

Original Research

The Effect of Branding, Perceived Environmental and Social Responsibility on Customer Satisfaction and Loyalty

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Abstract

In a competitive market, enterprises should strive to offer excellent services and products while implementing robust environmental policies that not only attract customers but also foster loyalty. This study is intended to fill a gap in brand dimensions (including brand identity, brand awareness, brand love and brand loyalty) through the role of perceived environmental responsibility and the effect of perceived social responsibility to improve customer satisfaction and loyalty. A questionnaire was given to people who used milk products in Ho Chi Minh City (HCMC) to obtain customer perceptions. To test the model, 537 data samples were chosen. This study explores the role of the brand dimension on perceived social responsibility toward customer satisfaction. The results indicate that customers' perceptions of an enterprise's social responsibility positively influence customer satisfaction. Perceived environmental responsibility insignificantly influences customer loyalty but significantly affects customer satisfaction. Our findings imply the importance of milk enterprises engaging in environmental and social responsibility activities with brand building and implementing appropriate strategies and policies regarding their impact on the environment and communities to increase customer satisfaction and loyalty.

Keywords: brand dimensions, perceived social responsibility, perceived environmental responsibility, customer loyalty, sustainable development

Introduction

The current business market is characterized by intense competition, largely due to globalization. Vietnamese enterprises should exhibit a strong drive to

succeed in this dynamic environment. Vietnam's food and beverage industry, in general, and dairy products, in particular, have provided fertile ground for many businesses and foreign investors to expand their business markets. The export activities of Vietnamese milk enterprises need to be improved, considering that this is an important channel to promote growth. Moreover, although some domestic milk enterprises dominate

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the market, competition from foreign brands is still present and becoming increasingly fierce.

In today's competitive market, retaining consumers and earning their loyalty is essential to preserving business and its associated marketing success, according to Novixoxo et al. [1]. Branding has become a key element to manage, and the value of branding is represented in its intangible assets [2]. Customers should have faith in an enterprise's ability to deliver its promises and be motivated to purchase its goods and services. Customers should also be encouraged to make purchases and remain devoted to an enterprise. Branding significantly impacts customer purchasing behaviour, and owners and customers alike reap its rewards.

This study considers brand dimensions: brand identity, awareness, love, and loyalty. Brand dimensions can improve the competitive advantage of today's enterprises. Enterprises should create new models of sustainability that incorporate components linked to enhancing customer loyalty in light of market trends and growing competition [3]. An integral part of a business, branding is an intangible element crucial to its success. Branding is essential in modern marketing because it combines all tactical components into one effective formula. Building an enterprise's brand can boost its competitive edge. Branding gives clients a sense of security, comfort, optimism, and increased regard for a company's goods and services and should be considered by an enterprise. Therefore, enterprises need to focus on building a strong brand presence to establish a favorable position in the minds of customers and enhance sustainable development in the new era.

Sustainable growth strategies should be consistent with an enterprise's business model to be successful. Because of the issues in building a brand and the need for ethics and environmental concern for sustainability, This study identified significant gaps in the literature on consumer satisfaction and loyalty, including the brand dimensions of perceived environmental and social responsibility. Building a strong brand that combines environmental concern and corporate social responsibility (CSR) plays a vital role in inspiring and motivating customers to accept the enterprise's products and services. Customers are increasingly aware of the social responsibility and environmental impacts of a company's products or services. Customers play a significant role in an enterprise's ability to compete and thrive. When customers have reasonable expectations for a product or service and those expectations are met, the customer is satisfied and continues to use the brand [4]. The research by Vuong and Bui [5] investigates the effect of corporate social responsibility (CSR) dimensions on employees' perceptions of the value of those activities for increasing brand reputation and equity. Enterprises should include clearly defined socially responsible activities and environmental concerns in their branding strategies to ensure long-term growth and retain customers. Due to the growing awareness among consumers and businesses regarding

social responsibility and environmental concerns, this research examines the impacts of perceived environmental responsibility, brand dimensions, and perceived social responsibility on customer satisfaction and loyalty.

The present study has significant implications for policymakers, as it sheds light on the determinants of customer satisfaction and loyalty. The findings of this research could guide the formulation of policies and regulations that incentivize businesses to adopt socially and environmentally responsible practices, resulting in mutual benefits for the enterprises and the broader society.

Literature Review

Branding and Its Role in Customer Satisfaction and Loyalty

Branding plays a vital role in customer satisfaction and loyalty and is beneficial for enterprises and customers. The process of brand building is crucial in fostering increased consumer belief, inspiration and loyalty. From a holistic perspective, a 'brand' can be seen as the tangible and intangible attributes that are used to identify or distinguish a product, service, individual, or organisation. Brand elements serve as a vital link between a business and its customers, facilitating the connection between customers and product information while strengthening the overall brand.

The Role of Behavioural Reasoning Perspectives in Customer Satisfaction and Loyalty

Behavioural reasoning theory (BRT) is a prominent behavioural theory introduced by Westaby [6] that explores human behaviour holistically. BRT is made up of four parts: values, reasoning, attitude, and intentions/behaviour. Behavioural reasoning theory is a general behavioural theory used to understand the motivations that underpin human activities. This study tested consumers' perception of brand dimensions based on environmental concerns and social responsibility in purchasing a company's products and services. Based on behavioral reasoning, the combination of environmental concern and corporate social responsibility (CSR) within the brand dimensions serves to motivate and inspire customers to accept the products and services offered by a particular enterprise. When an enterprise considers environmental concern and social responsibility, it improves the level of consumer satisfaction and enhances consumer loyalty-resulting in increased profits.

There is a strong link between social responsibility and environmental concerns expressed by businesses through their branding strategies. This motivated us to raise awareness among businesses about their management policies and environmental concerns for the community. This topic – how perceived environmental

and social responsibility relates to customer-company identity, customer satisfaction, and customer loyalty – has been extensively researched in the literature. The perception of a product's effectiveness in providing value that meets the buyer's expectations determines customer happiness [7]. An enterprise should develop a well-crafted marketing plan and deliver the most impactful message to the target customers in order to motivate them to purchase products or services. When someone talks about or sees the brand, the dimensions also generate an association with consumers – and consumer loyalty to the product occurs. This is one of the dimensions that contributes to brand value, which allows firms to reduce marketing expenses, draw in potential clients, and, in particular, strengthen their position in a competitive market. The brand dimensions considered by this study are brand identity, brand awareness, brand love, and brand loyalty.

The Relationship between Brand Identity and Perceived Social Responsibility and Customer Satisfaction

Brand identity is one component of brand dimensions. Customer brand identification has also been described as a customer's psychological condition of recognising, appreciating and experiencing a sense of belonging to a brand [8]. When customers identify with a service, product, or brand, their curiosity is piqued, leading them to explore the associated products or services. If they develop a strong interest, they are more likely to make a purchase.

A clear understanding of the evolution of the customer – the brand connection may be gained from the notion of customer – brand identification [9-12]. According to Sallam and Wahid [13] the theory of social identification – which has been widely used in other sectors – is the foundation upon which the idea of brand identity is based. When new products or services are introduced to the market or the brand's representation of the enterprise becomes well-known to customers, brand identity may also indicate product and service distinction. If the products or services offered by a particular brand are exceptional and effectively meet the needs and desires of customers, it will result in satisfied buying behavior among customers.

The customer's assessment of a product's superiority is known as "perceived quality" [14]. When an expectation is met, customers are content. A customer comparison between actual performance and expectations can be used to define customer satisfaction. This can be considered a post-consumption evaluation of the customers' experience, emotions, and expectations. If customers develop positive emotions towards a particular brand, they are more likely to accept and purchase its products or services.

In the long term, customers' perception of brand identity – distinguishing the enterprise's products and services from its rivals – makes it easier for prospective

consumers to recognize, respect, and remain loyal to an enterprise's products and services [3]. Organisational participation in environmental and social responsibility is associated with many important attitudinal and behavioural consumer outcomes. It is indicated that organizations' CSR performance enhances their desirability to both customers and staff. Customers will accept a company's goods and services if businesses become aware of and adopt corporate social responsibility and environmental protection strategies. In the modern world, when a particular brand shows a genuine concern for CSR and environmental issues, it takes on a human-like identity, which in turn motivates customers and creates a positive perception in their minds. Consequently, this positive perception influences their buying behavior. Therefore, based on the facts and the synthesis analysis, the following hypothesis was developed:

H1: There is a significant relationship between brand identity and perceived social responsibility toward customer satisfaction.

The Relationship between Brand Awareness and Perceived Social Responsibility Toward Customer Satisfaction

Brand awareness is an essential component of brand dimensions, and enterprises need to prioritize their branding strategy, according to Padhy and Sawlikar [15] consumers are aware of a brand's image or how they relate to the brand. Consumers' capacity to recognize and recall a brand in various contexts is known as "brand awareness" [2]. Customers can therefore recognize goods or services based on a company's branding in the marketplace. The phase of brand awareness holds significant importance in the minds of customers once they recognize the products or services available in the market. Brand awareness occurs when customers have an understanding of the quality of goods or services offered by a particular brand in the market. In other words, if customers have ever seen or heard of a brand, they can recall it exactly. Therefore, brand awareness is crucial for consumers to experience before they select a brand for its goods or services. All brand awareness is equal. The process of users' brand awareness should be promoted through several psychological processes and phases for marketing communication to be successful when various communication methods are used.

The literature has extensively explored the link between perceived environmental and social responsibility and customer-company identification, satisfaction, and loyalty. Environmental and social responsibility may benefit an organization's appeal to employees, consumers, investors, and other stakeholders [3]. Numerous studies have also contended that brand awareness increases a customer's perception of brand quality [2]. The most prevalent notion of perceived value is the customer's gains relative to sacrifices. Customers are pleased and satisfied when they obtain quality goods

and services because of CSR adoption by businesses. In brand strategy, when enterprises incorporate environmental concern and CSR activities, customers will perceive that the products or services offered are environmentally friendly and do not pose harm to their health or the environment. Customers' impressions of a firm's CSR positively impact their loyalty to that company, directly and indirectly [16]. Based on the facts and the synthesis analysis, the following hypothesis was developed:

H2: There is a significant relationship between brand awareness and perceived social responsibility toward customer satisfaction.

The Relationship between Brand Love and Perceived Social Responsibility Toward Customer Satisfaction

Brand love is part of the brand dimension and it specifically relates to the emotional connection and attachment that consumers have towards a brand. It goes beyond mere brand loyalty or preference and involves deep affection, passion, and a sense of personal connection with the brand, Carroll and Ahuvia (2006) [17] define love for a brand as the level of a person's intense emotional commitment to a specific trade name. Brand awareness alone will not help a brand generate sales; however, brand love drives the desire for a product and consumer action through the purchase. Brand managers are creating innovative ways to enhance their consumer-favoured brands [18]. Marketing aims to persuade the target market of the benefits of goods and services and win the target market's loyalty to the company.

Considering satisfaction as the result of a single transaction in terms of the link between the level of satisfaction and loyalty based on CSR and an enterprise's environmental concerns would be overly narrow. Health concerns and environmental sustainability are key factors shaping consumption habits in the 21st century. Incorporating health concerns and environmental sustainability into branding strategies is crucial to offering green products or services that benefit our planet. This approach ensures the well-being of customers and contributes to maintaining a green environment, providing a favorable atmosphere for human beings. Brand love has drawn increased attention due to its ability to increase consumer involvement, brand advocacy, commitment, and loyalty [19]. Because of this increased awareness, customers prefer natural goods [20]. The more socially responsible policies businesses implement, the more awareness consumers have about their brand.

According to Holbrook [21], people motivated by romantic love engage in subjective self-examination, which suggests that motivations may be crucial in creating brand love. Once in brand love, consumers find it challenging to alter their buying patterns to use goods from other companies. The key to a brand's long-

term development is comprehending the degree of client attitude. Customers may develop a passion for a brand if they choose a good product or service because it has the traits they desire in a product. Recent developments in consumer behaviour have given rise to the vivid idea of brand love, which is associated with enhanced brand loyalty, willingness to pay a premium price, and favourable word-of-mouth [22]. Providing consumers exceptional service and quality is the best way to win their loyalty and happiness. Although there seems to be a logical link between brand love and perceived social responsibility for customer satisfaction, there is little evidence to support this in the literature. We want to determine whether these factors may help us comprehend the genesis of brand love. As a result, the following hypothesis was developed:

H3: There is a significant relationship between brand love and perceived social responsibility toward customer satisfaction.

The Relationship between Brand Loyalty and Perceived Social Responsibility Toward Customer Satisfaction

Brand loyalty is a significant component of the brand dimension, which is evaluated based on the level of consumer engagement with a brand's products or services. This engagement is measured by considering the frequency of people's purchases [1]. Customers are more likely to be brand loyal when satisfied with the goods and services they receive from an enterprise. A person's feelings of joy from evaluating a product's performance against expectations are called "loyalty."

In the context of strategic brand management, it is argued that brand experience has a significant impact on consumers' brand loyalty. When consumers have positive, satisfying, and memorable experiences with a brand, it tends to enhance their emotional connection, trust, and attachment to the brand. As a result, they are more likely to exhibit higher levels of brand loyalty. Moreover, the strength of emotions also reflects the degree to which consumers perceive whether a product meets their expectations. Customers will remain loyal to a brand if they believe the product offers good quality and affordable pricing. Brand-loyal customers do not assess the brand but confidently purchase [2]. Therefore, enterprises might also target customers with severe environmental and social responsibility concerns to encourage them to adopt their products or services because of their loyalty. Customers continue to choose the brand they are devoted to and trust, even when other companies provide the product for less money or with superior quality [23]. Brand equity includes a significant amount of brand loyalty. The customer's consistent purchasing behaviour demonstrates their brand loyalty. Customers will feel stronger loyalty to a brand if it meets their expectations. Brand loyalty and the perceived quality to repurchase the same brand may in fact, be inversely correlated. Therefore,

based on the synthesis analysis above, the following is hypothesised:

H4: There is a significant relationship between brand loyalty and perceived social responsibility toward customer satisfaction.

The Relationship between Perceived Social Responsibility and Customer Satisfaction

The intensity of feelings also indicates the level of consumers' perception of whether a product meets their expectations. Consumers' perception of an entity's services as possessing overall excellence or superiority is known as "perceived quality" [24]. The perception of consumers regarding good products or services is crucial as it influences their acceptance based on the perceived quality. Moreover, Customer satisfaction may initially seem like a straightforward concept: if customers feel positively about the products or services, they are likely to be satisfied. The perceived social responsibility integrated into the products or services strategy has the potential to enhance customer satisfaction. Therefore, perceived quality meets consumers' high expectations and may lead to their satisfaction. According to Prasad [25], perceived quality significantly influences customer loyalty. Therefore, in considering the brand of a particular enterprise, this view is reflected and represented in several ways, for example, a product or service outperforming rivals. There are several ways to describe customer feelings and satisfaction levels. When customers perceive a company or brand to prioritize social responsibility, it can contribute to increased satisfaction. This perception is typically formed through the company's efforts to tackle environmental, social, or ethical issues within its operations, including the adoption of sustainable practices, engagement in community initiatives, and the maintenance of fair labor standards.

One measurement of a product's success with a specific brand is the frequency of repeat consumer purchases. Repurchase intent is one sign of a brand's fanatical following among consumers. Perceived quality is an important component of brand equity and affects a business's performance. According to Drew and Bolton [26], consumer satisfaction or unhappiness results from inconsistencies between past expectations and actual performance.

Environmental corporate social responsibility is derived from the concepts of environmental management and corporate social responsibility [27]. A firm's perceived environmental and social performance may raise the perceived value of its products and services. A company's perceived environmental and social performance contributes to the non-economic value of its products and services. As a result, favourable CSR linkages might provide additional perceived benefits to customers, such as consumer self-enhancement and self-esteem. It has demonstrated that a company's perceived environmental and social responsibility may favourably

impact consumer satisfaction. As a result, many consumers make their purchasing decisions based on necessity rather than value or exploitation. Based on the facts and synthesis analysis, the following hypothesis was developed:

H5: There is a significant relationship between perceived social responsibility and customer satisfaction.

Relationship between Customer Satisfaction and Loyalty

In marketing, a customer's emotional reaction to a transaction is referred to as "satisfaction." High customer satisfaction levels result in client retention; therefore, it is thought that they can affect repeat purchase behaviour. "Customer satisfaction" refers to how a consumer feels about the goods and services that are offered in relation to satisfying their desires for consumption. As stated by Casidy and Wymer [28], a customer's sense of connection manifests itself as loyalty rather than frequent business dealings. Customer satisfaction is considered an essential foundation for loyalty [29]. Therefore, it is important to have good products and services in the minds of consumers to satisfy them and earn their loyalty.

Customer loyalty was described by Tuu et al. [30], as a cumulative construct that included both actual consumption (action loyalty) and anticipated consumption (future repurchasing). "Customer loyalty" is defined as a firmly held determination to repeatedly purchase or use a preferred good or service, despite external factors, including marketing initiatives that would encourage switching behaviour [31]. Therefore, in the buying process, enterprises need to improve the satisfaction level of their customers. When customers are satisfied, they are likelier to return and become loyal.

Customer loyalty is positively impacted by customer satisfaction, according to a study by Morgan and Govender [32] and is recognized as a critical concept in marketing literature because it is the foundation of every firm [25]. Customer loyalty also represents a connection between a client and a business over the goods and services the business provides [33]. According to a study by Haron et al. [34], customer loyalty is substantially influenced by and positively affected by customer satisfaction. Based on this fact and the above discussion, the following hypothesis was developed:

H6: There is a significant relationship between customer satisfaction and customer loyalty.

Moderation of Perceived Environmental Responsibility between Perceived Social Responsibility and Customer Satisfaction

Corporate social responsibility and environmental concerns are crucial for our enterprises' sustainable development. The implementation of a green strategy in products or services entails the use of eco-friendly materials along with the integration of socially

responsible (SCR) activities within the business. This approach seeks to generate favorable outcomes for the environment and society, while also meeting the expectations and preferences of consumers. Corporate social responsibility and corporate sustainability have traditionally been used as umbrella terms to describe the principles of corporate environmental and social responsibility [3]. To add value to items where a customer's perceived value and reduced perceived risk impact the consumer's decision, businesses should consider environmentally friendly marketing, or so-called "green marketing" [31]. Customer satisfaction should increase as perceived value rises. As a result, to entice consumers to repurchase and demonstrate loyalty, it is necessary to implement perceived quality in the minds of consumers, as well as an environmental concern. To protect the environment, the customer's health and society, good quality products and services and environmental protection should be implemented in today's marketing policy.

Customer satisfaction should be fostered through the perception of value from a combination of delivery methods used for goods and services [35]. A post-purchase evaluation known as "satisfaction" comprises both affective and cognitive elements. Customer satisfaction evaluation processes cannot be divorced from service quality and perceived value. Because it helps a business increase revenue and satisfies and retain clients, service quality is widely regarded as crucial in many industries [36]. Therefore, enhancing the perception of products and services with good quality and environmental concerns increases loyalty as well as consumer motivation to repurchase.

According to the expectation – disconfirmation theory of customer satisfaction, customers are likelier to be satisfied if the product or service's performance exceeds or at least meets their expectations. A company's perceived social and environmental performance

constitutes a portion of the non-economic value of its goods and services. Therefore, the moderation of perceived environmental responsibility between perceived quality and customer satisfaction should be considered to increase consumer satisfaction and loyalty in the buying process.

The relationship between customer/company identification, customer satisfaction and loyalty, and perceived environmental and social responsibility has been thoroughly researched in the literature [3]. Previous research has demonstrated a favourable relationship between a company's perceived social and environmental responsibility and customer satisfaction [37-39]. From an organization's perspective, environmental and social responsibility can benefit the organization's appeal to stakeholders, including employees, clients, and investors. Therefore, there is a connection between perceived environmental responsibility, perceived quality, and customer satisfaction. Based on the facts and the above discussion, the following hypotheses were developed:

H7: Perceived environmental responsibility moderates the relationship between perceived social responsibility and customer satisfaction.

H8: There is a significant relationship between perceived environmental responsibility and customer satisfaction.

H9: There is a significant relationship between perceived environmental responsibility and customer loyalty.

Based on related studies and theory discussed above, the proposed research conceptual framework includes value, reasons for consumer satisfaction toward loyalty based on perceived environmental responsibility, and subjective norms in perceived social responsibility with brand dimension. The proposed research conceptual framework is presented in Fig. 1.

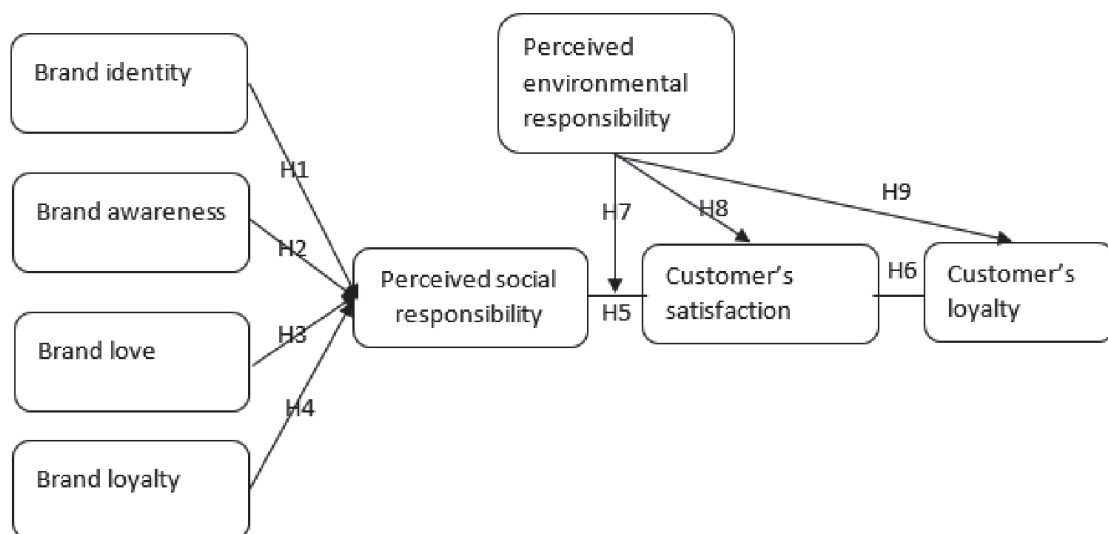


Fig. 1. Proposed research conceptual framework of the study.

Methodology

Eight variables were examined: brand identity (BID), brand awareness (BAW), brand love (BLO), brand loyalty (BLY), perceived environmental responsibility (PER), perceived social responsibility (PSR), customer satisfaction (CSA), and customer loyalty (CLO). A five-point Likert scale was used to measure the survey items, with responses ranging from “strongly disagree” (1) to “strongly agree” (5).

The items were adapted to measure the variables. The scale that was used to measure BID consisted of four items and is adapted from Rather [12]; the scale that was used to measure BAW consisted of five items and is adapted from Syaifuddin et al. [40]; BLO consisted of four items and is adapted from Pontinha and Coelho do Vale [41]; BLY consisted of four items and is adapted from Foroudi et al. [42]; PER comprised three items; the PSR scale contained four items, the CSA scale contained three items, and three items were used to measure CLO and are adapted from Moisescu and Gică [3]. items of this study were adapted to measure the variables because they should be suitable for the context of the study as well as the perspective of Vietnam in HCMC.

A questionnaire-based survey of customers in Ho Chi Minh City (HCMC) who used milk products from Vinalmilk, TH True Milk, Dalat Milk, and Bavi Milk was used to collect data. These are the most popular local brands of milk in Vietnam. This study gathered data from customers who purchased specific milk products, aiming to target individuals who were aware of the socially responsible activities of Vietnamese milk companies and their commitment to environmental sustainability. After collecting the data, it will be selected and cleaned to ensure high-quality inputs. This step involves removing unsuitable data, such as missing information and neglected responses, among other things. A total of 537 selected data samples remained to test the model. The study hypotheses were investigated using multiple regression analyses using Smart PLS (version 3.3.9) as well as descriptive statistics to explain the features of the research samples.

Findings

Demographic Profile

A total of 537 data samples were chosen for analysis. The demographics indicate respondents’ gender, age, qualification, and income (additional details are provided in the supplementary document in Table S1). In general, males comprised 63.9% of those who took the survey, females comprised 34.6%, and others made up 1.5%.

The initial step of our PLS-SEM analysis was to evaluate the measurements. According to the statistics, the observed variables BAW4 and BID1 are removed from the outer loading because the outer loading is less than 0.7. The second run was then applied. As a result of the outer loadings, all observed variables are greater than 0.7 and are significant in the model. The results are shown in Table 1.

As seen Table 1, Cronbach’s alpha of variables was greater than 0.7. Therefore, the variables met the requirements of the statistics. The composite reliability (CR) scales were all greater than 0.7, and the average variance extracted (AVE) scales were all greater than 0.5, so the scales were all convergent.

The Fornell-Larcker and heterotrait-monotrait ratio of correlations (HTMT) criteria were used to assess discriminant validity [43]. The results from the statistics regarding the Fornell-Larcker criterion indicate that the square root of AVE is larger than the correlations between the latent variables, so the discriminant is guaranteed. All HTMT values are less than 0.9, so discriminability is guaranteed [44].

Using Bootstrap 5000 samples, the results of the SEM are indicated next.

Table 2 indicated that, except for the PER->CLO effect, which is not statistically significant because the p-value is greater than 0.05, the remaining effects are all significant because the p-value is less than 0.05. Table 2 also illustrates that the impact of PER*PSR on CSA is significant, as evidenced by the p-value of 0.019, which is less than 0.05. Moreover, the variable PER plays a crucial role in regulating the impact of PSR on CSA. The coefficient of regression normalization

Table 1. Cronbach’s Alpha Coefficients, Composite Reliabilities, and Average Variances Extracted.

	Cronbach’s alpha	rhoA	Composite Reliability	Average Variance Extracted (AVE)
BAW	0.846	0.848	0.896	0.684
BID	0.846	0.848	0.907	0.764
BLV	0.826	0.830	0.885	0.657
BLY	0.834	0.837	0.900	0.750
CLO	0.835	0.840	0.901	0.752
CSA	0.847	0.847	0.907	0.765
PER	0.859	0.860	0.914	0.780
PSR	0.865	0.867	0.908	0.712

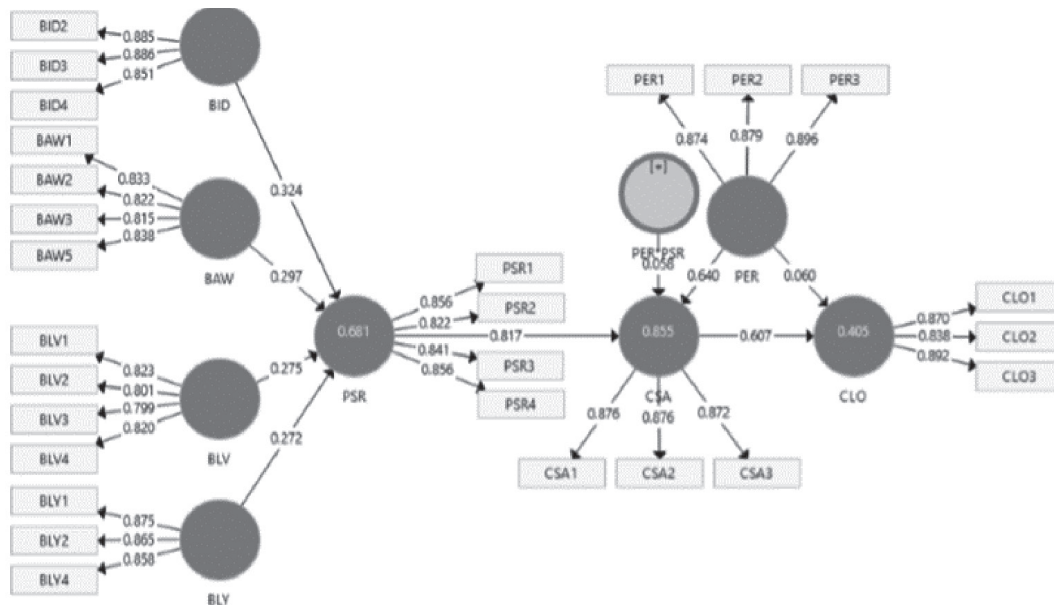


Fig. 2. Final diagram of SEM results.

Table 2. Mean, STDEV, T-Values, and P-Values.

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
BAW -> PSR	0.297	0.297	0.029	10.082	0.000
BID -> PSR	0.324	0.324	0.027	12.175	0.000
BLV -> PSR	0.275	0.277	0.026	10.460	0.000
BLY -> PSR	0.272	0.270	0.025	10.955	0.000
CSA -> CLO	0.607	0.610	0.039	15.572	0.000
PER -> CLO	0.060	0.059	0.049	1.232	0.218
PER -> CSA	0.640	0.640	0.030	21.606	0.000
PER*PSR -> CSA	0.058	0.057	0.025	2.350	0.019
PSR -> CSA	0.817	0.817	0.028	29.294	0.000

of the regulatory effect is $0.058 > 0$; therefore, when the PER increases, the PSR has a stronger impact on the CSA.

According to the data analysis in Table 2, there was a significant association between the variables, and all eight hypotheses were validated ($p = 0.005$). Only one hypothesis (H9: PER->CLO) is not statistically significant because the p-value is greater than 0.05. Given the evidence, the model of this research is significant.

In the original sample, BID has an effect on PSR of approximately 0.324, BAW has an effect on PSR of approximately 0.297, BLV has an effect on PSR of approximately 0.275, BLY has an effect on PSR of approximately 0.272, PSR has an effect on CSA of approximately 0.817, CSA has an effect on CLO of approximately 0.607, PER*PSR has an effect on CSA of approximately 0.058, PER has an effect on CSA of

approximately 0.640 and PER does not affect CLO ($P\text{-value} > 0.05$). The multicollinearity also represented by VIF, there is no multicollinearity in case VIF values are less than 5 [45]. Table 3 shows that all inner VIF values are less than 5, so the model has no multicollinearity.

Discussion

Past studies and theories have shown that brands and the information provided about them influence consumers' perceptions of a brand and a company's goods [46]. The results of this study indicate that the brand dimensions include brand identity, brand awareness, brand love, and brand loyalty and that perceived social responsibility affects Customer's satisfaction toward Customer's loyalty.

Table 3. Inner VIF values.

	BAW	BID	BLV	BLY	CLO	CSA	PER	PER*PSR	PSR
BAW									1.324
BID									1.247
BLV									1.328
BLY									1.293
CLO									
CSA						1.259			
PER						1.259	1.101		
PER*PSR							1.064		
PSR							1.048		

The effect of brand dimensions on consumer satisfaction is substantial. The results indicate the following:

- Brand identity affects perceived social responsibility toward customer satisfaction of approximately 0.324.
- Brand awareness has an effect on perceived social responsibility toward customer satisfaction of approximately 0.297.
- Brand love has an effect on perceived social responsibility toward customer satisfaction of approximately 0.275.
- Brand loyalty has an effect on perceived social responsibility toward customer satisfaction of approximately 0.272.

Therefore, it is crucial to integrate brand dimensions into the branding process in the milk industry to achieve customer satisfaction and loyalty. The perceived social responsibility acts as a mediator between brand dimensions and customer satisfaction by influencing their perception towards social responsibility. Empirical studies, such as Rivera et al. [47], have revealed that CSR associations have a direct positive impact on loyalty and an indirect impact by enhancing brand awareness and consumer satisfaction. Thus, milk industry players should adopt a social responsibility policy that includes community development to encourage customers to purchase products or services. The incorporation of favorable brand dimensions that match consumers' expectations and demands in Vietnamese milk enterprises is crucial in driving customer satisfaction and loyalty, as demonstrated by the impact of brand dimensions on customer satisfaction. Customers are more likely to exhibit positive support and advocacy behaviors for brands that provide positive experiences across key brand dimensions and participate in environmental and social responsibility initiatives.

The findings by Moisescu and Gică underscore the significance of environmental and social responsibility initiatives and appropriate strategies and policies in promoting customer loyalty. Similarly, Gong et al. [48] have shown that CSR strengthens the

relationship between a company's image and long-term purchasing intentions. Our study results indicate that PSR has a significant effect on CSA, with a coefficient of approximately 0.817. Customers tend to purchase products and services and become loyal to the milk corporation's brand when they perceive that the corporation demonstrates responsibility towards customers, community, and the environment. Additionally, customer awareness of CSR affects the reputation of the milk corporation. Therefore, the milk corporation that adopts social responsibility policies tends to enjoy a stronger reputation among its target customers, ultimately resulting in increased customer satisfaction and loyalty. Furthermore, customers tend to exhibit loyalty and satisfaction towards brands that care about community, environment, and employees' lives outside the business.

The results of this study also indicate that perceived environmental responsibility has a moderating effect of approximately 0.058 between perceived social responsibility and customer satisfaction. In a previous study, González-Rodríguez et al. [49] that upper management should adopt sustainability policies to achieve environmental, social, and economic success. When the milk corporation applies perceived environmental and social responsibility in its business, management, and manufacturing processes, it enhances customer satisfaction, which leads to customer loyalty. Based on the research results, this study suggest that milk companies in Vietnam apply CSR policies to the community, such as charity support programs and humanistic policies on social support. These programmes might include using office waste, building waste and resource recovery to create products and materials. Within the enterprise, policies on CSR for employees are also necessary, such as programmes that care for employees outside of work, support training policies and encourage promotion. These increase employee job satisfactions and help them feel secure enough to devote themselves to the sustainable development of human resources for the business.

The results showed that PER had an effect on CSA of approximately 0.640 in this study. According to the findings of this study, the greater the environmental responsibility of the milk company in question, the greater the customer satisfaction. In addition, Zheng et al. [50] indicate that environmental concerns significantly impact consumer behaviour in terms of green product purchases. In other words, the greater a company's concern for environmental sustainability, the likelier customers will purchase green items. In this era of focus on the environment and ethical issues, customers have a "green purchasing" attitude for products and services – buying things that are eco-friendly, recyclable, or biodegradable and avoiding harmful products to the environment and community. The milk corporation in Vietnam should be conscious and practise social responsibility and environmental concerns for sustainable development. Excellent social responsibility ensures not only accountability to consumers and their goods but also environmental responsibility, which corporations should adhere to. If the milk corporation is concerned about its business and manufacturing, the natural environment and social community motivate customers to purchase. Vietnamese milk corporations should have policies for protecting the environment in their production strategies. For example, they could use clean raw materials and grow green materials to make production materials that are safe for the environment and do not harm people's health.

This study tested the relationship between perceived environmental responsibility and customer loyalty; the results show that this hypothesis is not supported ($p\text{-value} = 0.218 > 0.05$). This study echoes the findings of Moisescu and Gică (2020) [3], who suggest that perceived environmental responsibility has no direct influence on consumer loyalty.

The results of this study indicate that CSA has an effect on CLO of approximately 0.607. In other studies, such as Javed et al. [51], the results emphasise the significance of consumer satisfaction, which leads to brand loyalty. Leclercq-Machado et al. [52] also state that customer satisfaction is universally acknowledged as leading to customer loyalty. Customer loyalty is a strong commitment to repurchase a product or service in the future, even though external forces may influence consumers to switch from one supplier to another. Therefore, based on ours and a related study, the results indicate the significance of Vietnamese milk corporations in increasing consumer satisfaction to create brand loyalty.

Conclusions

Given the model's explanatory and predictive capacities, the findings of this study have both theoretical and practical implications. The results of this study indicated that the role of brand dimensions, with the mediating effect of perceived social responsibility,

has a positive effect on customer satisfaction with customer loyalty.

This research also demonstrated that the moderator of perceived environmental responsibility positively affects the relationship between perceived social responsibility and customer satisfaction. However, the results indicate that perceived environmental responsibility does not positively affect customer loyalty, but does affect customer satisfaction. Therefore, the milk industry in Vietnam should apply green policies in its business, management, and manufacturing sectors, such as reasonable compensation and benefits, strong community development policies, and environmental concern in its manufacturing process. Green policies may benefit their employees, and good environmental policies, products, and services may protect customers' health.

This study also contributes to the sustained development of theories on the role of brand dimensions on perceived social responsibility toward customer loyalty. Enhancing the mediating role of perceived social and environmental responsibility will improve customer satisfaction with the milk industry. For this reason, enterprises in the milk sector should use brand dimension strategies to earn a position of trust in the eyes of their consumers. Businesses should be concerned with the environment and local communities and actively communicate this concern to their customers.

Limitations and Future Studies

The research findings have certain limitations due to time constraints, financial resources, and other subjective factors. Firstly, the study suffered from a small sample size, which undermined the level of representativeness and generalizability of the research. To address this limitation, future investigations should aim to expand the data collection process and gather a larger sample for analysis.

Moreover, this study primarily focused on brand-related factors and neglected to thoroughly explore the dimensions of social responsibility and environmental concerns beyond their impact on customer satisfaction. To enhance the comprehensiveness of future research, it is crucial to examine and develop potential factors that were not encompassed in the present study.

Furthermore, the study did not separate the perception of gender in the brand dimension from environmental concern and corporate social responsibility. In future studies, it would be beneficial to test the differences in the perception of environmental concern and corporate social responsibility in the branding strategy by gender, in order to motivate them to buy and foster loyalty to a particular brand in the milk market.

Lastly, it is advisable for subsequent research to encompass a broader scope by conducting studies in various geographical regions and cities within Vietnam. This approach would facilitate comparative analyses

of the research subjects, providing a more comprehensive and nuanced understanding of the interplay between brand dimensions, environmental concerns, and corporate social responsibility. Additionally, considering different perspectives arising from diverse attitudes and cultural influences across regions would enrich the findings of the study.

By addressing these limitations and expanding the scope of investigation, future research endeavors can overcome the constraints encountered in the current study, contributing to a more robust academic understanding of the subject matter.

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Conflict of Interest

The authors declare no conflict of interest.

References

- NOVIXOXO J.D., POMEGBE W.W.K., DOGBE C.S.K. Market orientation, service quality and customer satisfaction in the public utility companies. *European Journal of Business and Management*, **10** (30), 37, **2018**.
- VAZIFEHDOOST H., NEGAHDARI A. Relationships of Brand Awareness, Brand Association and Perceived Quality with Brand Loyalty and Repurchase Intention. *Case Studies Journal*, **7** (1), 45, **2018**.
- MOISESCU O.I., GICĂ O.A. The Impact of Environmental and Social Responsibility on Customer Loyalty: A Multigroup Analysis among Generations X and Y. *International Journal of Environmental Research and Public Health*, **17** (18), 17186466, **2020**.
- SALIM M., RODHIAH R. The Effect of Perceived Quality, Customer Satisfaction, Corporate Image, Customer Experience on Customer Loyalty. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, **5** (1), 2422, **2022**.
- VUONG T.K., BUI H.M. The role of corporate social responsibility activities in employees' perception of brand reputation and brand equity. *Case Studies in Chemical and Environmental Engineering*, 100313, **2023**.
- WESTABY J.D. Behavioral reasoning theory: Identifying new linkages underlying intentions and behavior. *Organizational behavior and human decision processes*, **98** (2), 97, **2005**.
- RAMADHAN R. The Effect Of Brand Awareness And Perceived Quality On Customer Satisfaction Of Starbucks Coffee In Malang. *Jurnal Ilmiah Mahasiswa FEB*, **6** (1), **2017**.
- LAM S.K., AHEARNE M., MULLINS R., HAYATI B., SCHILLEWAERT N. Exploring the dynamics of antecedents to consumer – brand identification with a new brand. *Journal of the Academy of Marketing Science*, **41** 234, **2013**.
- HE H., LI Y., HARRIS L. Social identity perspective on brand loyalty. *Journal of business research*, **65** (5), 648, **2012**.
- SO K.K.F., KING C., HUDSON S., MENG F. The missing link in building customer brand identification: The role of brand attractiveness. *Tourism Management*, **59** 640, **2017**.
- TUŠKEJ U., PODNAR K. Consumers' identification with corporate brands: Brand prestige, anthropomorphism and engagement in social media. *Journal of Product & Brand Management*, **27** (1), 3, **2018**.
- RATHER R.A. Investigating the Impact of Customer Brand Identification on Hospitality Brand Loyalty: A Social Identity Perspective. *Journal of Hospitality Marketing & Management*, **27** (5), 487, **2017**.
- SALLAM M.A., WAHID N.A. The effects of satisfaction and brand identification on brand love and brand equity outcome: the role of brand loyalty. *European Journal of Business and Social Sciences*, **4** (9), 42, **2015**.
- SAMUDRO A., SUMARWAN U., SIMANJUNTAK M., YUSUF E. Assessing the effects of perceived quality and perceived value on customer satisfaction. *Management Science Letters*, **10** (5), 1077, **2020**.
- PADHY S.K., SAWLIKAR R. The role of brand equity and brand awareness on consumers' purchase intention. *International Journal of Business and Management Invention*, **7** (1), 12, **2018**.
- CUESTA-VALIÑO P., RODRÍGUEZ P.G., NÚÑEZ-BARRIOPEDRO E. The impact of corporate social responsibility on customer loyalty in hypermarkets: A new socially responsible strategy. *Corporate Social Responsibility and Environmental Management*, **26** (4), 761, **2019**.
- CARROLL B.A., AHUVIA A.C. Some antecedents and outcomes of brand love. *Marketing letters*, **17** 79, **2006**.
- PALUSUK N., KOLES B., HASAN R. 'All you need is brand love': a critical review and comprehensive conceptual framework for brand love. *Journal of Marketing Management*, **35** (1-2), 97, **2019**.
- MOSCATO E.M., MACHIN J.E. Mother natural: Motivations and associations for consuming natural foods. *Appetite*, **121** 18, **2018**.
- BINNINGER A.-S. Perception of naturalness of food packaging and its role in consumer product evaluation. *Journal of Food Products Marketing*, **23** (3), 251, **2017**.
- HOLBROOK M.B. Romanticism, introspection, and the roots of experiential consumption: Morris the epicurean. *Consumption, Markets and Culture*, **1** (2), 97, **1997**.
- STA N., ABBASSI R., ELFIDHA C. The effect of brand love on brand performance: The role of brand loyalty. *Journal of Business and Management Research*, **11** 314, **2018**.
- POTURAK M., SOFTIC S. Influence of social media content on consumer purchase intention: Mediation effect of brand equity. *Eurasian Journal of Business and Economics*, **12** (23), 17, **2019**.
- SNOJ B., KORDA A.P., MUMEL D. The relationships among perceived quality, perceived risk and perceived product value. *Journal of product & brand management*, **13** (3), 156, **2004**.
- PRASADH R.R. Examining the roles of perceived quality and customer satisfaction as predictors of customer loyalty in the Indian e-banking context. *Journal of Management Research*, **18** (3), 176, **2018**.
- DREW J.H., BOLTON R.N. The structure of customer satisfaction: effects of survey measurement. *The Journal of*

- Consumer Satisfaction, Dissatisfaction and Complaining Behavior, **4** 21, **1991**.
27. CHUANG S.-P., HUANG S.-J. The effect of environmental corporate social responsibility on environmental performance and business competitiveness: The mediation of green information technology capital. *Journal of business ethics*, **150** 991, **2018**.
 28. CASIDY R., WYMER W. A risk worth taking: Perceived risk as moderator of satisfaction, loyalty, and willingness-to-pay premium price. *Journal of Retailing and Consumer Services*, **32** 189, **2016**.
 29. OTHMAN M., KAMAROHIM N., NIZAM F.M. Brand Credibility, Perceived Quality and Perceived Value: A Study of Customer Satisfaction. *International Journal of Economics & Management*, **11** 763, **2017**.
 30. TUU H.H., OTTAR OLSEN S., THI THUY LINH P. The moderator effects of perceived risk, objective knowledge and certainty in the satisfaction – loyalty relationship. *Journal of Consumer Marketing*, **28** (5), 363, **2011**.
 31. MARAKANON L., PANJAKAJORNSAK V. Perceived quality, perceived risk and customer trust affecting customer loyalty of environmentally friendly electronics products. *Kasetsart Journal of Social Sciences*, **38** (1), 24, **2017**.
 32. MORGAN S., GOVENDER K. Exploring customer loyalty in the South African mobile telecommunications sector. *Cogent Business & Management*, **4** (1), 1273816, **2017**.
 33. SMITH T.A. The role of customer personality in satisfaction, attitude-to-brand and loyalty in mobile services. *Spanish Journal of Marketing - ESIC*, **24** (2), 155, **2020**.
 34. HARON R., ABDUL SUBAR N., IBRAHIM K. Service quality of Islamic banks: satisfaction, loyalty and the mediating role of trust. *Islamic Economic Studies*, **28** (1), 3, **2020**.
 35. CHANG T.Y., LIN Y.C. The Effects of Atmosphere on Perceived Values and Customer Satisfaction toward the Theme Hotel: The Moderating Role of Green Practice Perception. *Sustainability*, **14** (15), 14159153, **2022**.
 36. HAPSARI R., CLEMES M., DEAN D. The Mediating Role of Perceived Value on the Relationship between Service Quality and Customer Satisfaction: Evidence from Indonesian Airline Passengers. *Procedia Economics and Finance*, **35** 388, **2016**.
 37. HE H., LI Y. CSR and Service Brand: The Mediating Effect of Brand Identification and Moderating Effect of Service Quality. *Journal of Business Ethics*, **100** (4), 673, **2011**.
 38. PÉREZ A., DEL MAR GARCÍA DE LOS SALMONES M., RODRÍGUEZ DEL BOSQUE I. The effect of corporate associations on consumer behaviour. *European Journal of Marketing*, **47** (1/2), 218, **2013**.
 39. YUEN K.F., THAI V.V., WONG Y.D. Are customers willing to pay for corporate social responsibility? A study of individual-specific mediators. *Total Quality Management & Business Excellence*, **27** (7-8), 912, **2016**.
 40. SYAIFUDDIN, ANDRIE Y., HARIRI A. The Influence of Brand Image, Awareness and Customer Satisfaction in Increasing Loyalty And Choosing Islamic Banking In Indonesia. *East Asian Journal of Multidisciplinary Research*, **1** (4), 671, **2022**.
 41. PONTINHA V.M., COELHO DO VALE R. Brand love measurement scale development: an inter-cultural analysis. *Journal of Product & Brand Management*, **29** (4), 471, **2020**.
 42. FOROUDI P., JIN Z., GUPTA S., FOROUDI M.M., KITCHEN P.J. Perceptual components of brand equity: Configuring the Symmetrical and Asymmetrical Paths to brand loyalty and brand purchase intention. *Journal of Business Research*, **89** 462, **2018**.
 43. HENSELER J., RINGLE C.M., SARSTEDT M. A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, **43** (1), 115, **2015**.
 44. FORNELL C., LARCKER D.F. Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, **18** (1), 39, **1981**.
 45. HAIR J.F., RINGLE C.M., SARSTEDT M. PLS-SEM: Indeed a Silver Bullet. *Journal of Marketing Theory and Practice*, **19** (2), 139, **2011**.
 46. ATTIA ALI A.A.E.-K. The impact of brand dimensions on customer satisfaction with the brand: An empirical study on mobile phone customers in Egypt. *European Journal of Management and Marketing Studies*, **5** (3), 66, **2020**.
 47. RIVERA J.J., BIGNE E., CURRAS-PEREZ R. Effects of Corporate Social Responsibility on consumer brand loyalty. *Revista Brasileira de Gestão de Negócios*, **21** 395, **2019**.
 48. GONG Y., XIAO J., TANG X., LI J. How sustainable marketing influences the customer engagement and sustainable purchase intention? The moderating role of corporate social responsibility. *Frontiers in Psychology*, **14**, **2023**.
 49. GONZÁLEZ-RODRÍGUEZ M.R., DÍAZ-FERNÁNDEZ M.C., BIAGIO S. The perception of socially and environmentally responsible practices based on values and cultural environment from a customer perspective. *Journal of Cleaner Production*, **216** 88, **2019**.
 50. ZHENG G.-W., SIDDIK A.B., MASUKUJAMAN M., ALAM S.S., AKTER A. Perceived Environmental Responsibilities and Green Buying Behavior: The Mediating Effect of Attitude. *Sustainability*, **13** (1), 13010035, **2021**.
 51. JAVED S., RASHIDIN M.S., JIAN W. Predictors and outcome of customer satisfaction: moderating effect of social trust and corporate social responsibility. *Future Business Journal*, **7** (1), 1, **2021**.
 52. LECLERCQ-MACHADO L., ALVAREZ-RISCO A., ESQUERRE-BOTTON S., ALMANZA-CRUZ C., DE LAS MERCEDES ANDERSON-SEMINARIO M., DEL-AGUILA-ARCENALES S., YÁÑEZ J.A. Effect of Corporate Social Responsibility on Consumer Satisfaction and Consumer Loyalty of Private Banking Companies in Peru. *Sustainability*, **14** (15), 9078, **2022**.

Supplementary Table

Table S1. Demographic profile.

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
	Male	343	63.9	63.9	63.9
	Female	186	34.6	34.6	98.5
	Other	8	1.5	1.5	100.0
	Total	537	100.0	100.0	
Age					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	22-30	59	11.0	11.0	11.0
	31-40	186	34.6	34.6	45.6
	41-50	177	33.0	33.0	78.6
	Above 51	115	21.4	21.4	100.0
	Total	537	100.0	100.0	
Qualification					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Certificate	71	13.2	13.2	13.2
	Diploma	149	27.7	27.7	41.0
	Bachelor	251	46.7	46.7	87.7
	Master	58	10.8	10.8	98.5
	Doctoral degree	8	1.5	1.5	100.0
	Total	537	100.0	100.0	
Income					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5-10 million VND	80	14.9	14.9	14.9
	11-15	105	19.6	19.6	34.5
	16-20	122	22.7	22.7	57.2
	21-25	112	20.9	20.9	78.0
	26-30	61	11.4	11.4	89.4
	Above 30	57	10.6	10.6	100.0
	Total	537	100.0	100.0	

