



國立臺灣大學管理學院企業管理碩士專班

碩士論文

Global MBA

College of Management

National Taiwan University

Master's Thesis

越南消費者對 Vinamilk 品牌 ESG 努力的認知

The Perception of Vietnamese Customers Toward ESG
endeavors of Vinamilk brand

黃芳嫻

Nam-Thi Hoang

指導教授: 堯里昂 博士

Advisor: Leon-van Jaarsveldt, Ph.D

中華民國 114 年 6 月

June, 2025



Acknowledgment

First, I would like to express my deep and sincere appreciation to my research advisor, Professor Leon van Jaarsveldt, who has been patient and supportive, providing invaluable guidance throughout the journey of conducting this thesis. His serious attitude toward academic research and the value of information, especially in market research and trade policies, has motivated me to explore different perspectives and deepen my understanding. I am grateful to have had his mentorship.

I would also like to thank my committee members, Professor Kuan-Chou Ko and Professor Hsin-Tsai Liu, for their valuable feedback and recommendations, which helped me improve and complete this research.

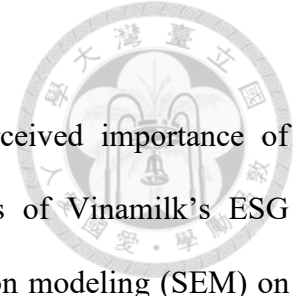
My sincere appreciation goes to Yvonne, Christy, and the GMBA office staff, for your consistent and thoughtful support during my GMBA journey at NTU.

To all my GMBA classmates, thank you for your kind support and meaningful contributions through group discussions, assignments, and life in Taiwan. You have all become part of this journey, and I believe our paths will cross again after graduation.

Special love and gratitude go to my fellow Vietnamese team - including, but not limited to, Marcus, Elaine, Dellena, Sam, and many others. Thank you for always being there to listen, support, and lift my spirits during challenging times over the past few years. I hope our friendship will last a lifetime.

Finally, I would like to acknowledge, with deep gratitude, the love and unwavering support of my family, my parents, sisters, husband, and my two little daughters. You are my greatest source of strength, and this thesis would not have been possible without each of you.

Abstract



This study investigates the relationships between consumers' perceived importance of environmental, social, and governance (ESG) issues, their perceptions of Vinamilk's ESG performance, brand trust, and purchase intention. Using structural equation modeling (SEM) on survey data from 288 Vietnamese consumers, we test a theoretically grounded model linking ESG attitudes to behavioral intentions. The results reveal that perceived ESG importance has a modest but significant effect on perceptions of Vinamilk's ESG performance ($\beta = 0.19$, $p = .006$), and ESG perception strongly predicts brand trust ($\beta = 0.37$, $p < .001$). Notably, ESG perception does not exert a significant direct effect on purchase intention ($\beta = -0.08$, $p = .241$); instead, its influence operates indirectly through brand trust ($\beta = 0.28$, $p < .001$). These findings highlight the pivotal role of trust as a mediator between ESG perceptions and consumer behavior, while challenging the assumption that ESG initiatives alone can directly motivate purchasing decisions. The study offers important theoretical and practical implications, suggesting that managers should prioritize building trust through authentic ESG commitments and that researchers should explore the contingent and context-dependent nature of ESG effects across markets.

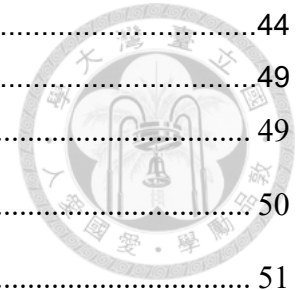
Keywords: ESG, consumer perception, Vinamilk, brand trust, Vietnam

Table of Contents



Acknowledgment	i
Abstract	ii
Table of Contents	iii
List of Tables	v
List of Figures	v
Chapter 1: Introduction	1
1.1 Background of the Study	1
1.2 Problem Statement	4
1.3 Research Objectives	5
1.4 Research Questions	7
1.5 Significance of the Study	7
1.6 Structure of the Study	8
Chapter 2: Literature review	11
2.1 Key Concepts, Theories, Ideas and Studies	11
2.2 Customer behavior in Vietnam	15
2.3 Vinamilk's Market Dominance in Vietnam's Dairy Industry	20
2.4 Vinamilk's Sustainability Claims and Greenwashing Concerns	22
2.5 Gaps in Existing Knowledge/Practices	27
Theoretical Framework	27
Chapter 3: Methodology	34
3.1 Participants	34
3.2 Data Collection Method	37
3.3 Validity and Reliability	39
3.4 Data Analysis Method	42

Chapter 4: Research Result	44
Chapter 5: Discussion	49
5.1 Discussion	49
5.2 Research implications	50
5.3 Limitations	51
5.4 Future Research Recommendations	53
Conclusion.....	54
Questionnaire: Consumer Perceptions of Corporate Responsibility (ESG) and Vinamilk...	56
References.....	60



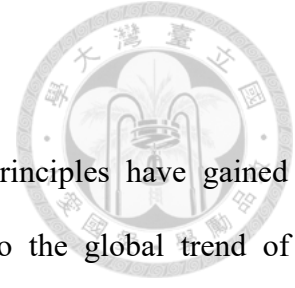
List of Tables

Table 1 Theoretical structure.....	33
Table 2 Factor loadings of the constructs.....	40
Table 3 Reliability test results.....	41
Table 4 Model fit testing results.....	41
Table 5 Standardized Factor Loadings of Latent Variables	44

List of Figures

Figure 1 Demographic profile of individuals completed the questionnaire.....	34
Figure 2 The structural equation model coefficient path	46

Chapter 1: Introduction



1.1 Background of the Study

In recent years, Environmental, Social, and Governance (ESG) principles have gained increasing importance in business operations worldwide in response to the global trend of sustainability (Zumente & Bistrova, 2021). There are three key pillars in this concept: Environmental factors assess a company's control, resource conservation, and climate change mitigation. Social aspect reflects how a company manages relationships with the “human factors” which related to its employees, suppliers, customers, and the communities in which it operates. Governance pertains to a company's leadership, executive compensation, audits, internal controls, shareholder rights, transparency, ethics, and anti-corruption measures. Consumers, investors, and policymakers are paying closer attention to how companies address these components (Gernego et al., 2024; Syed, 2017). As a result, to meet the growing public desire impact on the natural world, including the usage of energy, waste management, pollution for responsible corporate conduct, a significant number of businesses are incorporating ESG principles into their core strategies (Yan, 2024).

Vietnam, as one of the leading economies in Southeast Asia, is experiencing a gradual shift in consumer awareness toward ESG-related issues (V. P. Tai, 2024). Also, in July 2022, Vietnam included its net-zero target in Prime Minister's Decision No. 896/QD-TTg, approving the National Climate Change Strategy, which has put more pressure on the efforts of enterprises to comply with the ESG responsibility (Prime Minister of Vietnam, 2022). In its report on the implementation status of Vietnam's commitments at COP26, the Ministry of Natural Resources and Environment stated that at COP26, Vietnam joined 147 countries in pledging to achieve net-zero emissions by mid-century (VNT writers, 2023). Being a part of global trends, Vietnam alongside with 103

countries participated in the Global Methane Pledge; endorsed the Glasgow Leaders' Declaration on Forests and Land Use with 140 countries; joined 48 countries in the Global Coal to Clean Power Transition Statement; and took part in the Global Adaptation Action Coalition together with 150 countries. Under Decision No. 1658/QĐ-TTg, Vietnam's Green Growth Strategy for 2021–2030, formalized underscores the nation's dedication to transitioning towards a carbon-neutral economy. This strategy emphasizes the importance of green growth and sustainable development across various sectors. In addition, the Vietnam ESG Initiative—a joint effort between the Ministry of Planning and Investment and the United States Agency for International Development (USAID)—offers technical assistance and financial support to businesses implementing ESG frameworks, helping them boost their competitiveness in the global supply chain (Bao Linh, 2024).

In the FMCG sector, companies are increasingly encouraged to embed ESG principles into their operations—covering initiatives such as minimizing plastic usage, cutting carbon emissions, promoting fair labor practices, and enhancing transparency in corporate governance. Large domestic brands such as Vinamilk and international corporations operating in Vietnam (e.g., Nestlé, Unilever) have already begun aligning with ESG standards, investing in renewable energy, sustainable sourcing, and community development (Tuổi trẻ Thủ đô, 2024). Although ESG implementation is still at an early stage for many firms, especially SMEs, the trend is gaining momentum due to increased investor interest, changing consumer preferences, and government encouragement (Anh Phan, 2025). As a result, ESG is becoming not only a compliance issue but also a strategic advantage for FMCG companies in Vietnam.

Characterized by its significant environmental footprint and extensive supply chains, the FMCG sector is a focal point for ESG integration (OECD, 2024). The government's emphasis on sustainable practices encourages FMCG companies to adopt eco-friendly production methods,

ensure fair labor practices, and implement robust governance structures. Such measures not only align with national sustainability goals but also enhance the sector's appeal to environmentally conscious consumers and investors. The ESG agenda is becoming increasingly important in Vietnam's fast-moving consumer goods (FMCG) sector as both regulatory pressures and consumer expectations evolve (Thanh, 2022). The Vietnamese government has introduced frameworks such as the National Green Growth Strategy (2021–2030) and partnered with organizations like USAID to support ESG adoption through initiatives like the Vietnam ESG Initiative. These efforts aim to enhance the competitiveness and sustainability of businesses, particularly those with large-scale production and supply chains like FMCG firms.

Vinamilk (Vietnam Dairy Products Joint Stock Company) holds a dominant position in Vietnam's dairy industry, leading both in market share and brand recognition. Vinamilk has been recognized as the most purchased dairy brand in Vietnam for twelve consecutive years, according to the Vietnam Brand Footprint 2024 report. Vinamilk demonstrates a strong commitment to sustainability through initiatives like reduced carbon emissions, responsible dairy farming, and comprehensive CSR programs, alongside ethical governance. In 2023, Vinamilk launched its "Pathways to Dairy Net Zero 2050" action plan, becoming the first Vietnamese dairy producer to publicly pledge carbon neutrality by 2050 (Recessary, 2023). Within a year, the company achieved carbon-neutral certification for three of its facilities, including one farm and two factories, adhering to the PAS 2060:2014 standard (Nguyễn, 2024). On the social front, Vinamilk has partnered with the Ministry of Natural Resources and Environment to launch a five-year, VND 15 billion tree-planting initiative (Vinamilk, 2023). Governance-wise, the company has published annual sustainability reports since 2012, with its 2023 report aligning global GRI standards. These initiatives reflect Vinamilk's strong commitment to sustainable development and responsible

corporate practices.

A critical question remains: do Vietnamese consumers genuinely recognize and prioritize Vinamilk's ESG efforts when deciding to purchase their products? Understanding the extent to which these values influence consumer behavior within the local market is crucial for assessing the real-world impact and effectiveness of Vinamilk's sustainability initiatives.

1.2 Problem Statement

Despite the increasing global emphasis on ESG standards and their growing prominence within Vietnam's dynamic economy, there remains a notable gap in empirical research specifically focused on how Vietnamese consumers perceive these practices, particularly concerning major domestic corporations like Vinamilk. While general consumer awareness regarding corporate sustainability and ethical practices is evolving, especially among younger demographics, the depth of understanding and the specific influence of ESG initiatives on consumer attitudes, trust, loyalty, and purchasing decisions within the Vietnamese context are not fully understood (V. Tai, 2024).

Several factors contribute to this research problem:

Limited Specificity: Much existing research addresses Corporate Social Responsibility (CSR) broadly or focuses on general consumer trends towards sustainability, rather than drilling down into the specific perceptions of comprehensive ESG programs implemented by a leading national brand like Vinamilk. There's also evidence suggesting consumer awareness of specific company initiatives can be low.

Potential Attitude-Behavior Gap: While studies indicate a high willingness among Vietnamese consumers to support sustainable brands, sometimes even at a premium, translating this cheerful outlook into consistent purchasing behavior faces barriers like price sensitivity, information gaps, or skepticism. Understanding how Vinamilk's ESG efforts navigate this gap is

crucial.

Cultural Nuances: The relative importance and perception of the distinct Environmental, Social, and Governance pillars may differ in the Vietnamese context compared to global norms. Some research suggest social factors might resonate more strongly, while another study indicated CSR did not significantly impact purchase intention in Vietnam, unlike in neighboring countries, highlighting unique market dynamics.

Evolving Corporate Landscape: While Vinamilk is recognized as an ESG pioneer in Vietnam, the overall adoption and understanding of ESG among Vietnamese enterprises vary. Investigating consumer perception provides a vital external perspective on the effectiveness and resonance of these corporate efforts.

Addressing this research problem is significant because understanding consumer perceptions is essential for companies like Vinamilk to effectively communicate their ESG commitments, align strategies with genuine market expectations, build lasting brand trust and loyalty, and enhance both their sustainability performance and competitive standing in the Vietnamese market. This study aims to fill this critical gap by examining Vietnamese consumer perceptions specifically towards the ESG endeavors of Vinamilk. Many Vietnamese consumers still prioritize price, quality, and convenience over sustainability when making purchasing decisions (Hoang et al., 2023). Thus, understanding whether ESG influences customer behavior in Vietnam is crucial for both businesses and policymakers. This study seeks to evaluate the perception of Vietnamese consumers toward Vinamilk's ESG endeavors and assess the role ESG plays in shaping their purchasing decisions.

1.3 Research Objectives

This study seeks to explore the intersection of corporate sustainability practices and consumer

behavior in the context of Vietnam's leading dairy brand, Vinamilk. The specific objectives are as follows:



To examine Vietnamese consumers' awareness and perceptions of Vinamilk's ESG initiatives.

This objective focuses on assessing the extent to which consumers are informed about Vinamilk's sustainability-related activities, such as its commitment to carbon neutrality, environmental conservation efforts, community engagement programs, and corporate transparency. It also seeks to understand how consumers interpret these initiatives—whether they view them as authentic and impactful, or as superficial corporate messaging.

To analyze the influence of Vinamilk's ESG efforts on consumer trust and purchasing behavior.

This objective investigates how Vinamilk's ESG performance affects consumer attitudes and behavior. Specifically, it aims to determine whether ESG initiatives contribute to building trust in the brand, fostering long-term loyalty, and influencing purchasing decisions. The analysis will help clarify whether sustainability is a significant factor in consumer preference within the Vietnamese FMCG market.

To identify the primary drivers and barriers that affect Vietnamese consumer engagement with ESG-related practices.

This objective seeks to uncover the motivators that encourage consumers to support and respond positively to ESG efforts, as well as the challenges that prevent wider engagement. Factors such as personal values, socio-demographic characteristics, access to information, and skepticism about corporate intentions will be considered in identifying what enables or hinders consumer participation in sustainable consumption.

1.4 Research Questions

To achieve the stated research objectives, this study adopts a mixed-methods approach, combining both quantitative and qualitative research techniques. A structured survey will be administered to a representative sample of Vietnamese consumers to gather data on their awareness, perceptions, and behavioral responses to Vinamilk's ESG initiatives. In addition, semi-structured interviews with selected participants will be conducted to gain deeper insights into the underlying motivations, attitudes, and barriers related to ESG engagement. This methodological framework allows for a comprehensive understanding of consumer perspectives and ensures both breadth and depth in data collection and analysis.

To achieve the objectives above, this study will address the following questions:

1. How do Vietnamese consumers perceive Vinamilk's ESG efforts?
2. To what extent does Vinamilk's ESG commitment influence consumer awareness, trust, and purchasing behavior?
3. Would ESG initiative be a crucial factor that affects the Vietnamese consumers' attitudes toward a product in the dairy industry?

1.5 Significance of the Study

This study holds both theoretical and practical significance. From an academic perspective, it contributes to the growing body of literature on consumer behavior in relation to corporate sustainability, particularly in the context of emerging markets such as Vietnam. By focusing on ESG practices within the fast-moving consumer goods sector, the study addresses a gap in existing research, which has centered on developed economies.

Practically, the findings of this research offer valuable insights for businesses—especially local enterprises like Vinamilk—seeking to align their sustainability strategies with consumer

expectations. Understanding how ESG initiatives influence consumer awareness, trust, and purchasing decisions can help companies design more effective and credible sustainability campaigns. Furthermore, the study can inform policymakers and stakeholders aiming to promote sustainable consumption and responsible business practices in Vietnam, thereby supporting national goals related to green growth and sustainable development.

This research holds significant value for multiple stakeholders:

1. Enterprises: The findings will equip Vinamilk and other FMCG companies with actionable insights to refine their ESG strategies and communication, ensuring they resonate with Vietnamese consumers and drive positive brand perception and sales.
2. Policymakers: This study will provide empirical data to inform the development of regulatory frameworks that promote sustainable consumption patterns and support businesses committed to ESG principles within Vietnam.
3. Academia: This research will contribute to the expanding body of knowledge on ESG perception and consumer behavior within the Vietnamese context, offering valuable data and analysis for future scholarly work.

1.6 Structure of the Study

Chapter 1 – Introduction: This opening chapter establishes the context for investigating how Vietnamese consumers perceive and respond to corporate Environmental, Social, and Governance (ESG) initiatives—using Vinamilk, the country’s leading dairy brand, as the focal case. It articulates the research problem and poses the central question: Do Vinamilk’s publicly promoted ESG efforts tangibly shape brand trust and purchase intention, or are they dismissed as marketing rhetoric? To probe this, primary data are gathered via doing site survey of Vietnamese consumers. The chapter closes by underscoring the study’s practical relevance for both sustainability

strategists and skeptical stakeholders who demand evidence of genuine impact.

Chapter 2 – Literature Review and Theoretical Framework: This chapter critically surveys the ESG literature. It then reviews empirical work on consumer awareness of ESG claims, the psychological pathways from ESG perception to brand trust, and the mixed findings on whether such trust converts into purchase intention. Drawing on these studies, a theoretical model is developed that links four constructs—Perceived ESG Importance, Perceived ESG Performance (Vinamilk), Brand Trust, and Purchase Intention—and specifies the hypotheses to be assessed. This framework guides the subsequent methodological choices.

Chapter 3 – Methodology: This chapter details the research design. It justifies the use of a cross-sectional survey, describes sampling procedures, and presents the questionnaire—refined through a pilot test—to measure the four constructs. Structural Equation Modeling (SEM) is selected to evaluate both the reflective measurement model and the structural paths, with rigorous checks for reliability, convergent validity, and discriminant validity.

Chapter 4 – Research Result: Analyzing usable responses, Chapter 4 reports the measurement-model diagnostics and structural-model results. It scrutinizes path coefficients, effect sizes, and explained variance to assess whether consumers who value ESG indeed perceive Vinamilk more favorably, trust the brand more, and exhibit stronger purchase intentions—or whether the data reveal weaker, non-significant, or even counter-intuitive links that challenge prevailing assumptions. Each hypothesis is formally supported or rejected based on bootstrapped confidence intervals and p-values.

Chapter 5 – Discussion, Implications, and Limitations: The closing chapter interprets the findings considering prior ESG research, noting where Vinamilk’s case aligns with or diverges from global patterns. Managerial implications are offered, for instance, how Vinamilk might

strengthen the credibility of its ESG messaging to overcome consumer skepticism. Policy recommendations for fostering transparent ESG disclosure in Vietnam's dairy sector are also proposed. The chapter ends with a candid appraisal of study limitations (cross-sectional design, self-reported attitudes, potential non-response bias) and suggests avenues for future research, such as longitudinal tracking of behavioral data or experimental tests that disentangle genuine ESG influence from mere halo effects.

Chapter 2: Literature review

2.1 Key Concepts, Theories, Ideas and Studies

ESG framework and the ESG trend

The concept of Environmental, Social, and Governance (ESG) has evolved over the past decades, which initially came from the corporate social responsibility (CSR), and extended to the more integrated approach of ESG nowadays (Carroll (1999), Wielechowski and Krasuski (2024)). Embedding ESG considerations into business strategy signifies a profound shift towards sustainable and responsible operations. This is not a simple task; it necessitates a well-defined strategic framework to ensure ESG initiatives are aligned with business objectives and meet stakeholder expectations (Bezerra et al., 2024). Real-world examples demonstrate the varied experiences of companies navigating this integration, illustrating both successes and the challenges encountered (Drei et al. (2019), Castro and Gradillas Garcia (2022), Wang (2024)).

From the past decades, studies consistently demonstrate a global increase in consumer awareness and concern regarding environmental and social issues (Abd Halim (2014), Liu et al. (2023), Mifsud (2024)). In developed countries, it is observed that consumers are increasingly expecting companies to demonstrate responsible practices, whereas consumers in developing countries still stick with the price and quality of their products. For Vietnam, the practices of ESG are still in early stages with many challenges, thus need a lot of efforts from the government and businesses to refine the framework (Hoa et al., 2024).

ESG criteria constitute a comprehensive framework used globally by stakeholders, including investors, corporations, and consumers, to evaluate an organization's performance beyond traditional financial metrics. This framework assesses how sustainably and responsibly a company operates by examining its management of risks and opportunities related to three core pillars:



Environmental (E): This pillar scrutinizes a company's impact on the natural world. It encompasses factors such as energy consumption and efficiency, greenhouse gas emissions (direct and indirect), waste management, pollution control, natural resource conservation, water usage, biodiversity protection, and resilience to climate change risks like flooding and fires. It reflects how environmentally conscious a company is and the measures it takes to minimize its ecological footprint.

Social (S): This dimension focuses on how a company manages its relationships with various stakeholders, including employees, suppliers, customers, and the communities in which it operates. Key considerations include labor practices (fair wages, safe working conditions), human capital management, diversity and inclusion, human rights adherence (within the company and its supply chain), product safety and quality, data privacy, and community engagement and impact.

Governance (G): This aspect pertains to a company's leadership, internal controls, and overall management structure. It examines factors like board composition and diversity, executive compensation alignment with stakeholder interests, shareholder rights, transparency and accuracy in accounting and reporting, ethical conduct, anti-corruption measures, risk management systems, and overall accountability of leadership.

Evolution from CSR and Growing Prominence

ESG represents a significant evolution from earlier concepts like Corporate Social Responsibility (CSR). While CSR, which gained traction in the early 2000s, often focused on ethical conduct, philanthropy, and community support, ESG provides a more structured, measurable, and standardized framework. First appearing in a 2004 UN report, ESG gained mainstream momentum in the late 2010s and early 2020s, shifting the focus towards initiative-taking risk management and opportunity identification related to sustainability. It integrates

environmental and social impacts with governance structures to maximize stakeholder well-being and long-term value. This evolution has been accompanied by the development of standardized reporting frameworks like the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB), and Task Force on Climate-related Financial Disclosures (TCFD), enabling better comparison and assessment of corporate performance.

The Global ESG Trend and in Vietnam

ESG has transitioned from a niche concern to a critical factor in the global business landscape. Its importance stems from several interconnected trends:

Investor Demand: Socially conscious investors increasingly utilize ESG criteria to screen investments, manage risk, and identify companies positioned for long-term, sustainable growth. Strong ESG performance is often perceived as indicative of better risk management, resilience, and potential profitability. The capital markets are becoming a powerful tool, rewarding companies with strong ESG performance and potentially restricting capital for those lagging. ESG-focused funds have seen significant growth in assets under management.

Corporate Strategy Integration: Companies are increasingly embedding ESG into their core business strategies, recognizing its role in enhancing brand reputation, attracting and retaining talent aligned with sustainability values, improving operational efficiency (e.g., cost reduction through energy savings), fostering innovation, ensuring regulatory compliance, and building resilience against disruptions.

Stakeholder Expectations: Consumers, employees, and communities increasingly expect businesses to operate responsibly and ethically, considering their environmental and social impacts. Positive ESG performance helps meet these evolving expectations and build trust.

Regulatory Landscape: Governments worldwide are introducing regulations and, in some

jurisdictions, mandatory ESG disclosure requirements, pushing companies towards greater transparency and accountability.

In Vietnam, ESG is an emerging but rapidly accelerating trend. While CSR historically focused on philanthropy, the concept of ESG is gaining traction, driven by both internal and external factors:

Government Commitment: The Vietnamese government is actively promoting sustainable practices, exemplified by the updated Environmental Protection Law (2020) and the national commitment to achieve Net Zero emissions by 2050, announced at COP26. Plans for a carbon trading exchange further signal this commitment.

Business Adoption: Leading Vietnamese companies, including Vinamilk, are recognized as pioneers in adopting structured ESG approaches and integrating sustainable development into their core strategies. However, awareness and implementation vary across the business sector, with some enterprises still unfamiliar with the term or taking a cautious approach. Key motivators for adoption include enhancing brand image, maintaining competitiveness, and attracting talent.

Growing Consumer Awareness: Vietnamese consumers, particularly younger generations, show increasing environmental consciousness and interest in corporate responsibility. This evolving consumer landscape puts pressure on companies to align their practices with sustainability expectations.

In conclusion, the ESG framework provides a critical lens for assessing corporate sustainability performance. Its global prominence is driven by investors, strategic business imperatives, stakeholder expectations, and regulatory pressures. While still evolving in Vietnam, the ESG trend is clearly gaining momentum, influenced by government policy, pioneering companies, and rising consumer awareness.

ESG in the dairy industry and Vinamilk

The dairy industry is facing significant challenges related to environmental changes, and sustainability is a big question for those developing countries who rely heavily on this industry. Greenhouse gas emissions, chemical usage, water usage, and waste management are factors that need more concentrations (FAO, 2010).

In 2012, Vinamilk voluntarily launched its inaugural Sustainable Development Report, distinct from its annual financial report, at a time when mandatory requirements for such disclosures were absent (Diệp Chi, 2022). The report was prepared in reference to the Global Reporting Initiative (GRI) Standards for sustainability reporting, specifically those issued by the Global Sustainability Standards Board (GSSB) in 2016 and updated in 2021, representing the latest international standard for such reporting. Vinamilk's strategic goals and operational activities were also explicitly linked to the United Nations' 17 Sustainable Development Goals (SDGs) and the global Dairy Sustainability Framework (DSF) (Vinamilk, 2024).

2.2 Customer behavior in Vietnam

There are several factors affecting customer behavior toward purchasing a product, it might differ significantly depending on the development of society, and the product's sector. For Vietnam, mostly customers are driven by the price and the quality of the products. Even for people in urban areas, the idea of sustainable consumption is generally low (De Koning et al., 2015).

With the influence of social media, consumer perception in Vietnam has been raised to a certain level (Van-Tien Dao et al., 2014), and businesses can leverage the effectiveness of social media to educate the customers about their ESG efforts. This study tries to evaluate to what extent customers receive the sustainable value of Vinamilk's products.

Perceived ESG performance refers to consumers' subjective evaluation of a company's

effectiveness and authenticity in implementing environmental, social, and governance initiatives. Unlike actual ESG disclosures or third-party ratings, perceived ESG performance is shaped by consumer awareness, communication strategies, brand reputation, and direct or indirect experiences with the brand (Fatemi et al., 2018).



The Role of Perception in ESG Evaluation

Perception plays a crucial role in shaping stakeholder responses to ESG activities. Consumers do not necessarily assess ESG performance based on audited data or sustainability reports, but rather through accessible signals such as marketing campaigns, product packaging, media coverage, and word-of-mouth. If ESG efforts are seen as genuine and aligned with a company's core values, they can lead to enhanced trust and loyalty (Chatterji et al., 2016). Numerous studies have found a positive relationship between perceived ESG performance and favorable consumer outcomes. For example, Koh et al. (2022) demonstrated that high perceived ESG performance is associated with increased brand trust and customer satisfaction, which in turn influence purchase intention and loyalty. Similarly, Narayanan and Singh (2023) noted that consumers are more likely to support brands they perceive as environmentally and socially responsible, even if it involves paying a premium. In the context of the FMCG sector, where purchase decisions are often habitual and price-sensitive, perceived ESG performance can function as a differentiator, helping brands build emotional connections with consumers.

Determinants of Perceived ESG Performance

A company's ESG performance is increasingly under scrutiny from a wide array of stakeholders, including investors, consumers, employees, and regulators. However, the perception of this performance is not solely a reflection of objective reality; it is a complex construction shaped by numerous interacting factors. Understanding these determinants is crucial for businesses

aiming to build credibility, manage reputation, and align their operations with evolving stakeholder expectations in today's conscientious marketplace.

At its core, perceived ESG performance must be grounded in a company's actual conduct. Tangible actions related to environmental stewardship—such as managing emissions, conserving resources, and protecting biodiversity—form a fundamental basis for perception. Similarly, social practices, encompassing fair labor standards, employee well-being, diversity and inclusion initiatives, product safety, data privacy, and positive community engagement, are critical inputs. Sound corporate governance, demonstrated through ethical leadership, board independence and accountability, transparent accounting, fair executive compensation, and robust shareholder rights, provides the structural integrity that underpins trust in a company's overall commitment to responsible operations. Without substantive positive performance across these E, S, and G pillars, efforts to shape perception are unlikely to be sustainable or credible overall.

While actual performance is foundational, how a company communicates its ESG efforts significantly influences how it is perceived. The quality, clarity, frequency, and transparency of ESG disclosures are paramount. Stakeholders increasingly expect comprehensive and credible information, often detailed in sustainability reports, or integrated into annual reporting. Effective communication involves not just highlighting successes but also acknowledging challenges and outlining future goals. Conversely, a lack of transparency, superficial reporting, or engaging in "greenwashing"—misleading claims about environmental or social credentials—can severely damage trust and lead to negative perceptions, regardless of actual performance. Strategic communication, often led by senior figures like the CEO, helps organizations control their ESG narrative and ensure their efforts are recognized.

Stakeholders do not evaluate ESG information in a vacuum; their perceptions are filtered

through the lens of the company's overall reputation and the level of trust they already place in the brand. A company with a strong, positive corporate image may find its ESG initiatives are viewed more favorably, and it might receive the benefit of the doubt during minor setbacks. Conversely, a company with a historically poor reputation may face skepticism even when reporting genuine ESG progress. Trust, therefore, acts as a critical mediator. Positive ESG perceptions can build trust over time, while high existing trust can amplify the positive reception of ESG communications and actions.

Perceptions are also heavily shaped by external information sources and the broader operating environment. Media coverage, particularly reports on negative ESG incidents like environmental damage or labor disputes, can rapidly and significantly harm public and consumer perception. Word-of-mouth communication further amplifies these effects. Independent third-party ESG rating agencies (e.g., MSCI, Sustainalytics) play a significant role, especially in influencing investor decisions, by providing standardized (though sometimes inconsistent) assessments. Furthermore, the regulatory landscape, including environmental laws and governance mandates, sets expectations and benchmarks. Industry norms and the ESG performance of competitors also create a comparative context that influences how a specific company's efforts are judged.

Perception resides with the stakeholder. Individual characteristics significantly influence how ESG information is received and interpreted. A stakeholder's personal values (e.g., concern for climate change, commitment to social justice), their level of awareness and knowledge about ESG issues, and their specific motivations (e.g., financial returns for investors, ethical alignment for consumers) all function as filters. Demographics such as age, income, location, and political leaning can also correlate with differing ESG priorities. Effective stakeholders actively listening to and collaborating with diverse groups like employees, customers, investors, and local

communities—is therefore essential not only for gathering insights to improve ESG strategy but also for understanding and addressing the specific perspectives that shape their perception of the company's performance.



ESG and Brand Awareness

Brand awareness refers to the extent to which consumers are familiar with a brand and can recognize or recall it in various contexts (Keller, 2001). ESG efforts have been shown to contribute to increased brand visibility and differentiation, especially in markets saturated with similar product offerings. Brands that actively promote their sustainability practices—such as carbon footprint reduction, ethical sourcing, or community initiatives—can enhance consumer awareness by standing out in the marketplace. In emerging markets like Vietnam, ESG-related campaigns can also serve an educational role, raising not only awareness of the brand but also of the issues the brand supports. However, the effectiveness of ESG in building awareness often depends on the clarity, consistency, and credibility of the communication strategy (Martínez García de Leaniz & Nishiyama, 2017).

Consumer attitudes towards corporate ESG practices appear positive.¹⁶ As awareness of environmental and social challenges grows within Vietnam ¹⁰, consumers increasingly expect businesses to operate responsibly. The Vietnamese government's own commitments, such as the net-zero target announced at COP26 and regulatory measures like Circular No. 96/2020/TT-BTC mandating ESG reporting for listed companies, contribute to shaping public discourse and expectations around corporate responsibility.³ While these government actions act as a significant catalyst for corporate strategy and reporting, their direct influence on immediate consumer behavior appears less pronounced than their impact on the corporate environment. Consumer awareness seems more influenced by broader sustainability narratives, media coverage, and direct

brand messaging.

The fact that companies prioritize ESG due to perceived benefits for brand image and reputation indicates a strong corporate belief that consumers value these aspects and that positive ESG performance can translate into market advantage. Surveys suggest a massive portion of consumers view alignment with ESG goals as paramount for sustainable business growth, although the specific context and demographics of such surveys should be considered.

ESG and Brand Trust

Brand trust is defined as the consumer's willingness to rely on a brand based on the belief that it will fulfill its promises and act with integrity (Chaudhuri & Holbrook, 2001). ESG practices play a crucial role in cultivating this trust, especially when companies demonstrate authentic commitment rather than superficial marketing. Consumers are more likely to trust a brand that consistently acts in the interest of society and the environment, even at the cost of short-term profits (Pivato et al., 2008).

According to Koh, perceived ESG sincerity positively influences brand trust, especially among consumers with strong ethical values. Conversely, perceptions of "greenwashing"—where ESG claims are not backed by real actions—can significantly undermine trust (Delmas & Burbano, 2011). Several studies have modeled the pathway from ESG awareness to loyalty through brand trust. For example, Fatemi et al. (2018) demonstrated that perceived ESG performance enhances brand trust, which then mediates the relationship between ESG and loyalty. This multi-stage influence supports the argument that ESG is not merely a reputational tool but a foundational element of long-term consumer engagement.

2.3 Vinamilk's Market Dominance in Vietnam's Dairy Industry

Vinamilk has long been the undisputed leader in Vietnam's dairy industry, with a

commanding presence across all major product categories. As of late 2024, the company holds nearly 50% of the total national dairy market, according to data compiled by Vietdata (2024). This extensive market share underscores not only Vinamilk's deep-rooted brand recognition among Vietnamese consumers but also its robust distribution network, aggressive product diversification, and continual investment in quality and innovation.

The company's dominance is most evident in specific product categories. For instance, Vinamilk controls approximately 54.5% of the fresh milk segment, 40.6% of powdered milk, 84.5% of the yogurt market, and a staggering 79.7% of the condensed milk segment (Vietdata, 2024). These figures highlight how Vinamilk is not merely a major player in general dairy but the dominant force in subcategories that are essential to Vietnamese dietary habits.

Despite this dominance, several competitors have carved out substantial niches, particularly in the fresh milk and nutrition segments. TH True Milk, a prominent domestic rival, holds between 30% and 45% of the packaged fresh milk market. This reflects the success of its “clean milk” branding and vertically integrated supply chain, which appeal to health-conscious consumers. Friesland Campina, operating under the Dutch Lady brand, commands roughly 25% of the overall dairy market, making it one of the most formidable foreign-affiliated players in Vietnam (Vietdata, 2024).

Moc Chau Milk, though less prominent nationally, has a stronghold in the northern region of Vietnam, where it captures up to 35% of the local market, despite having only about a 10% national market share. International players such as Nestlé Vietnam also maintain a competitive presence, particularly in the pediatric nutrition segment, with its NAN and Milo product lines contributing to its approximate 7% market share.

Other players including Nutifood, IDP, Abbott, and Fonterra remain relevant but comparatively minor in scale. These firms typically focus on specialized niches such as high-end nutritional supplements, ready-to-drink products, or infant formulas.

Vinamilk's dominance is driven by its breadth of product offerings, its early market entry, and its ability to build trust with Vietnamese consumers through consistent quality and strategic ESG initiatives. Nevertheless, the presence of viable alternatives, particularly in fresh milk and nutritional products, indicates that consumer loyalty is not immutable. As the market matures and consumer preferences evolve—particularly toward organic, traceable, or value-added dairy—Vinamilk's continued dominance may depend on its agility in adapting to new demands.

In conclusion, while Vietnam's dairy market is becoming increasingly competitive, Vinamilk remains the clear leader across most product lines. The company's extensive market share, particularly in yogurt and condensed milk, reflects both historical advantages and strategic execution. However, continued innovation and consumer engagement will be necessary for Vinamilk to maintain this position, especially as niche brands and foreign competitors strengthen their footholds in targeted segments.

2.4 Vinamilk's Sustainability Claims and Greenwashing Concerns

Greenwashing refers to the practice of making false, misleading, or unsubstantiated claims about the environmental benefits of a product, service, or a company's practices (Lyon & Montgomery, 2015). In academic literature, it is broadly defined as “any communication that misleads people into adopting overly positive beliefs about an organization's environmental performance, practices, or products” (Lyon & Montgomery, 2015). In simpler terms, greenwashing occurs when companies portray themselves or their offerings as more “green” or eco-friendly than they truly are. The term was first used in the 1980s; for example, hotel towel-

reuse campaigns were “accused in 1986 by activist Jay Westerveld” of being more about cost-saving than genuine environmental concern. As green marketing became blooming, followed by greenwashing, customers remained a green skepticism, which hindered the ESG endeavors of enterprises (Nyilasy et al., 2014).



Globally, greenwashing has become widespread alongside the rise of green consumerism. Studies have found an alarming prevalence of misleading green claims. One often-cited report found “95% of products claiming to be green in Canada and the USA committed at least one of the “sins of greenwashing” (TerraChoice, 2010).. In other words, the vast majority of “eco-friendly” labeled products had some element of exaggeration or falsehood in their marketing. Major consumer goods industries (from food to fashion to automobiles) have all seen high-profile cases – from fast-fashion brands overstating their use of sustainable materials, to carmakers understating emissions. An advertising firm Ogilvy & Mather warned that greenwashing had grown to “epidemic proportions” in recent decades (Tiffany Hsu, 2011).

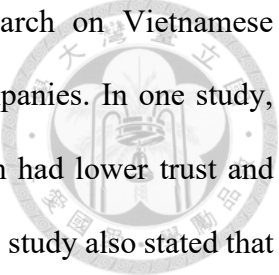
In Vietnam, the issue of greenwashing is beginning to gain attention as sustainability becomes a mainstream concern. Vietnam’s rapid economic growth and industrialization have been accompanied by rising environmental awareness among both consumers and the government. A “green consumption trend” is clearly on the rise – official statistics show demand for green or eco-friendly goods expanding by about 15% each year (2021–2023) (Việt Nam News, 2024). Surveys indicate that up to 72% of Vietnamese consumers are willing to pay more for green products, reflecting increasing public concern for environmental protection. Particularly younger demographics (Gen Z and Millennials) are driving this change, viewing sustainability as a core value rather than a fad (MarketingTNT, 2024).

This shift is pushing Vietnamese companies, especially in consumer goods, to embrace green

marketing and sustainability initiatives. Many firms now advertise eco-friendly packaging, natural ingredients, energy-efficient operations, etc., to “ride the wave” of consumer preference. For example, retailers have introduced biodegradable bags, and food manufacturers highlight organic or “clean” labels. Local media often spotlight businesses’ green projects – tree planting campaigns, solar panel installations, “eco-product” launches, and so on. In the fast-moving consumer goods (FMCG) sector, such efforts are becoming part of brand-building. As one report notes, “today’s Vietnamese consumers...are actively seeking brands that align with their eco-friendly values,” leading companies to integrate sustainability into packaging, sourcing, and operations (MarketingTNT, 2024).

However, with this growing green marketing comes the risk of greenwashing in Vietnam, just as elsewhere. Regulators and consumer advocates are aware that some companies might overstate their environmental efforts. A Vietnamese government official recently cautioned that alongside genuine progress, “the prevalence of fake advertisements ‘green claims’ that hurt consumer confidence” is a challenge that needs addressing. In fact, Vietnam has already seen instances of greenwashing that sparked public backlash. While there haven’t been high-profile lawsuits or penalties yet, “incidences of greenwashing...have sparked public anger” in the past (YKVN) – implying that Vietnamese consumers will voice disapproval if they feel misled by green claims. For example, some businesses have been found claiming to use “biodegradable” plastics but using only partially degradable materials. Experts note that “in the trend against plastic waste, some businesses claim to use biodegradable plastic. However, the reality is they are using partially biodegradable plastic (OXO)” which does not truly meet sustainability goals (Thanh Van, 2023). Such cases undermine trust and could be seen as greenwashing, even if no legal action ensues.

Consumer awareness of greenwashing in Vietnam is still developing, but skepticism is



expected to rise as consumers become more educated. Academic research on Vietnamese consumers finds that misleading green claims can indeed backfire on companies. In one study, Vietnamese shoppers who perceived a company's marketing as greenwash had lower trust and lower purchase intention toward that product (Nguyễn Thị et al., 2019). This study also stated that greenwashing was shown to increase “green perceived risk” (consumers feel unsure or suspicious about the product) and decrease perceived quality, thereby reducing the likelihood of purchase. Another recent survey-based study confirmed a “negative correlation between greenwash and consumers’ green purchasing intentions”, and a positive correlation between greenwash and green skepticism among Vietnamese buyers (Thai & Alang, 2025). In other words, when consumers sense a firm is just paying lip service to the environment, they grow more skeptical and become less inclined to buy supposedly “green” products. Notably, consumers with higher environmental knowledge are even more sensitive to greenwashing – they are quicker to detect vague or exaggerated claims and consequently trust the brand less (Nguyễn Thị et al., 2019). These findings suggest that as Vietnamese citizens become better informed (through media, education, or experience), their tolerance for greenwashing will diminish.

Despite Vinamilk's strong sustainability messaging, it has not been entirely free from scrutiny or questions. Stakeholders – from NGOs to analysts and increasingly consumers – have reason to examine whether Vinamilk's green claims fully match reality, or if some amount of greenwashing is at play. One area of scrutiny is transparency and actual performance. Independent evaluations suggest that Vinamilk still has room to improve its environmental performance relative to the best global practices. For instance, the World Benchmarking Alliance's 2023 assessment on nature metrics gave Vinamilk a very low score of 11 out of 100, ranking it near the bottom among food and agriculture companies (World Benchmarking Alliance, 2023). Such findings indicate that,

beyond the selectively promoted initiatives, Vinamilk may not yet have comprehensive sustainability integration across all facets of its business. This gap between communication and comprehensive action is what greenwashing is about. If a company markets its green achievements but fails to disclose or address ongoing negative impacts (e.g. sourcing of cattle feed, overall greenhouse gas emissions from dairy cows, plastic packaging waste), stakeholders could argue the company is engaging in selective disclosure greenwashing (de Freitas Netto et al., 2020).

From the consumer perspective in Vietnam, Vinamilk's sustainable image appears to be an asset, not a liability. Vietnamese media and public discourse often praise Vinamilk's green initiatives (tree planting, Green Farm, etc.) as pioneering, and there has not been widespread public skepticism of the brand's motives reported. In fact, Vinamilk frequently wins consumer choice awards and enjoys an important level of trust. This suggests that thus far, Vinamilk's sustainability communications have been effective and not widely seen as disingenuous. If anything, Vinamilk helps set consumer expectations that big brands should invest in greener practices. The potential greenwashing concern will be if the company fails to continue improving and merely sustains a green image. With greater transparency and benchmarking now happening, any gaps could be noticed. For example, if in a few years Vinamilk still has only one "carbon-neutral" farm and the rest of its supply chain remains conventional, critics might label the initial fanfare as greenwash.

In conclusion, on Vinamilk: The company provides a case of initiative-taking sustainability branding that reflects real initiatives, but it operates in a sector where green claims must be carefully substantiated. The line between robust green marketing and greenwashing can sometimes blur if results do not keep up with rhetoric. So far, Vinamilk has maintained a positive reputation, yet independent evaluations urge it to be more transparent and comprehensive in its environmental performance to avoid any perception of cherry-picking good news. It serves as a reminder that

even market leaders must continuously align sustainability communication with genuine action – otherwise they risk the same skepticism that is growing worldwide toward greenwashing.

2.5 Gaps in Existing Knowledge/Practices

Despite the global growth of ESG research, a significant gap exists regarding Vietnamese consumers' perceptions of ESG initiatives within the dairy industry. Unlike well-studied sectors like banking and energy, the dairy industry remains under-researched, with existing studies relying heavily on theoretical discussions and corporate reports rather than consumer-centric empirical data. This lack of quantitative data, particularly regarding ESG's impact on brand loyalty, trust, and purchase intention, coupled with the absence of qualitative insights from interviews and case studies, highlights a critical need for a more comprehensive understanding. This study aims to address these limitations by employing a mixed-methods approach, providing actionable insights for businesses and policymakers through a thorough examination of Vietnamese consumer perceptions of Vinamilk's ESG endeavors.

Theoretical Framework

The independent and dependent variables of this study can be extracted from the literature review. Despite the fact that there are several factors that can affect the purchase intention of the customers regarding their ESG awareness, in the scope of this study, the independent variables are limited to “ESG awareness”, “perceived ESG performance”, “brand awareness”, “brand trust”, Whereas, the “purchase intention” is the dependent variable. A range of hypotheses are drafted from the review of the literature and will be assessed with variables to address each of the research questions.

As organizations increasingly recognize the importance of ESG factors, the need for well-structured and insightful ESG surveys has grown significantly. To ensure these surveys align with

the global best practices and effectively capture stakeholder insights, several internationally recognized standards and frameworks can serve as valuable guides. These frameworks not only enhance the credibility of the survey but also ensure that it addresses the full spectrum of ESG dimensions. Among the most widely used are the GRI, SASB, TCFD, the UN Sustainable Development Goals, and ISO standards.

One of the most comprehensive and widely adopted frameworks is the Global Reporting Initiative (GRI). As the leading standard for sustainability reporting, the GRI provides detailed guidelines on how to report and assess ESG performance across several topics. When designing survey questionnaires, referencing GRI Standards—such as GRI 2 (General Disclosures), GRI 3 (Material Topics), GRI 302 (Energy), GRI 403 (Occupational Health and Safety), and GRI 405 (Diversity and Equal Opportunity)—can help structure meaningful questions that reflect stakeholder expectations and address material ESG concerns.

Baseline awareness of the ESG concept among consumers

This study supposes that there is a relevant relationship between ESG awareness and the favorable perception of ESG endeavors from the enterprise.

Hypotheses (H1): Higher perceived importance of ESG factors (PIE) among Vietnamese consumers is positively associated with a more favorable perception of Vinamilk's ESG initiatives (PVE).

There are previous researches indicate that the consumers in Vietnam are starting to notice the ethical and sustainable practices when making purchasing decision (Nguyen et al. (2018); (V. Tai, 2024)). However, to get more relevant information for the analysis, the questionnaire was designed to filter more suitable responds by checking the customer's awareness first. Herein, the degree to which Vietnamese consumers believe ESG factors are important considerations in their

consumption choices and evaluation of companies. The first construct of this model is Construct 1: Perceived Importance of ESG (PIE), with following measurement items:

PIE1: Environmental practices are a crucial factor influencing my consumer values and decision-making.

PIE2: A company's social actions (like community support, employee welfare) are a crucial factor influencing my consumer values and decision-making.

PIE3: Corporate ethics and accountability (governance) are a key factor influencing my consumer values and decision-making.

PIE4: I am familiar with the concept of ESG (Environmental, Social, Governance) in business.

Awareness and Perception of Vinamilk's ESG Initiatives

It is supposed that when the customers have awareness about the ESG terms, they may notice the effort of brand's ESG initiatives. Theoretically, Vinamilk's ESG (Environmental, Social, and Governance) initiatives have garnered significant recognition both domestically and internationally, reflecting the company's commitment to sustainable development and responsible business practices. campaign has gained notable popularity and recognition both in Vietnam and internationally, underscoring its commitment to sustainable development. The company has been consistently ranked among the world's top dairy firms for sustainability, including a place in the top global five for Sustainability Perceptions Value in 2023. Its initiatives have earned accolades such as the "Green Leadership" award at the Asia Responsible Enterprise Awards 2024 and the "CSR & ESG Leadership Award" at the Global CSR & ESG Awards 2022. Central to Vinamilk's ESG approach is its Net Zero by 2050 commitment, with its Vietnam Beverage Factory receiving international carbon neutrality certification from the British Standards Institute. Since 2012, Vinamilk has published annual Sustainable Development Reports aligned with international

standards like GRI and DSF, reflecting its transparency and strategic direction. The company's community-focused programs, such as the "One Million Trees for Vietnam" initiative, have also contributed to its favorable public image. Collectively, these efforts have strengthened Vinamilk's reputation as a responsible corporate leader and enhanced its popularity among environmentally and socially conscious consumers.

The study tries to address the level of customer perception of Vinamilk's ESG initiatives with the following hypothesis:

Hypothesis (H2): A more favorable perception of Vinamilk's ESG initiatives (PVE) is positively associated with higher levels of consumer Brand Trust (BT) in Vinamilk.

PVE1: I believe Vinamilk is genuinely committed to environmentally sustainable practices.

PVE2: I perceive Vinamilk as actively contributing positively to society (e.g., community support, social programs).

PVE3: I believe Vinamilk operates with high ethical standards and corporate governance.

PVE4: I am aware of specific ESG initiatives or communications from Vinamilk.

PVE5: Vinamilk communicates effectively about its ESG commitments and activities.

Brand trust and purchase intention

Existing brand research presents various definitions of brand trust. It is seen as consumers' confidence in a brand's quality and trustworthiness, a feeling of safety in brand interactions based on expectations of reliability and responsibility, and a consumer's willingness to depend on the brand. Trust is especially important when uncertainty exists, reducing the perceived risk by assuring consumers they can rely on a trusted brand. Brand trust is also described as a consumer's readiness to depend on a brand when uncertain, expecting positive results. Notably, scholars have identified brand trust as a precursor to purchase intention, a relationship supported by empirical

evidence showing a positive impact of brand trust on consumers' buying decisions.

From both brand and consumer research perspectives, several studies have investigated the impact of ESG practices on consumer attitudes. The findings of Koh et al. (2022) suggest that the social and governance aspects of perceived ESG positively influence brand credibility, image, and quality. Bae et al. (2023) corroborated this by demonstrating a significant positive relationship between ESG and consumers' brand trust and word-of-mouth intentions. Moreover, Moon et al. (2023) analysis of Starbucks indicated that ESG practices can directly and indirectly affect brand trust and repurchase intention.

H3: Higher consumer Brand Trust (BT) in Vinamilk is positively associated with higher consumer Purchase Intention (PI) towards Vinamilk products.

BT1: I trust Vinamilk to provide safe and high-quality products.

BT2: I believe Vinamilk cares about the well-being of its consumers.

BT3: I trust that Vinamilk acts responsibly and ethically in its business practices.

BT4: I consider Vinamilk a brand that aligns with my personal values.

BT5: My perception of Vinamilk's commitment to ESG (environmental, social, governance) increases my overall trust in the brand.

Purchase intention

Purchase intention is a term that has been subjected to several studies since it became more noticeable from the study of Fishbein and Ajzen (1977). It reflects a consumer's readiness to act on attitudes formed toward a brand — especially in response to CSR/ESG performance (Martínez & Del Bosque, 2013).

Trust acts as a crucial mediating factor. The previously noted skepticism and the finding that lack of trust in sustainability claims hinders the willingness to pay more highlight this link.

Credible, verifiable ESG performance is essential for building the foundation of trust upon which brand loyalty can be built, especially among consumers who actively consider these factors. Therefore, Vinamilk's efforts in transparent reporting and achieving third-party certifications are not just about compliance but are fundamental to nurturing the trust needed for ESG initiatives to positively impact loyalty.

H4: A more favorable perception of Vinamilk's ESG initiatives (PVE) is positively associated with higher consumer Purchase Intention (PI) towards Vinamilk products.

Items Primarily Driven by Trust (for H3):

PI_T1: My overall trust in the Vinamilk brand makes me intend to purchase their products.

PI_T2: Because I trust Vinamilk's quality and safety standards, I am likely to buy their products.

PI_T3: My trust in Vinamilk's ethical conduct and responsibility positively influences my decision to buy from them.

Items Primarily Driven Directly by ESG Perception (for H4):

PI_P1: I am more likely to purchase Vinamilk products specifically because of their positive ESG initiatives (environmental, social, governance).

PI_P2: Vinamilk's efforts in social and environmental responsibility make me want to buy more of their products.

PI_P3: If price and quality are comparable, I would choose Vinamilk over competitors due to their ESG commitments.

PI_P4: I intend to buy from Vinamilk because they balance product quality with social and environmental responsibility.

Hypothesized relationships between ESG Awareness, Perceived ESG Performance, Brand

Table 1

Theoretical structure

Hypothesis	Survey Items	Constructs Measured	Scale Type
H1: ESG Awareness → ESG Perception	PIE1-4	ESG Awareness → ESG Perception	Likert (1–5)
H2: ESG Perception → Brand Trust	BT1-5	ESG Perception → Brand Trust	Likert (1–5)
H3: Brand Trust → Purchase Intention	PI_T1-3	Brand Trust → Purchase Intention	Likert (1–5)
H4: ESG Perception → Purchase Intention	PI_P1-4	ESG Perception → Purchase Intention	Likert (1–5)



Chapter 3: Methodology

This chapter presents the steps to conduct empirical study and the research methodology to answer the research objectives. From the review of the literature, several hypotheses are assessed to address the objectives of this study. This chapter outlines and explains the quantitative method employed in this research. Also, the construction of each factor and the data analysis method are carefully discussed.

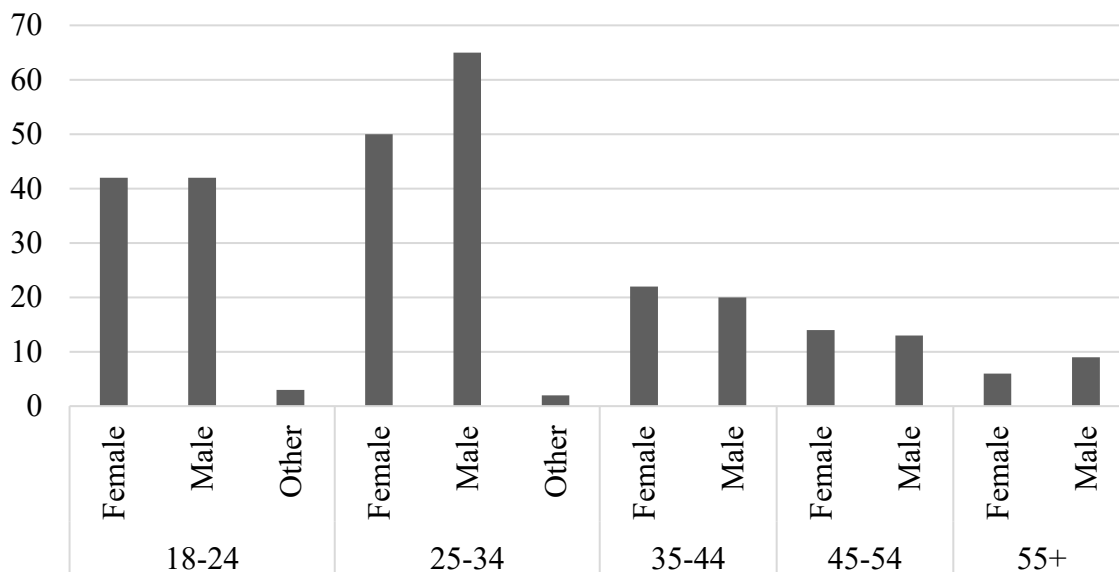
3.1 Participants

Population Demographics

The demographic composition of the sample offers valuable insights into the diversity of the respondents who participated in the study. A total of 288 individuals completed the questionnaire, spanning various age groups, genders, education levels, income brackets, and geographic locations in Vietnam.

Figure 1

Demographic profile of individuals completed the questionnaire.



In terms of age distribution, most respondents fell within younger demographic groups, with

40.6% aged 25 to 34 and 30.2% aged 18 to 24. These two segments together comprised over 70% of the entire sample, highlighting the significant representation of young adult consumers. Other age groups included those aged 35 to 44 (14.6%), 45 to 54 (9.4%), and fifty-five and above (5.2%). Gender distribution was balanced, with 51.7% identifying as male and 46.5% as female, along with a smaller group (1.7%) identifying as other. This relative balance helps ensure gender-inclusive insights.

Educational attainment among respondents was notably high. A significant 56.2% of the sample held a bachelor's degree, while 14.9% had completed postgraduate education (master's degree or higher). An additional 13.9% had vocational or technical training, and 12.8% had completed high school. A small percentage (2.1%) preferred not to state their education level. This educational spread may influence awareness and interpretation of brand communications.

Regarding household income, a substantial portion of respondents reported moderate to upper-middle income levels, with 42.4% earning between 20 and 35 million VND per month. Other income groups included 10–20 million VND (22.6%), below 10 million VND (13.9%), 35–50 million VND (16.3%), and above 50 million VND (4.9%). This mix provides a comprehensive view of consumers across different economic tiers.

Geographically, the survey included participants primarily from major urban centers but also other provinces. Ho Chi Minh City accounted for the largest portion (49.3%), followed by Hanoi (22.6%) and Da Nang (9.4%). The remaining 18.8% were from other provinces across the country, allowing for regional comparisons in brand perception and purchasing behavior.

Overall, the demographic data confirms a well-rounded sample composed of diverse age, gender, education, and income groups, as well as varied geographic backgrounds, primarily concentrated in major urban areas. These demographic characteristics contribute to the robustness

of the study and support more nuanced interpretations of consumer perceptions and behaviors.

Sampling Method

This study employed a non-probability convenience sampling method to recruit participants. The target population for this research was defined as consumers residing in Ho Chi Minh City, and Ha Noi, who are familiar with the Vinamilk brand and potentially consume dairy products. Due to the practical challenges and lack of a comprehensive sampling frame listing all eligible consumers in the city, convenience sampling was deemed the most feasible approach for data collection within the available resources and timeframe (Jager et al., 2017).

Data was collected over a period of 4 weeks in April 2025 from shoppers at various high-traffic locations, including selected supermarkets and convenience stores across different districts within Ha Noi and Ho Chi Minh City. These locations were chosen based on accessibility and the likelihood of encountering consumers from the target population during their routine shopping activities. In particular, dairy product aisles—especially those with Vinamilk products—were identified as optimal locations to approach qualified buyers. Additionally, Vinamilk’s own retail chain stores provided a particularly suitable setting to engage with actual consumers of the brand, enhancing the relevance of the sample.

Field researchers intercepted potential participants near the entrances/exits or within specific aisles of these retail locations. Individuals were briefly introduced to the purpose of the study and screened for initial eligibility (e.g., familiarity with the Vinamilk brand, general consumption of dairy products). Those who met the criteria and agreed to participate were then asked to complete the survey questionnaire via a paper form by volunteers. This process continued until the desired sample size of around 300 responses was achieved.

While convenience sampling allowed for efficient data collection, it is important to

acknowledge its limitations. The resulting sample may not be fully representative of the entire target population of consumers in Ha Noi and Ho Chi Minh City, potentially limiting the generalizability of the findings. However, the selection of diverse locations (supermarkets and convenience stores) aimed to capture a reasonable cross-section of shoppers relevant to the study's focus on consumer goods and brand perception.

3.2 Data Collection Method

3.2.1 Research Instrument – The Questionnaire

The primary instrument used for data collection in this study was a structured questionnaire, meticulously designed to measure the constructs outlined in the theoretical framework. The questionnaire was developed based on the research objectives and hypotheses, drawing upon the conceptual definitions of Perceived Importance of ESG (PIE), Perception of Vinamilk's ESG Initiatives (PVE), Brand Trust (BT), and Purchase Intention (PI).

The questionnaire consisted of the following “Sections:1. Screening Questions” To ensure participants met the basic criteria for inclusion (e.g., familiarity with the Vinamilk brand, consumption of dairy products). Section 2: Perceived Importance of ESG (PIE) with items measuring general consumer views on the importance of environmental, social, and governance factors (e.g., PIE1 to PIE4). Section 3: Perception of Vinamilk's ESG Initiatives (PVE) with items assessing specific perceptions and awareness of Vinamilk's ESG activities and communication (e.g., PVE1 to PVE5). Section 4: Brand Trust (BT) with items evaluating consumer trust in Vinamilk regarding product quality, ethics, consumer well-being, and value alignment (e.g., BT1 to BT5). Section 5: Purchase Intention (PI) with items gauging the likelihood of purchasing Vinamilk products, including items specifically linked to trust (PI_T1 to PI_T3) and items linked directly to ESG perception (PI_P1 to PI_P4). Section 6: Demographic Information includes the

questions collecting background information such as age group, gender, education level, income bracket, and location.

Excluding the screening and demographic questions, the core constructs were measured using multiple items rated on a 5-point Likert scale, ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). This scale was chosen to capture the intensity of respondents' attitudes and perceptions effectively. The questionnaire was initially developed in Vietnamese (and subsequently translated into English) to ensure clarity and cultural appropriateness for the target respondents in Vietnam.

3.2.2 Pilot Study

A focused pilot study preceded the main survey to sharpen both the Vietnamese-language questionnaire and its administration protocol: items were scrutinized for linguistic clarity, cultural resonance, and construct validity; wording glitches, confusing instructions, and potentially intrusive questions were flagged; median completion time was logged to prevent respondent fatigue; and the screening logic plus overall question sequence were stress-tested for a seamless flow. Revisions based on this feedback—rephrased items, streamlined instructions, deletion of one redundant question, and a reordered demographic block—produced the final instrument deployed in the full data-collection phase.

The pilot study involved administering the draft Vietnamese questionnaire to a small sample of ten individual's representative of the target population (e.g., shoppers in Ho Chi Minh City familiar with Vinamilk). Participants were recruited using convenience sampling from locations like those planned for the main survey, but distinct from them.

After completing the questionnaire, participants were encouraged to provide feedback on their experience, focusing on any difficulties encountered or suggestions for improvement. Feedback indicated that the questionnaire was well-understood and flowed logically. However, minor

adjustments were made based on the pilot results, primarily involving rephrasing the questions to be more comprehensive, explaining the Likert scale better to ensure the validity of the responds. The successful completion of the pilot study provided confidence in the suitability of the research instrument for the main survey deployment.

3.3 Validity and Reliability

Research quality is anchored in validity and reliability (Gill & Johnson, 2010), yet both are shaped by the choice of sampling strategy. In this study a convenience sample—respondents who were easiest to reach were employed. The approach offers logistical advantages: rapid data collection, low cost, and ready access to a critical mass of ESG-aware consumers. However, because inclusion hinges on accessibility rather than random selection, external validity is necessarily limited: the findings cannot be generalized with confidence to the entire Vietnamese consumer population, and selection bias may color estimates of brand trust or purchase intention. Reliability, in contrast, is less affected. All questionnaire items were designed and modified with exploratory tests indicated high internal-consistency coefficients (e.g., Cronbach's $\alpha > 0.80$), suggesting that repeated application within similar convenience groups would yield stable results. In short, the study sacrifices some generalizability for practical feasibility, while preserving reliable measurement through rigorously validated constructs.

In structural equation modeling (SEM), ensuring the validity and reliability of both the measurement model and the structural model is essential to establish the credibility of the research findings (Hair Jr et al., 2021). This process involves careful assessment of how well the observed indicators represent the latent constructions and how accurately the proposed relationships among constructs hold in the empirical data.

The evaluation begins with the measurement model, where convergent validity is assessed to

determine whether items that are supposed to measure the same construct are indeed related. This is typically examined through standardized factor loadings, which should ideally exceed 0.60.



Table 2

Factor loadings of the constructs

Constructs	Factor	Factor loadings
Perceived_ESG_Importance	PIE1	0.771
	PIE2	0.835
	PIE3	0.829
	PIE4	0.845
Vinamilk_ESG_Perception	PVE1	0.707
	PVE2	0.734
	PVE3	0.717
	PVE4	0.750
	PVE5	0.625
Brand_Trust	BT1	0.645
	BT2	0.778
	BT3	0.792
	BT4	0.762
	BT5	0.686
Purchase_Intention (Trust)	PI_T1	0.767
	PI_T2	0.809
	PI_T3	0.831
Purchase_Intention (ESG)	PI_P1	0.768
	PI_P2	0.776
	PI_P3	0.806
	PI_P4	0.798

Assessing reliability typically involves calculating both Cronbach's alpha and G6(smc), which sometimes called Guttman's Lambda 6. While Cronbach's alpha provides a traditional estimate of internal consistency, smc often considered a lower-bound estimate of reliability. It can be useful to compare it to Cronbach's alpha. If G6(smc) is lower than alpha, it might suggest that your scale is not very unidimensional. Values above 0.70 for both indices are accepted as evidence of satisfactory reliability.

Table 3*Reliability test results*

	Cronbach's Alpha	G6(smc)
Perceived_ESG_Importance	0.89	0.86
Vinamilk_ESG_Perception	0.84	0.81
Brand_Trust	0.86	0.84
Purchase_Intention (Trust)	0.85	0.79
Purchase_Intention (ESG)	0.86	0.83

Moving to the structural model, researchers must evaluate the overall model fit, which indicates how well the proposed model replicates the observed data. Several fit indices are commonly reported. Absolute fit indices, such as the chi-square statistic and the Root Mean Square Error of Approximation (RMSEA), assess the discrepancy between the model and the data. Although a non-significant chi-square is ideal, it is often unrealistic with large samples, making the RMSEA (≤ 0.05 for close fit, ≤ 0.08 for acceptable fit) a more practical indicator. Incremental fit indices, including the Comparative Fit Index (CFI) and the Tucker-Lewis Index (TLI), compare the proposed model to a baseline null model, with values above 0.90 or 0.95 indicating good or excellent fit, respectively. The Standardized Root Mean Square Residual (SRMR), with values below 0.08, further adds to the evaluation by measuring the standardized difference between observed and predicted correlations.

Table 4*Model fit testing results*

	Value
Root Mean Square Error of Approximation (RMSEA)	0.036
Standardized Root Mean Square Residual (SRMR)	0.039
Comparative Fit Index (CFI)	0.978
Tucker-Lewis Index (TLI)	0.975

It is crucial to highlight that the evaluation of SEM validity and reliability should not be

reduced to a mechanical reporting of statistical indices. In sum, the rigorous evaluation of measurement validity, reliability, and model fit forms the backbone of robust SEM analysis. By systematically assessing convergent and discriminant validity, ensuring high reliability, and confirming acceptable model fit, this study has greater confidence in the theoretical and empirical contributions of the analyzing results.

3.4 Data Analysis Method

To investigate the relationships among ESG awareness, perception of Vinamilk's ESG initiatives, brand trust, and purchase intention, this study employs Structural Equation Modeling (SEM) as the primary data analysis technique. SEM is a powerful multivariate statistical method that allows researchers to assess complex causal relationships among latent constructs while accounting for measurement error (Hair Jr et al., 2021). It is particularly suitable for this research, which involves multiple interrelated hypotheses and theoretical constructions that cannot be directly observed.

The use of SEM enables simultaneous testing of both the measurement model and the structural model. The measurement model validates the reliability and validity of the observed indicators representing latent constructions, such as ESG perception, brand trust, and purchase intention. The structural model, on the other hand, examines the hypothesized relationships among the latent constructs. Specifically, this study tests five key hypotheses: (H1) the relationship between ESG awareness and ESG perception, (H2) the influence of ESG perception on brand awareness, (H3) the impact of ESG perception on brand trust, (H4) the effect of brand trust on purchase intention, and (H5) the direct influence of ESG perception on purchase intention. SEM allows for the analysis of both direct and indirect effects among these variables, offering a more comprehensive understanding of how ESG initiatives contribute to consumer behavior.

The model estimation and analysis are conducted using R, a widely used statistical computing environment, leveraging packages such as lavaan for SEM modeling, psych for scale reliability assessment, and semPlot for visualizing the conceptual path model. Prior to SEM analysis, data screening and descriptive statistics are performed to ensure data quality, including tests for normality, reliability (Cronbach's alpha), and validity (convergent and discriminant).

In summary, SEM provides a robust and flexible framework for examining the complex relationships that underlie consumers' perceptions and behavioral intentions regarding Vinamilk's ESG efforts. By applying SEM, this study aims to offer empirical insights into how ESG-related initiatives influence brand trust and drive consumer loyalty in the Vietnamese market.

Chapter 4: Research Result

This chapter presents the key findings derived from the analysis of the collected data, focusing on consumer perceptions of Vinamilk's ESG initiatives and their impact on brand trust and purchase intention. The results are organized to highlight overall patterns, demographic variations, and the relationships among the studied variables. This section aims to provide an empirical foundation for the subsequent discussion and interpretation of the study's implications.

Table 5

Standardized Factor Loadings of Latent Variables

Latent Variable	Indicator	Estimate	Std. Error	z-value	p-value	Std.lv	Std.all
Perceived ESG Importance	PIE1	1.000	—	—	—	0.724	0.756
	PIE2	1.111	0.077	14.362	0.000	0.804	0.840
	PIE3	1.120	0.078	14.371	0.000	0.814	0.835
	PIE4	1.142	0.079	14.530	0.000	0.826	0.853
Vinamilk ESG Perception	PVE1	1.000	—	—	—	0.622	0.717
	PVE2	1.146	0.099	11.549	0.000	0.713	0.778
	PVE3	1.061	0.097	10.895	0.000	0.669	0.734
	PVE4	1.035	0.094	11.025	0.000	0.644	0.740
	PVE5	0.710	0.072	9.799	0.000	0.442	0.641
Brand Trust	BT1	1.000	—	—	—	0.440	0.658
	BT2	1.334	0.118	11.336	0.000	0.587	0.808
	BT3	1.294	0.113	11.441	0.000	0.569	0.809
	BT4	1.429	0.130	11.027	0.000	0.628	0.768
	BT5	1.500	0.145	10.325	0.000	0.660	0.720
Purchase Intention	PI_T1	1.000	—	—	—	0.642	0.778
	PI_T2	1.152	0.076	15.064	0.000	0.740	0.817
	PI_T3	1.190	0.077	15.368	0.000	0.707	0.812
	PI_P1	1.101	0.079	13.967	0.000	0.704	0.797
	PI_P2	1.089	0.077	14.143	0.000	0.711	0.805
	PI_P3	1.054	0.073	14.440	0.000	0.677	0.796
	PI_P4	1.074	0.073	14.677	0.000	0.690	0.803

Each row of the table corresponds to an individual survey item, or indicator, and several

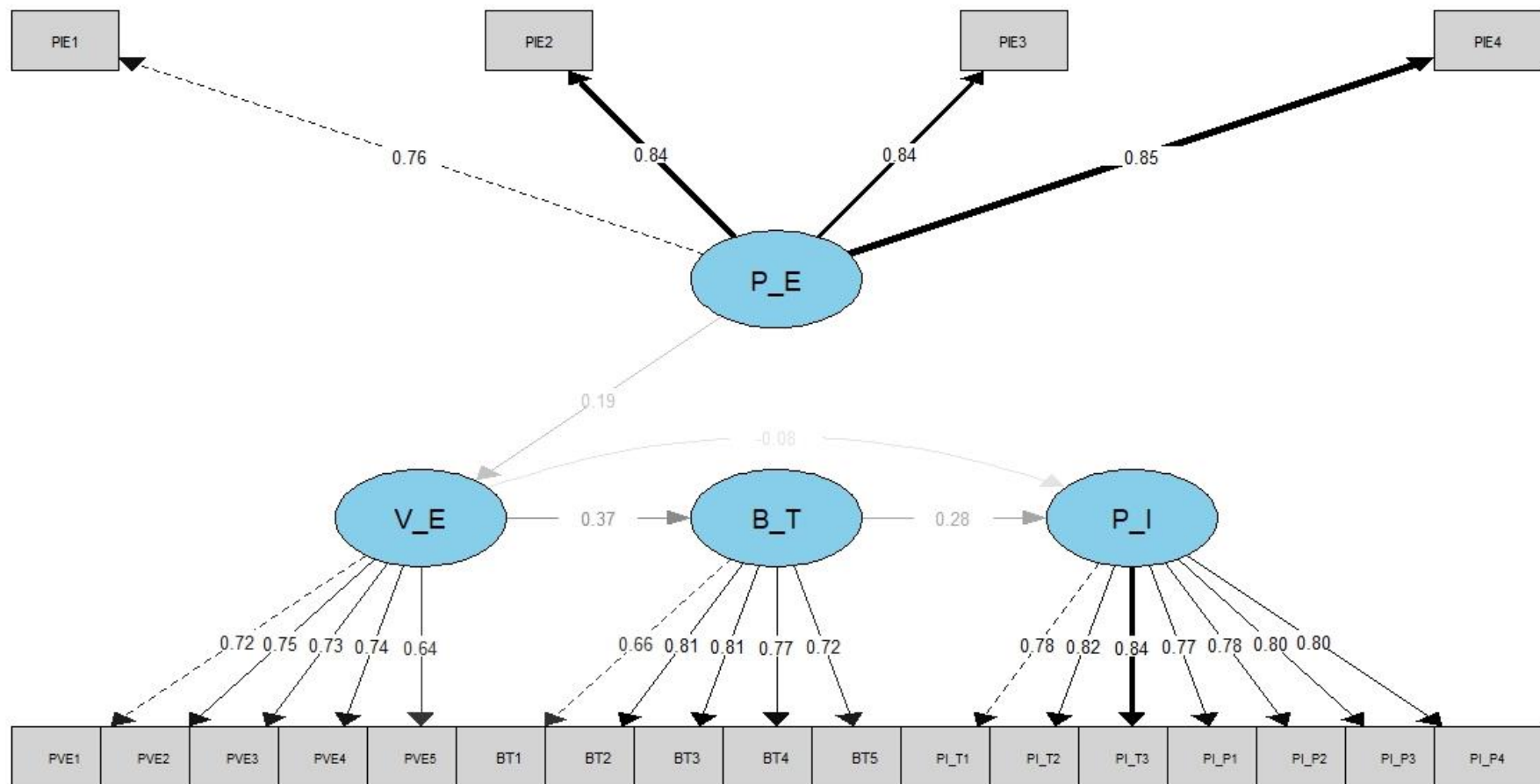
statistics are reported for each. The unstandardized loading (“Estimate”) quantifies the raw relationship between the latent factor and its indicator; by fixing the first loading of each factor at 1.000, the model defines the scale of each latent variable. Accompanying each estimate is its standard error and a value (the estimate divided by its standard error), along with the associated p-value. In this analysis, all estimated loadings beyond the first are highly significant ($p < 0.001$), confirming that each indicator reliably contributes information to its respective construct.

Beyond statistical significance, the practical adequacy of each indicator is best judged by its fully standardized loading (“Std.all”). These values convert both latent and observed variables to a common scale, allowing direct comparison across items. A conventional benchmark of 0.708 is often used: since 0.708 squared equals 0.50 (which means 50% of the item’s variance is explained by the factor), any loading exceeding this threshold indicates that more than half of the indicator’s variance is explained by the latent construct. In this study, there are items PVE5 and BT1 which have the St. All lower than others, which could be considered as potential issues.

The structural equation model (SEM) provided valuable insights into how consumers’ perceptions of ESG importance shape their trust in the Vinamilk brand and ultimately influence their purchase intentions. As hypothesized, Perceived ESG Importance had a positive and statistically significant effect on Vinamilk ESG Perception ($\beta = 0.19$, $p = .006$). This suggests that consumers who place high importance on ESG issues tend to view Vinamilk’s ESG performance somewhat more favorably. In other words, general attitudes toward ESG appear to function as a perceptual filter through which consumers evaluate Vinamilk’s specific ESG efforts. While the effect size is modest, the finding supports the theoretical claim that consumers’ value orientations inform their corporate evaluations and raises the possibility of projection bias, whereby consumers may overestimate a company’s ESG performance simply because they care about ESG themselves.

Figure 2

The structural equation model coefficient path.



The model further revealed that Vinamilk ESG Perception significantly predicted Brand Trust ($\beta = 0.37, p < .001$). This relationship underscores the reputational benefits companies can gain from credible ESG performance. Consumers appear to interpret ESG activities not merely as ethical gestures but as signals of corporate reliability, competence, and integrity — key components of brand trust. Importantly, this path was the strongest in the model, highlighting ESG perception as a critical antecedent of trust formation. However, it is important to remain cautious: while the statistical association is robust, the cross-sectional nature of the data limits causal conclusions. It is also plausible that prior trust in the brand shapes how consumers evaluate its ESG actions, suggesting a possible reciprocal relationship that the model does not capture.

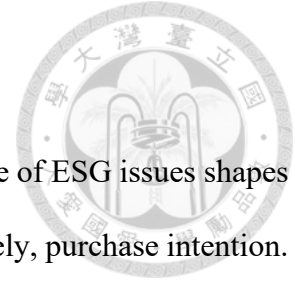
When examining the ultimate behavioral outcome, Purchase Intention, the model showed that Brand Trust significantly influenced Purchase Intention ($\beta = 0.28, p < .001$), aligning with prior literature that positions trust as a critical driver of consumer decision-making. Trust seems to act as a psychological shortcut, reducing perceived risk and making consumers more likely to choose Vinamilk products.

The model revealed that Vinamilk ESG Perception did not exert a significant direct effect on Purchase Intention ($\beta = -0.08, p = .241$), and the effect was even negative, contrary to theoretical expectations. This finding suggests that, in this sample, simply perceiving Vinamilk as performing well on ESG dimensions does not directly motivate consumers to buy its products. One possible explanation is that consumers compartmentalize ESG evaluations and purchasing decisions: while they may cognitively acknowledge Vinamilk's ESG efforts, these do not translate into action unless reinforced by trust or other affective drivers. Another possibility is that ESG perception primarily influences intermediate variables, such as trust, rather than acting as a standalone predictor of behavioral intention — consistent with the strong mediation effect observed through

Brand Trust ($\beta = 0.28, p < .001$).

Moreover, the negative (though nonsignificant) coefficient may reflect suppression effects or model misspecification. For example, when controlling for Brand Trust, the residual variance in ESG Perception may capture critical or skeptical consumer attitudes (e.g., perceiving ESG as “greenwashing” or marketing spin), which could dampen purchase motivation. Alternatively, consumers with high ESG awareness may hold brands to higher standards, making them more demanding or less easily persuaded by ESG claims alone. This complexity underscores that the relationship between ESG perception and consumer behavior is not uniformly positive and points to the importance of including moderators (such as skepticism, brand familiarity, or product category involvement) in future models. This study anticipates that Vietnamese consumers will exhibit varied levels of ESG awareness within the dairy sector, with many recognizing Vinamilk's efforts but not fully grasping ESG complexities.

Chapter 5: Discussion



5.1 Discussion

This study set out to investigate how consumers' perceived importance of ESG issues shapes their perceptions of Vinamilk's ESG performance, brand trust, and ultimately, purchase intention. The structural equation modeling (SEM) results offer both expected confirmations and important surprises that contribute to the literature on ESG and consumer behavior.

As hypothesized, Perceived ESG Importance significantly predicted Vinamilk ESG Perception ($\beta = 0.19$, $p = .006$), suggesting that consumers who value ESG issues tend to evaluate Vinamilk's ESG efforts more favorably. This supports the idea that general ESG attitudes serve as a perceptual filter through which company actions are judged. However, the relatively modest effect size indicates that while value alignment matters, it is not a dominant driver, raising the possibility that other factors such as media framing or peer influence also shape ESG perceptions.

The model further revealed that Vinamilk ESG Perception significantly predicted Brand Trust ($\beta = 0.37$, $p < .001$). This finding aligns with prior researches highlighting the reputational benefits of credible ESG performance, suggesting that consumers interpret ESG activities as signals of corporate reliability, competence, and integrity. Importantly, this path emerged as the strongest in the model, underscoring ESG perception as a key antecedent of trust formation (Koh et al. (2022), Cheng and Huang (2024)). Nonetheless, it is worth noting that the cross-sectional nature of the data limits causal claims. It is plausible that prior trust in Vinamilk shapes how consumers interpret ESG information, suggesting a potential reciprocal relationship worthy of future exploration.

Perhaps the most unexpected finding was the nonsignificant and negative direct effect of Vinamilk ESG Perception on Purchase Intention ($\beta = -0.08$, $p = .241$). Contrary to prior assumptions, consumers' perceptions of Vinamilk's ESG performance did not directly motivate

their purchasing behavior. Instead, the pathway from ESG perception to purchase intention operated indirectly, fully mediated through Brand Trust ($\beta = 0.28, p < .001$). This pattern highlights that while ESG activities may enhance corporate reputation, they do not automatically translate into consumer action without trust. One possible explanation is that consumers compartmentalize ethical evaluations and consumption decisions, or that ESG performance matters only when it is perceived as authentic and aligned with core product values. Another possibility is that some consumers, particularly those with high ESG awareness, become more critical and discerning, which may reduce their purchase intention if they perceive ESG efforts as inadequate or insincere.

These findings make important contributions to the literature by underscoring the contingent nature of ESG effects on consumer behavior. While ESG initiatives can enhance trust, their direct impact on purchasing is far from guaranteed and may depend on moderating factors such as perceived authenticity, brand reputation, and consumer skepticism. This challenges overly optimistic assumptions in both academic and managerial discourse that ESG performance will automatically drive sales.

5.2 Research implications

The findings of this study carry several important practical implications for managers at Vinamilk and other companies seeking to leverage ESG initiatives in their brand strategy. First, the results highlight that while consumers' general concern for ESG issues positively shape how they perceive Vinamilk's ESG performance, this effect is modest. Managers should therefore avoid broad social trends toward ESG awareness that will automatically translate into favorable brand evaluations; instead, they should focus on communicating specific, credible, and transparent ESG actions that resonate with consumers' priorities.

Second, the strongest pathway in the model—from ESG perception to brand trust—underscores that trust is the critical conduit through which ESG efforts gain traction with consumers. Managers should not treat ESG merely as a compliance or public relations exercise but should integrate it authentically into the company’s core mission and operations. Efforts such as third-party certifications, transparent ESG reporting, and consistent long-term commitments can help strengthen consumer perceptions of ESG credibility and, in turn, build trust.

Third, the absence of a significant direct effect of ESG perception on purchase intention suggests that ESG efforts alone are unlikely to drive sales unless they are linked to trust and other drivers such as product quality, price competitiveness, and brand image. This finding cautions managers against overestimating the commercial payoff of ESG initiatives in isolation. Instead, ESG should be positioned as part of a broader value proposition that combines ethical commitments with tangible consumer benefits.

Finally, given the possibility that highly ESG-conscious consumers may be more discerning or skeptical, managers should actively engage these critical consumer segments through dialogue, transparency, and continuous improvement, rather than assuming that any ESG initiative will be positively received. By treating ESG as a relational strategy rather than a promotional tool, managers can build stronger, more resilient brand relationships that benefit both the company and its stakeholders.

5.3 Limitations

While this study offers valuable insights into the role of ESG perceptions in shaping brand trust and purchase intentions, several limitations should be acknowledged.

First, the cross-sectional design of the survey restricts the ability to make strong causal inferences. Although the SEM results suggest directional relationships between constructs, it is

plausible that trust also shapes ESG perceptions, or that prior purchase experiences influence both trust and ESG evaluations, introducing potential reciprocal effects not captured by the current model.

Second, the sample was drawn exclusively from Vietnamese consumers, which limits the generalizability of the findings to other cultural or market contexts. Consumer responses to ESG initiatives may vary across regions, depending on cultural values, market maturity, regulatory environments, and societal expectations. For example, while Vietnamese consumers increasingly value corporate responsibility, their purchase decisions are often still strongly influenced by price and brand familiarity. In contrast, markets like Taiwan show a higher prevalence of health-conscious, sustainability-driven consumption behavior—evident in the rising popularity of plant-based milk alternatives and greater consumer scrutiny of product sourcing and packaging (Xin Ou (2024), Global Monitor (2024)). These differences suggest that ESG perceptions may have a more pronounced or nuanced influence on brand trust and purchase behavior in more mature or saturated dairy markets. Future research should replicate this model in diverse geographic settings to assess its broader applicability.

Third, although the survey employed validated scales and achieved high internal consistency (as indicated by Cronbach's alpha), the remarkably high reliability scores raise concerns about potential item redundancy or overly narrow construct coverage. This suggests a need for more refined instruments that capture the complexity of ESG perceptions, trust, and purchase intentions.

Fourth, the modest sample size ($N = 288$), while adequate for SEM, may have limited the statistical power to detect small or interaction effects, especially in the presence of more nuanced pathways. Future research with larger and more demographically diverse samples could enable subgroup analyses by factors such as age, income, or education.

Fifth, the study focused exclusively on self-reported intentions rather than actual purchase behaviors. Given the well-established gap between intentions and actions, future studies should integrate behavioral data—such as purchase records or observational tracking—to provide a more robust assessment of ESG impact.

Finally, the model did not account for other well-established determinants of purchase intention, such as price sensitivity, promotional activities, product availability, or brand loyalty. These marketing factors exert significant influence on consumer decision-making and may interact with or even overshadow ESG considerations in certain contexts. Their omission limits the comprehensiveness of the explanatory model and suggests that future research should adopt a more holistic framework that integrates both ESG and traditional marketing variables.

5.4 Future Research Recommendations

The negative and nonsignificant direct effect of Vinamilk ESG Perception on Purchase Intention ($\beta = -0.08$, $p = .241$) highlights several promising avenues for future research. First, scholars should explore the role of consumer skepticism and perceived authenticity as moderators of the ESG–behavior relationship. It is possible that some consumers interpret ESG efforts as superficial “greenwashing,” which could dampen or even reverse the expected positive effect on purchase intentions. Incorporating validated measures of skepticism or trust in corporate motives could help disentangle these competing interpretations.

Second, future studies could employ experimental designs to isolate the causal impact of ESG messaging. For example, exposing consumers to ESG information with varying levels of credibility, detail, or relevance might clarify under what conditions ESG perceptions enhance or erode purchase intention.

Third, longitudinal research is needed to assess whether the effects of ESG perception on

behavior emerge over time rather than immediately. Consumers may require repeated exposure or accumulated trust before ESG efforts translate into actual buying behavior.

Finally, cross-cultural, or cross-brand comparisons could determine whether this negative effect is unique to the Vinamilk context or reflects a more general pattern in emerging markets where consumers may prioritize price and quality over ESG concerns. Together, these extensions would provide a richer, more context-sensitive understanding of the limits and potential of ESG strategies in shaping consumer behavior.

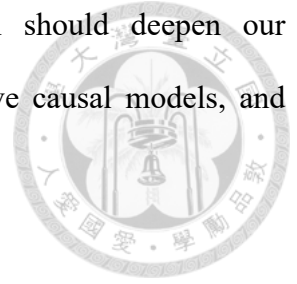
Conclusion

This study examined the complex relationships between consumers' perceived importance of ESG issues, their perceptions of Vinamilk's ESG performance, brand trust, and purchase intention. Using structural equation modeling (SEM) on survey data from Vietnamese consumers, the findings revealed that while perceived ESG importance positively influenced ESG perception, and ESG perception significantly enhanced brand trust, the direct effect of ESG perception on purchase intention was nonsignificant and unexpectedly negative. Instead, brand trust emerged as the key mediator linking ESG perception to purchasing intentions.

These results make both theoretical and practical contributions. Theoretically, they highlight the contingent nature of ESG's impact on consumer behavior, suggesting that ESG perceptions alone are insufficient to drive action without the mediating role of trust. Practically, they offer clear guidance for managers: building consumer trust through credible, authentic, and transparent ESG initiatives is crucial if firms wish to translate ethical performance into commercial outcomes.

At the same time, the study underscores the need for caution and humility in ESG strategy and research. It challenges the overly optimistic assumption that ESG activities will automatically boost purchase intentions and points to the importance of context, consumer skepticism, and the

interplay of ethical and functional brand attributes. Future research should deepen our understanding of these dynamics by incorporating moderators, alternative causal models, and behavioral data across diverse market settings.



Questionnaire: Consumer Perceptions of Corporate Responsibility (ESG) and Vinamilk



Lời giới thiệu / Introduction

Xin chào (Hello),

We are conducting research to understand consumer views on corporate social responsibility (often referred to as ESG - Environmental, Social, and Governance factors) and how these views relate to well-known brands like Vinamilk.

Your participation in this survey is voluntary and appreciated. The survey should take 5-7 minutes to complete. Your responses will be kept strictly confidential and anonymous. The data collected will be used solely for academic research purposes.

By proceeding with this survey, you indicate your consent to participate.

Thank you for your valuable time and input!

Section A: Screening Questions

Are you familiar with the Vinamilk brand?

☐ Yes

☐ No (If no, thank respondent and end survey)

Do you currently consume, or have you previously consumed, dairy products (like milk, yogurt, cheese)?

☐ Yes

☐ No (If no, thank respondent and end survey, unless study includes non-consumers)

Do you currently consume, or have you previously consumed, Vinamilk products?

☐ Yes

☐ No (Proceed, but note this response)

Section B: Perceived Importance of ESG

This section asks about your general views on the importance of environmental, social, and governance (ESG) factors when considering companies and products. ESG refers to how companies manage their impact on the environment, their relationships with employees and society, and their corporate leadership and ethics.

Please indicate the extent to which you agree or disagree with the following statements:

(Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

PIE1	Environmental practices are a key factor influencing my consumer values and decision-making.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
PIE2	A company's social actions (like community support, employee welfare) are a crucial factor influencing my consumer values and decision-making.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
PIE3	Corporate ethics and accountability (governance) are crucial factors influencing my consumer values and decision-making.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
PIE4	I am familiar with the concept of ESG (Environmental, Social, Governance) in business.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

Section C: Perception of Vinamilk's ESG Initiatives

This section asks about your specific perceptions of Vinamilk's efforts related to environmental, social, and governance (ESG) issues.

Please indicate the extent to which you agree or disagree with the following statements about Vinamilk:

(Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

PVE1	I believe Vinamilk is genuinely committed to environmentally sustainable practices.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
PVE2	I perceive Vinamilk as actively contributing positively to society (e.g., community support, social programs).	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
PVE3	I believe Vinamilk operates with high ethical standards and corporate governance.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐
PVE4	I am aware of specific ESG initiatives or communications from Vinamilk.	1 ☐	2 ☐	3 ☐	4 ☐	5 ☐

PVE5 Vinamilk communicates effectively about its ESG commitments and activities.

1 2 3 4 5
○ ○ ○ ○ ○



Section D: Brand Trust in Vinamilk

This section asks about your level of trust in the Vinamilk brand.

Please indicate the extent to which you agree or disagree with the following statements about Vinamilk:

(Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

BT1	I trust Vinamilk to provide safe and high-quality products.	1 ○	2 ○	3 ○	4 ○	5 ○
BT2	I believe Vinamilk cares about the well-being of its consumers.	1 ○	2 ○	3 ○	4 ○	5 ○
BT3	I trust that Vinamilk acts responsibly and ethically in its business practices.	1 ○	2 ○	3 ○	4 ○	5 ○
BT4	I consider Vinamilk a brand that aligns with my personal values.	1 ○	2 ○	3 ○	4 ○	5 ○
BT5	My perception of Vinamilk's commitment to ESG (environmental, social, governance) increases my overall trust in the brand.	1 ○	2 ○	3 ○	4 ○	5 ○

Section E: Purchase Intention towards Vinamilk

This section asks about your likelihood of purchasing Vinamilk products.

Please indicate the extent to which you agree or disagree with the following statements:

(Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree)

PI_T1	My overall trust in the Vinamilk brand makes me intend to purchase their products.	1 ○	2 ○	3 ○	4 ○	5 ○
PI_T2	Because I trust Vinamilk's quality and safety standards, I am likely to buy their products.	1 ○	2 ○	3 ○	4 ○	5 ○
PI_T3	My trust in Vinamilk's ethical conduct and responsibility positively influences my decision to buy from them.	1 ○	2 ○	3 ○	4 ○	5 ○
PI_P1	I am more likely to purchase Vinamilk products specifically because of their positive ESG initiatives (environmental, social, governance).	1 ○	2 ○	3 ○	4 ○	5 ○
PI_P2	Vinamilk's efforts in social and environmental responsibility make me want to buy their products more.	1 ○	2 ○	3 ○	4 ○	5 ○

PI_P4	I intend to buy from Vinamilk because they balance product quality with social and environmental responsibility.	1	2	3	4	5
		☐	☐	☐	☐	☐

Section F: Demographics

Finally, please provide some general information about yourself for statistical purposes.

Remember, your responses are anonymous.

What is your age group?

- | | |
|-----------------------------|--|
| ☐ 18-24 | ☐ 45-54 |
| ☐ 25-34 | ☐ 55+ |
| ☐ 35-44 | ☐ Prefer not to say. |

What is your gender?

- | | |
|------------------------------|--|
| ☐ Male | ☐ Other |
| ☐ Female | ☐ Prefer not to say. |

What is the highest level of education you have completed?

- | | |
|---|---|
| ☐ High school or lower | ☐ Master's degree or higher |
| ☐ Vocational/Technical school | ☐ Prefer not to say. |
| ☐ Bachelor's degree | |

What is your approximate average monthly household income (VND)?

- | | |
|--|--|
| ☐ Below 10 million VND | ☐ 35 - 50 million VND |
| ☐ 10 - 20 million VND | ☐ Above 50 million VND |
| ☐ 20 - 35 million VND | ☐ Prefer not to say. |

(Optional) Which city/province do you currently reside in? _____

☐ Prefer not to say.

Thank you very much for completing this survey. Your feedback is valuable to our research.

References

- Abd Halim, S. (2014). *ESG in Focus: UK, France, Germany, China and Malaysia Evidence* [University of East London].
- Anh Phan. (2025). Doanh nghiệp vừa và nhỏ vẫn mơ hồ về khái niệm ESG. *Vietnam Finance*. <https://vietnamfinance.vn/doanh-nghiep-vua-va-nho-van-mo-ho-ve-khai-niem-esg-d124789.html>
- Bae, G.-K., Lee, S.-M., & Luan, B.-K. (2023). The impact of ESG on brand trust and word of mouth in food and beverage companies: Focusing on Jeju Island tourists. *Sustainability*, 15(3), 2348.
- Bao Linh. (2024). Deputy Minister Tran Quoc Phuong meets USAID Mission Director for Vietnam. *Ministry of Planning and Investment*. <https://www.mpi.gov.vn/en/Pages/2024-10-28/Deputy-Minister-Tran-Quoc-Phuong-meets-USAID-Missiu0woi8.aspx>
- Bezerra, R. R. R., Martins, V. W. B., & Macedo, A. N. (2024). Validation of challenges for implementing ESG in the construction industry considering the context of an emerging economy country. *Applied Sciences*, 14(14), 6024.
- Carroll, A. B. (1999). Corporate social responsibility: Evolution of a definitional construct. *Business & society*, 38(3), 268-295.
- Castro, A., & Gradillas Garcia, M. (2022). Insights into succesful ESG implementation in organizations. *Journal of Financial Transformation*, 56, 168-176.
- Chatterji, A. K., Durand, R., Levine, D. I., & Touboul, S. J. S. m. j. (2016). Do ratings of firms converge? Implications for managers, investors and strategy researchers. 37(8), 1597-1614.
- Chaudhuri, A., & Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty. *Journal of marketing*, 65(2), 81-93.
- Cheng, L. K., & Huang, H.-L. (2024). Influence of environmental, social and governance (ESG) disclosures on consumer brand perceptions and behavioral intentions. *Asia Pacific Journal of Marketing Logistics*.
- de Freitas Netto, S. V., Sobral, M. F. F., Ribeiro, A. R. B., & Soares, G. R. d. L. (2020). Concepts and forms of greenwashing: a systematic review. *Environmental Sciences Europe*, 32(1), 19. <https://doi.org/10.1186/s12302-020-0300-3>
- De Koning, J. I. J. C., Crul, M. R. M., Wever, R., & Brezet, J. C. (2015). Sustainable consumption in Vietnam: an explorative study among the urban middle class. *International journal of consumer studies*, 39(6), 608-618.
- Delmas, M. A., & Burbano, V. C. (2011). The drivers of greenwashing. *California management review*, 54(1), 64-87.
- Diệp Chi. (2022). Thực hành E-S-G tại doanh nghiệp sữa lớn nhất Việt Nam. *VnExpress*. <https://vnexpress.net/thuc-hanh-e-s-g-tai-doanh-nghiep-sua-lon-nhat-viet-nam-4517399.html>
- Drei, A., Le Guenedal, T., Lepetit, F., Mortier, V., Roncalli, T., & Sekine, T. (2019). ESG investing in recent years: New insights from old challenges. *Available at SSRN* 3683469.
- FAO. (2010). *Greenhouse Gas Emissions from the Dairy Sector: A Life Cycle Assessment*.
- Fatemi, A., Glaum, M., & Kaiser, S. (2018). ESG performance and firm value: The moderating role of disclosure. *Global finance journal*, 38, 45-64.
- Fishbein, M., & Ajzen, I. (1977). Belief, attitude, intention, and behavior: An introduction to theory and research.

- Gernego, I., Petrenko, L., Lavrynenko, V., & Dyba, M. (2024). Trends and focuses for ESG investment support: A cross country comparative analysis. *European Journal of Sustainable Development*, 13(1), 167-167.
- Gill, J., & Johnson, P. (2010). Research methods for managers.
- Global Monitor. (2024). *Taiwan Plant-Based Dairy Market: Trends, Forecasts upto 2028 and Company Shares*. <https://www.globalmonitor.us/product/taiwan-plant-based-dairy-market/>
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., Ray, S., . . . Sarstedt, M. (2021). *Partial least squares structural equation modeling using R: a workbook*.
- Hoa, T., Phan, T., Hua, P., Trang, T., Thi, N., Phung, D., . . . Tran, P. (2024). Environment, Social and Governance Investment, the Current Situation and Proposed Solutions for Vietnam. *International Journal of Multidisciplinary Research Analysis*, 7(3), 906-909.
- Hoang, V., Saviolidis, N. M., Olafsdottir, G., Bogason, S., Hubbard, C., Samoggia, A., . . . Nguyen, D. (2023). Investigating and stimulating sustainable dairy consumption behavior: An exploratory study in Vietnam. *Sustainable Production Consumption*, 42, 183-195.
- Jager, J., Putnick, D. L., & Bornstein, M. H. (2017). II. More than just convenient: The scientific merits of homogeneous convenience samples. *Monographs of the society for research in child development*, 82(2), 13-30.
- Keller, K. L. (2001). Building customer-based brand equity: A blueprint for creating strong brands.
- Koh, H.-K., Burnasheva, R., & Suh, Y. G. (2022). Perceived ESG (environmental, social, governance) and consumers' responses: The mediating role of brand credibility, Brand Image, and perceived quality. *Sustainability*, 14(8), 4515.
- Liu, M., Luo, X., & Lu, W.-Z. (2023). Public perceptions of environmental, social, and governance (ESG) based on social media data: Evidence from China. *Journal of Cleaner Production*, 387, 135840.
- Lyon, T. P., & Montgomery, A. W. (2015). The Means and End of Greenwash. 28(2), 223-249. <https://doi.org/10.1177/1086026615575332>
- MarketingTNT. (2024). The Shift Towards Sustainability in Vietnamese Marketing- How Brands are Embracing Eco-Friendly Practices to Win Consumer Trust. *MarketingTNT Team*. <https://marketingtnt.org/sustainability-in-vietnamese-marketing>
- Martínez García de Leaniz, P., & Nishiyama, N. (2017). Enhancing customer-based brand equity through CSR in the hospitality sector. *International Journal of Hospitality & Tourism Administration*, 20, 1-25. <https://doi.org/10.1080/15256480.2017.1397581>
- Martínez, P., & Del Bosque, I. R. J. I. j. o. h. m. (2013). CSR and customer loyalty: The roles of trust, customer identification with the company and satisfaction. 35, 89-99.
- Mifsud, A. (2024). *The influence of ESG on local consumer behaviour* University of Malta].
- Moon, J., Tang, R., & Lee, W. S. (2023). Antecedents and consequences of Starbucks' environmental, social and governance (ESG) implementation. *Journal of Quality Assurance in Hospitality Tourism*, 24(5), 576-598.
- Narayanan, S., & Singh, G. A. (2023). Consumers' Willingness to Pay for Corporate Social Responsibility: Theory and Evidence. *International journal of consumer studies*, 47. <https://doi.org/10.1111/ijcs.12910>
- Nguyen, M., Bensemam, J., & Kelly, S. (2018). Corporate social responsibility (CSR) in Vietnam: a conceptual framework. *International Journal of Corporate Social Responsibility*, 3(1), 9. <https://doi.org/10.1186/s40991-018-0032-5>

- Nguyễn Thị, H., Huong, T., Zhi, Y., & Le Viet, A. (2019). HOW DOES GREENWASH AFFECT GREEN FOOD PURCHASE INTENTION IN AN EMERGING MARKET? EVIDENCE FROM VIETNAM. *Ciência e Técnica Vitivinícola*, Vol. 34, 233.
- Nguyễn, L. (2024). Vinamilk tiến nhanh trên hành trình đến Net Zero năm 2050. *Báo Điện tử Chính phủ*. <https://baochinhphu.vn/vinamilk-tien-nhanh-tren-hanh-trinh-den-net-zero-nam-2050-102240423135118962.htm>
- Nyilasy, G., Gangadharbatla, H., & Paladino, A. (2014). Perceived Greenwashing: The Interactive Effects of Green Advertising and Corporate Environmental Performance on Consumer Reactions. *Journal of Business Ethics*, 125(4), 693-707. <https://doi.org/10.1007/s10551-013-1944-3>
- OECD. (2024). *Global Corporate Sustainability Report 2024*. P. OECD Publishing. https://www.oecd.org/en/publications/global-corporate-sustainability-report-2024_8416b635-en.html
- Pivato, S., Misani, N., & Tencati, A. (2008). The impact of corporate social responsibility on consumer trust: the case of organic food. *Business ethics: A European review*, 17(1), 3-12.
- Prime Minister of Vietnam. (2022). *Decision 896/QĐ-TTg 2022 approving the National strategy for climate change until 2050*. Retrieved from <https://vanban.chinhphu.vn/?pageid=27160&docid=206254>
- Reccessary. (2023). Vinamilk announces "Pathways to Dairy Net Zero 2050" and the first carbon-neutral factory and farm in Vietnam. *RECESSARY*. <https://www.reccessary.com/en/corporate/vinamilk-announces-pathways-dairy-net-zero-2050>
- Syed, A. M. (2017). Environment, social, and governance (ESG) criteria and preference of managers. *Cogent Business Management*, 4(1), 1340820.
- Tai, V. (2024). General consumer perceptions and their impact on corporate social responsibility (CSR) and environmental, social, and governance (ESG) in Vietnam. *International Journal of Multidisciplinary Research and Growth Evaluation*, 05, 912-920. <https://doi.org/10.54660/IJMRGE.2024.5.3.912-920>
- Tai, V. P. (2024). General consumer perceptions and their impact on corporate social responsibility (CSR) and environmental, social, and governance (ESG) in Vietnam.
- TerraChoice. (2010). *The sins of greenwashing: home and family edition*. <http://sinsofgreenwashing.org/findings/the-seven-sins/>
- Thai, O. T. T., & Alang, T. (2025). Greenwash and green purchase intentions among Vietnamese consumers: The mediating roles of green skepticism, environmental concern and knowledge. *Ho Chi Minh City Open University Journal Of Science-Economics Business Administration*, 15(4).
- Thanh, T. (2022). *Cuộc cách mạng xanh trong ngành tiêu dùng nhanh*. Văn phòng Sản xuất và tiêu dùng bền vững - Bộ Công Thương. <https://scp.gov.vn/tin-tuc/t12817/cuoc-cach-mang-xanh-trong-nganh-tieu-dung-nhanh>
- Thanh Van. (2023). Understanding biodegradable plastics. *Vietnam Investment Review*. <https://vir.com.vn/understanding-biodegradable-plastics-100834.html>
- Tiffany Hsu. (2011). Skepticism grows over products touted as eco-friendly. *Los Angeles Times*. <https://www.latimes.com/business/la-xpm-2011-may-21-la-fi-greenwash-20110521-story.html>

- Tuổi trẻ Thủ đô. (2024). Vinamilk: Hành Trình phát triển bền vững nhìn từ 3 khía cạnh E-S-G. *Tuổi trẻ Thủ đô eMagazine*. <https://tuoitrethudo.vn/vinamilk-hanh-trinh-phat-trien-ben-vung-nhin-tu-3-khia-can-e-s-g-267025.html>
- Van-Tien Dao, W., Nhat Hanh Le, A., Ming-Sung Cheng, J., & Chen, C. (2014). Social media advertising value: The case of transitional economies in Southeast Asia. *International journal of Advertising*, 33(2), 271-294.
- Việt Nam News. (2024, August 14, 2024). Vietnamese consumer goods makers pay more attention to green production. *Việt Nam News*. <https://vietnamnews.vn/economy/1661169/vietnamese-consumer-goods-makers-pay-more-attention-to-green-production.html>
- Vietdata. (2024). *How major dairy brands sustain market share in Vietnam's shifting landscape*. Doanh Nghiệp & Do Thi. <https://www.vietdata.vn/post/how-major-milk-brands-sustain-market-share-in-vietnam-s-shifting-landscape?>
- Vinamilk. (2023). *Vinamilk khởi động dự án trồng cây hướng đến NET ZERO tại Mê Linh, Hà Nội* <https://www.vinamilk.com.vn/vi/tin-tuc-su-kien/2514/vinamilk-khoi-dong-du-an-trong-cay-huong-den-net-zero-tai-me-linh-ha-noi>
- Vinamilk. (2024). *Vinamilk Công Bố Báo Cáo Phát Triển Bền Vững, Chọn Chủ Đề: Net Zero 2050* <https://www.vinamilk.com.vn/vi/tin-tuc-su-kien/2637/vinamilk-cong-bo-bao-cao-phat-trien-ben-vung-chon-chu-de-net-zero-2050>
- VNT writers. (2023). Vietnam Pledges to Realize Commitments At COP26. *Vietnamtimes*. <https://vietnamtimes.org.vn/vietnam-pledges-to-realize-commitments-at-cop26-67738.html>
- Wang, L. (2024). Challenges and Opportunities of ESG Integration in Financial Operations. International Conference on Finance and Economics,
- Wielechowski, M., & Krasuski, P. (2024). ESG concepts in business practice. Characteristics and assessment of common ESG frameworks. *MAZOWSZE Studia Regionalne*(Special Edition 2024), 9-26.
- World Benchmarking Alliance. (2023). *Vinamilk nature benchmark*. <https://www.worldbenchmarkingalliance.org/publication/nature/companies/vinamilk-4/#:~:text=Summary>
- Xin Ou. (2024). *Most popular plant-based food alternative types among respondents in Taiwan as of February 2024, by age group*. <https://www.statista.com/statistics/1070970/taiwan-most-popular-plant-based-food-products-by-consumer-age>
- Yan, Y. (2024). The Impact of ESG Standards and Investment: Global Trends and Practices. *Advances in Economics, Management Political Sciences*, 121, 14-22.
- YKVN. *ESG in APAC - Vietnam*. <https://insights.slaughterandmay.com/esg-in-apac-2024-vietnam/index.html#group-section-Greenwashing-risks-JySLGzML0R>
- Zumante, I., & Bistрова, J. (2021). ESG Importance for Long-Term Shareholder Value Creation: Literature vs. Practice. 7(2), 127. <https://www.mdpi.com/2199-8531/7/2/127>