam Logistics Conference (2023), experts emphasized that policies encouraging renewable energy use and emission reduction in logistics are becoming essential criteria for evaluating brand image. According to Trần Quốc Toàn (Ministry of Industry and Trade), green policies serve

as a bridge between regulatory compliance and consumer trust, particularly among the younger generation. Thus, this study includes environmental protection policies in logistics as a factor in the model to assess its influence on brand image from students' perspectives.

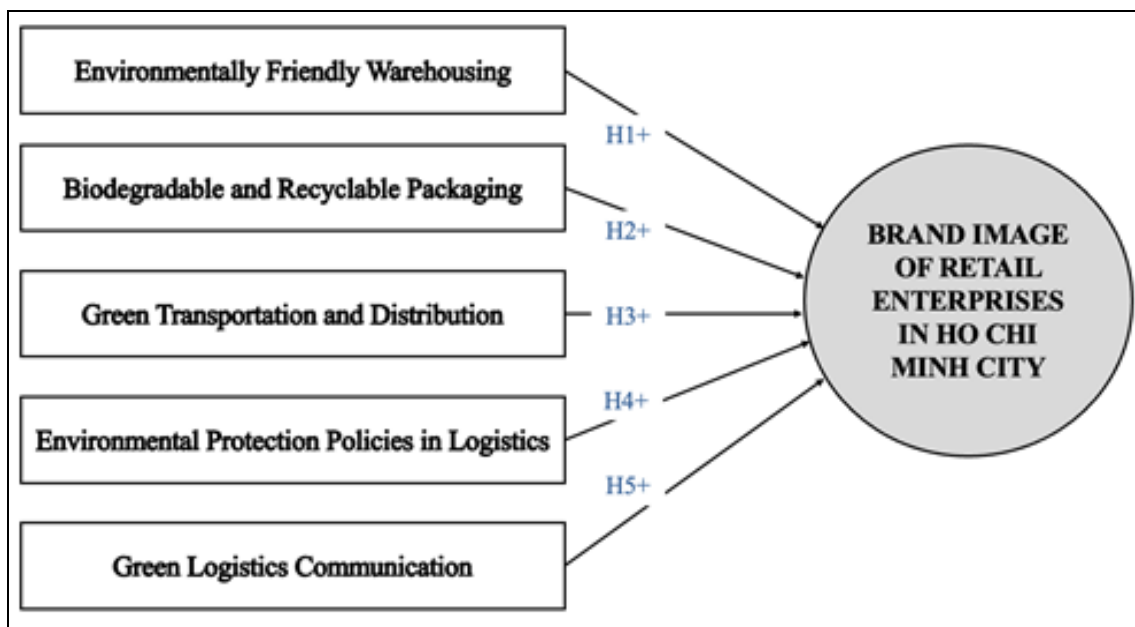
Hypothesis H4: Environmental protection policies in logistics have a positive impact on brand image.

Effective communication enables companies to clearly express their environmental commitments and enhance brand awareness. According to the Government News Portal (2024), several green logistics communication campaigns have made a strong impression on young audiences by

highlighting initiatives such as recycled packaging, electric delivery vehicles, and corporate social responsibility. Hà Vữ Sơn (2024) affirmed that transparent and consistent messaging around green commitments contributes to building a trustworthy and approachable brand image. Therefore, this study includes green logistics communication in the model to test its relationship with the brand image of retail enterprises.

Hypothesis H5: Communication about green logistics practices has a positive impact on brand image.

The research model is presented in Figure 1



Source: Proposed by the author, 2025

Fig 1: Research Model

Conclusion

Green logistics practices, including environmentally friendly warehousing, biodegradable packaging, and sustainable transportation, play a crucial role in shaping a brand's green image. These practices not only reduce environmental impact but also enhance consumer perceptions, particularly among young, eco-conscious consumers. Brands that adopt sustainable practices such as renewable energy in warehousing, eco-friendly packaging, and green transportation are more likely to build trust, foster loyalty, and gain a competitive advantage. The effective communication of these green efforts further strengthens brand image, making sustainability an essential component of modern retail strategies. Ultimately, environmentally responsible logistics practices contribute to long-term business success and positive consumer behavior.

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