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Factors affecting consumers' purchase decisions on green products in a developing market

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Abstract: As consumers are reducing their usage of environmentally destructive resources owing to increasing concerns about environmental issues, businesses in an environmentally friendly market can exploit the resulting expansion opportunities. The most crucial factors affecting consumers' purchasing decisions regarding green products are environmental awareness and social influences. Generally, the crucial factors that positively affect consumers' intentions to purchase green products include social influence, knowledge of environmental issues, environmental attitude, marketing communication, and product design and variety. Based on the results, we recommend the following for organisations that do not promote green products: the establishment of strict regulations on environmentally friendly products: the production of biodegradable products, the emphasis on local ingredients, the exploitation of various media to increase consumers' awareness on green products and campaigns to reduce, refrain and stop the usage of environmentally harmful products.

Keywords: green product; purchasing decision; developing market; environmentally friendly product; marketing communication; product design; environmental awareness; social influence; environmental issues; biodegradable products.

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1 Introduction

Continuous population growth facilitates the expansion of economic activities, including production and service delivery. These activities consume considerable energy and resources, accounting for the degradation and depletion of natural resources, which are the main raw materials for production and consumption (Department of International Trade Promotion, 2013). Improper management of these activities will generate substantial waste that will cause environmental issues, such as water, noise, and air pollution, which may cause further severe natural disasters (Nisaisuk and Donkwa, 2015). From previous studies, it was found that despite consumers having a positive attitude toward the environment or green products, there remains a lack of corresponding behaviour in purchasing such products. Only a small percentage of consumers actually engage in purchasing them (Morwitz et al., 2007; Tracy and Oskamp, 1984). Even though the government has campaigned for environmental consciousness among the populace, there persists an issue wherein consumers refuse to buy green products due to scepticism about their environmental friendliness (Piriyakul et al., 2018). This reluctance can also stem from perceived quality issues in relation to the product's price, compounded by difficulties in accessing green products which are often limited to urban areas (Roberts, 1996). Therefore, there has been a collaboration between the government and the private sector that is paying great attention and awareness to environmental issues, growth must be achieved in an environmentally friendly manner that integrates economic, social and environmental dimensions for economic and social development while preserving the environment and natural resources (Office of Natural Resource and Environmental Policy and Planning, 2018). Thus, the behaviours of producers, consumers and government policies reflect environmental concern, as well as environmental responsibility and awareness regarding the quality of life for the next generation. The impacts of the production and consumption of goods, e.g., pollution from vehicles or waste from the production processes, have been carefully monitored. Therefore, the utilisation of environmentally friendly products, including recycled items, is considered part of sustainable development (Leerattanakorn, 2013).

The changes in consumer behaviour mainly focus on environmental issues and the reduction of the use of environmentally toxic resources. It represents a new way of life, ushering in the era of green marketing in which products must satisfy consumers' needs (green products or products without chemical additives) and the employed production technology must generate less pollution and be recyclable (Leerattanakorn, 2013). From a survey conducted in Thailand, it was discovered that green products enjoy popularity, and the majority of Thai consumers hold a positive attitude toward adjusting their lifestyles to embrace greater responsibility and environmental consciousness. Consumers exhibit a behaviour aimed at reducing the use of environmentally harmful resources.

They consciously opt for products that contribute minimally to pollution in society (Meesupthong, 2018). Therefore, Small and Medium Enterprises (SMEs) must improve and adjust their business practices according to the sustainable development goal (SDG) guidelines to expand their business in a market that focuses on environmental friendliness (Sapsanguanboon and Faijaidee, 2019). Additionally, many countries worldwide are very critical of environmental protection; they deploy environmentally friendly resources, including consumers with healthy behaviours, by selecting healthy foods and products that are environmentally friendly (Boonpienpon, 2017; Energy Policy and Planning Office, 2019). As the global food business has focused on health and protein instead of meat and new protein sources, as well as healthy drinks, the Thai food business is currently worth approximately 2.6 trillion Baht (Marketeer Online, 2019). Thus, the implementation of the concept of producing green products to achieve that goal requires human resources with the vision of staying up-to-date with change and understanding the importance of adapting to the existing situation, including the concept of green products, which is constantly improving, for the actualisation of sustainable performance in terms of profitability and cost-effectiveness. Hence, despite existing research on green consumer behaviour, the determinants influencing the purchase of green products remain relatively limited. The researcher acknowledges the critical significance of business organisations diversifying into the green product industry, which constitutes a pivotal focus of this study.

The outcomes of this research endeavour will furnish valuable insights into the factors considered pivotal by consumers when making purchasing decisions concerning green products. These insights will enable businesses to tailor their products or services in alignment with consumer preferences, thereby fostering profitability and sustainable competitiveness. In pursuit of these objectives, the following Research Questions (RQs) have been formulated:

- *RQ1*: What are the crucial factors that affect consumers' purchasing decisions regarding green products?
- *RQ2*: How do the crucial factors affect consumers' intentions to purchase green products?

2 Theoretical background

2.1 Green product

Compared with other products, green products exhibit unique environmental-conserving properties. Green products do not contain toxic substances, are recyclable, conserve natural energy and require fewer containers. Furthermore, they do not harm the environment, and their production processes do not require the use of preserved animals (Amornchai, 2009). These products are obtained via processes and technologies that consider their environmental impacts *ab initio*, namely the selection of raw materials for production, the selection of suitable energy and technology for every production process and the awareness of the environmental impact after the expiration of the products (Patanadul and Jedsadalug, 2016). An organisation can attract consumers to utilise a green product by exploiting the concept of creating a unique selling point and differentiation (Jongsawat et al., 2018).

Environmentally conscious consumers are those who only patronise goods and services that do not affect the environment. They distinguish themselves from others by contributing to environmental conservation, supporting green products and maintaining healthy lifestyles despite rising costs (Kantaputra, 2011). The factors affecting the consumers' decision to purchase green products are as follows:

Table 1 Factors affecting consumers' decisions to purchase green products

<i>Factors</i>	<i>Activities</i>	<i>References</i>
1. Social influence	<ul style="list-style-type: none"> • Purchasing green products makes you feel like you are playing your part in saving the environment. • Social acceptance. • Being a good example for the youth and others in the society. 	Rattanangkul (2009) and Kianpour et al. (2014).
2. Social ethics of producers	<ul style="list-style-type: none"> • The organisation has a policy or production process that does not harm the environment. • Organising activities that promote the efficient utilisation of natural resources. 	Kianpour et al. (2014); Kong et al. (2014) and Nisaisuk and Donkwa (2015).
3. Environmental knowledge	<ul style="list-style-type: none"> • Climate crisis or global warming. • Substantial contamination of the climate. • The global loss of biodiversity due to the extinction of plants and animals. 	Leerattanakorn (2013); Kianpour et al. (2014); Nisaisuk and Donkwa (2015) and Ali and Ahmad (2016).
4. Knowledge of green products	<ul style="list-style-type: none"> • Properties or components of the environmentally friendly packaging of the product. • Wastes from production or production processes are recycled into raw materials for further production. 	Kianpour et al. (2014); Patanadul and Jedsadalug (2016) and Sun and Wang (2020).
5. Environmental awareness	<ul style="list-style-type: none"> • Personal awareness of the environmental impact of the product. 	Agyeman (2014); Kianpour et al. (2014); Nisaisuk and Donkwa (2015); Ali and Ahmad (2016) and Suwandecha (2016).
6. Environmental attitude	<ul style="list-style-type: none"> • Purchasing environmentally friendly products makes sense regarding the reduction of waste. • Purchasing environmentally friendly products makes sense regarding the reduction of global warming. • Purchasing environmentally friendly products makes sense regarding. • Environmental preservation. 	Leerattanakorn (2013) and Nisaisuk and Donkwa (2015). Patanadul and Jedsadalug (2016); Suwandecha (2016); Wei et al. (2017); Sun and Wang (2020) and Li et al. (2021).

Table 1 Factors affecting consumers' decisions to purchase green products (continued)

<i>Factors</i>	<i>Activities</i>	<i>References</i>
7. Marketing communications	<ul style="list-style-type: none"> • Available description of the raw materials for production. • Communication that encourages the trials of green products. • Engaging in sustainable activities. 	Rattanangkul (2009); Leerattanakorn (2013); Kianpour et al. (2014); Kong et al. (2014); Sheikh et al. (2014); Nisaisuk and Donkwa (2015) and Sun and Wang (2020).
8. Environmental logos or labels	<ul style="list-style-type: none"> • Carbon footprint label. • Label revealing that the product has been assessed according to environmental standards. 	Rattanangkul (2009); Agyeman (2014); Kong et al. (2014); Sheikh et al. (2014); Nisaisuk and Donkwa (2015).
9. Product quality	<ul style="list-style-type: none"> • The production of products has a selection of quality materials. • Contains a mixture of materials that do not harm the environment. • The product does not contain harmful residues. • The product can be used safely. • Products can be used to meet the needs and objectives effectively. 	Rattanangkul (2009); Leerattanakorn (2013); Agyeman (2014); Sheikh et al. (2014); Nisaisuk and Donkwa (2015); Ali and Ahmad (2016) and Suwandecha (2016).
10. Design and variety of product	<ul style="list-style-type: none"> • The product design comes in a variety of beautiful colours. • There are many types of products and suitable for use. • Green product performance meets expectations and functions provide very good value. 	Rattanangkul (2009); Kong et al. (2014) and Sheikh et al. (2014).
11. Price	<ul style="list-style-type: none"> • The price of the product is similar to that of the general product. • Green products are priced slightly higher than conventional products. But the product is valuable for health or helps to conserve the environment. 	Rattanangkul (2009); Leerattanakorn (2013); Agyeman (2014); Sheikh et al. (2014); Ali and Ahmad (2016) and Sun and Wang (2020).

2.2 *Corporate social responsibility*

Corporate Social Responsibility (CSR) is a method that organisations deploy to conduct businesses for economic gain while contributing to social and environmental developments toward achieving a balanced and sustainable development (Noonin et al., 2016). The implementation of activities within and outside an organisation considers the impacts of such activities on society; thus, the available resources must be utilised to ensure maximum benefits to the organisation and the public (Yoon et al., 2006).

CSR is the adherence to social responsibility guidelines. The principles, policies, practices and guidelines of internationally recognised organisations reflect their values and how their applications as tools for formulating strategies in all operational processes of such organisations, indicating a clearer and more detailed social responsibility. CSR can ensure the happy coexistence of an organisation and society (Kulchorn and Boonchuan, 2012). The organisation acts as a hub that connects people from all sectors, including the business, government and public sectors, to participate in activities that are beneficial to society, the economy and the environment. This is a new form of good-governance-driven social innovation for sustainable development (Chaison and Kesapradist, 2017). The organisation must assume direct responsibilities for different groups of stakeholders. If the organisation builds a good relationship with its stakeholders by building credibility, trust, mutual respect and participation, it will gain societal recognition and operate continuously and sustainably, resulting in the creation of competitiveness (Chareonwongsak, 2019).

2.3 *Competitive advantage*

Acquiring a competitive advantage is a critical mission to business operations. Particularly, fierce competition exists in businesses nowadays. Therefore, business organisations must develop new strategies for implementing and improving the quality of their work. Therefore, competitive advantage refers to the discovery and development of resources that competitors do not have; it is the undertaking of actions that competitors cannot perform. Becoming the core or distinctive competency is considered a competitive advantage (Lalitsasivimol, 2016). Organisations exhibiting different capabilities from those of their competitors, a suitable competitive strategy and superior performance over those of their competitors would soon become industry leaders in the business (Sukglun et al., 2018). Healy et al. (2014) described a competitive advantage as a result of the following four key factors:

- 1 *Cost leadership*: an organisation's profit can be increased by increasing selling prices or reducing costs. Most successful organisations opt for cost reduction rather than increasing selling prices. Therefore, such organisations must boast of effective management.
- 2 *Differentiation*: this is the creation of value for a product or service. This must be constantly developed because consumers may not accept past values over time. As the existing products or services in the market are very similar, organisations must create distinct products or services from those of their competitors to satisfy their consumers' needs.
- 3 *Niche markets*: the main aim is to focus on niche consumers and markets. This can create competitive advantages for organisations as such organisations can define the main target groups of their products or services. They can adopt different technologies to satisfy the needs of market-specific groups of consumers.
- 4 *Quick response*: this refers to the flexibility to satisfy consumers' needs, offer products or services with unique characteristics and respond swiftly to consumer needs, including the ability to adjust according to the needs of such consumers.

3 Methodology

This is quantitative research in which the data were collected through questionnaire surveys. The research was divided into the following three parts:

- *Part 1:* Consumers' demographic characteristics.
- *Part 2:* Factors affecting consumers' purchasing decisions on green products (Brown and Dacin, 1997; Walsh and Bartikowski, 2013; Kim and Kim, 2016).
- *Part 3:* Recommendations for organisations fail to consider green products

It was observed that each question yielded an IOC value ranging from 0.67 to 1.00, surpassing the threshold of 0.50. This indicates that the questionnaire instrument is deemed accurate (Rovinelli and Hambleton, 1997). To ensure the clarity and consistency of the online questionnaire, a pilot test involved 30 participants. The finalised questionnaire demonstrated a Cronbach's alpha value of 0.907, exceeding the 0.7 threshold, signifying high reliability. Consequently, it is deemed ready for implementation in a full-scale research project (Tavakol and Dennick, 2011).

3.1 Sample and data

The research population, which comprised 66,171,439 people, includes general Thai consumers who purchased goods for personal or household purposes. A nonprobability sample was selected via purposive sampling using Yamane's (1973) equation, where the desired margin of error (0.05, 95% confidence level) of the sample size was 400.

Online questionnaires were distributed to Thai consumers in Thailand to collect data for the experiment. This method was chosen due to its convenience for the targeted participants, many of whom regularly utilise the internet. Additionally, the questionnaire was created using Google Forms, an online software tool.

3.2 Measures

The data were analysed by descriptive statistics, such as the mean and standard deviation, and inferential statistics using multiple regression analysis.

4 Data analysis and results

The results obtained from analysing the consumers' demographic characteristics from a sample of 400 questionnaires revealed the following: 62.00% and 38.00% of the consumers were females and males, respectively. Most of them were under 25-years-old (38.00%), 60.00% had Bachelor's degrees and 45.00% had incomes of less than THB15,000. The results are shown in Table 2.

Table 2 Demographic characteristics of the respondents

<i>Demographics</i>	<i>Characteristics</i>	<i>No. of respondents</i>	<i>Percentages (%)</i>
Gender	Male	152	38.00
	Female	248	62.00
Age	<25 years	152	38.00
	25–34 years	150	37.00
	35–44 years	61	15.00
	45–54 years	27	7.00
	≥55 years	10	3.00
Levels of education	Below Bachelor's degrees	59	15.00
	Bachelor's degrees	240	60.00
	Master's degrees or PhD.	101	25.00
Monthly income	<THB15,000	179	45.00
	THB15,000–24,999	90	22.00
	THB25,000–34,999	56	14.00
	>THB35,000	75	19.00

4.1 Mean and standard deviation of the factors that consumers choose to purchase green products

Table 3 presents the Mean and standard deviation of factors that consumers choose to purchase green products. It was observed that environmental awareness ($\bar{x} = 4.27$) and social influence ($\bar{x} = 4.22$) accounted for the most crucial factors. We also observed that the consumers would decide to purchase a green product if the manufacturer can design the products that meet their needs based on the above factors ($\bar{x} = 4.28$).

Table 3 Mean and standard deviation of the factors that consumers choose to purchase green products

<i>Factors</i>	<i>Mean</i>	<i>S.D.</i>
1. Social influence	4.22	0.811
2. Social ethics of producers	4.07	0.908
3. Environmental knowledge	3.97	0.888
4. Knowledge of green products	3.67	0.926
5. Environmental awareness	4.27	0.852
6. Environmental attitude	4.18	0.868
7. Marketing communications	4.11	0.842
8. Environmental logos or labels	3.71	1.108
9. Product qualities	3.95	0.939
10. Product design and variety	4.09	0.936
11. Price	3.98	0.897
12. A consumer will purchase a green product if the manufacturer designs the product to meet the consumer's needs based on the above factors	4.28	0.782

4.2 *Crucial factors affecting consumers' decisions to purchase green products*

The results are shown in Table 4.

Table 4 Crucial factors affecting consumers' decisions to purchase green products

<i>Factors</i>	β	<i>t</i>	<i>p-value</i>
1. Social influence (x_1)	0.179	3.924	0.000*
2. Social ethics of producers (x_2)	0.001	0.022	0.982
3. Environmental knowledge (x_3)	0.109	2.486	0.013*
4. Knowledge of green products (x_4)	-0.115	-2.520	0.012*
5. Environmental awareness (x_5)	0.048	0.893	0.372
6. Environmental attitude (x_6)	0.112	1.975	0.049*
7. Marketing communications (x_7)	0.135	2.687	0.008*
8. Environmental logos or labels (x_8)	-0.076	-1.552	0.121
9. Product quality (x_9)	0.096	1.840	0.067
10. Product design and variety (x_{10})	0.262	5.998	0.000*
11. Price (x_{11})	0.182	3.944	0.000*

Notes: * $P < 0.05$; $R = 0.715$; $R^2 = 0.511$; Adj. $R^2 = 0.497$; $F = 36.871$; Sig = 0.000.

Table 4 presents the crucial factors affecting consumers' decision to purchase green products. Overall, it was found that the independent variable had an influence on the dependent variable by 51.10%. And the results revealed that the factors that directly accounted for the consumers' positive decision to purchase a green product included social influence (x_1) ($\beta = 0.179$), environmental knowledge (x_3) ($\beta = 0.109$), environmental attitude (x_6) ($\beta = 0.112$), marketing communications (x_7) ($\beta = 0.135$), product design and variety (x_{10}) ($\beta = 0.262$) and price (x_{11}) ($\beta = 0.182$). However, knowledge of green products (x_4) ($\beta = -0.115$) negatively affected their decisions to purchase a green product. The following equation and Figure 1 further demonstrate the relationships:

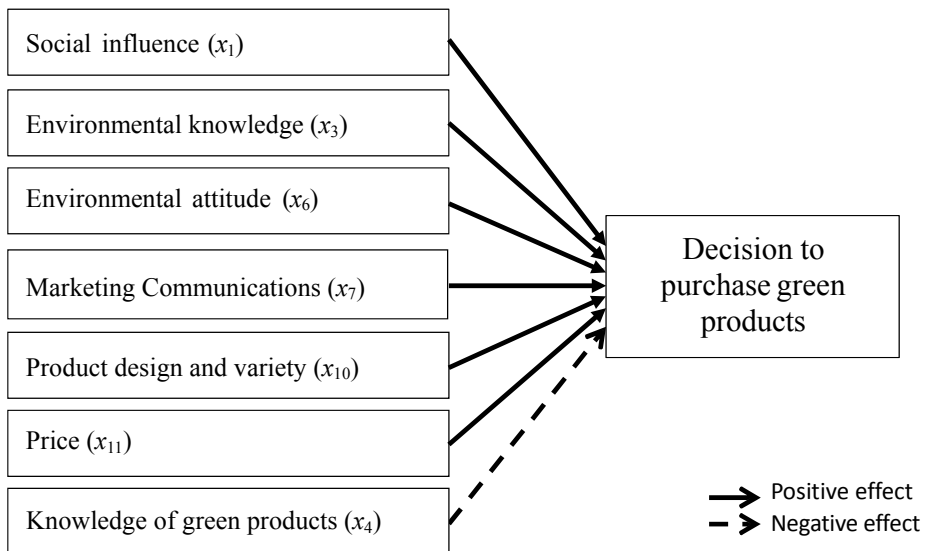
$$Y = 0.179(x_1) + 0.109(x_3) + 0.112(x_6) + 0.135(x_7) + 0.262(x_{10}) + 0.182(x_{11}) - 0.115(x_4)$$

where:

Y = Decision to purchase a green product.

B_i = Coefficient showing the effect of the change in X on Y .

x_i = Crucial factors affecting consumers' decisions to purchase green products.

Figure 1 Significant crucial factors affecting consumers' decisions to purchase green products

4.3 Recommendations for organisations fail to consider green products

Respondents suggested that rather than imposing penalties on organisations engaged in or selling environmentally harmful production processes, the government should establish clear laws or regulations regarding green products (23.93%). Business organisations should prioritise the use of local raw materials, considering those that can be biodegraded using natural methods (22.42%). Communication between government entities, businesses and consumers to enhance knowledge and understanding about green products was also recommended (17.63%). Additionally, there was a suggestion to refrain from purchasing and endorsing products that are not environmentally friendly (15.62%). Some respondents proposed that the government impose taxes on organisations producing environmentally damaging products (7.56%). Furthermore, recommendations included the provision of knowledge and guidelines by the government to assist businesses in adopting environmentally friendly operations (6.55%). Respondents also supported government initiatives such as tax reductions for organisations adapting their operations to be environmentally friendly (4.79%). Finally, a smaller percentage of respondents highlighted the scarcity of manufacturers and distributors of environmentally friendly products, leading to the use of conventional products for the sake of convenience (1.51%).

5 Discussion and conclusion

The results revealed that consumers will opt for green products if the manufacturers in a developing market can design such products to satisfy their needs based on the aforementioned factors. The most crucial factors for consumers include social influence, knowledge of environmental issues, environmental attitudes, marketing communications,

product design and variety and prices. These findings correspond to those reported by Chinsattapong (2018) regarding the factors affecting consumers' decisions to purchase environmentally friendly products, revealing that social-pressure factors and the value of environmentally friendly products correlated with purchasing decisions (Kaewma, 2017).

Environmental knowledge, as suggested by Peattie (1995), endeavours to elucidate purchasing behaviour linked to a consumer's awareness of ecological concerns. While challenging to substantiate, consumers well-versed in environmental matters tend to exhibit a proclivity towards eco-conscious purchasing behaviour.

Attitudes represent the emotional perspectives individuals hold towards a phenomenon and play a pivotal role in forecasting consumer behaviour (Abedi and Hasani, 2015). Environmental attitude delineates a perspective where considerations of environmental repercussions, desires, emotions and intentions towards environmental concerns are paramount (Abbasi et al., 2013). This disposition is directly influenced by personal experiences and external influences such as interactions with others and exposure to media content (Paco and Raposo, 2009). Assessments of environmental consequences often stem from concerns regarding a product's environmental impact and energy usage during production (Ramayah et al., 2010). An individual's level of environmental concern correlates with their attitude and subsequent behaviour (Newton et al., 2015), aligning with research findings.

Marketing strategies like eco-labelling, advertisements and green packaging serve as intuitive methods to communicate product attributes directly, offering information on production cycles, origins and environmental footprints – factors of significant consumer interest (Hao et al., 2019; Cerri et al., 2018). This concurs with research findings, emphasising that increased consumer knowledge about a product positively influences their willingness to purchase.

Moreover, advertising serves as another influential marketing method with expansive reach and stronger directional influence. The abstract appeal's promotional effect often surpasses that of concrete appeals, particularly when the attributes of green products align with consumer interests (Yang et al., 2015). Therefore, businesses should concentrate on disseminating the environmental values of green products to the public, highlighting their design concepts to showcase distinct personality and value compared to traditional products (Zhang and Dong, 2020).

A study on sustainable product innovation and changes in consumer behaviours revealed that sustainable product innovations impact sustainability design, which drives sustainable adoption, including the adoption of environmental features that are designed to meet consumers' expectations, according to the desired functionalities. Consumer behaviours towards the usage of environmentally friendly products can change (Pinkse and Bohnsack, 2021), as demonstrated by the research results, factor design and product variety.

Additionally, this study revealed that consumers will not patronise products from organisations that use raw materials or produce environmentally harmful products. Therefore, organisations must be able to design environmentally friendly products. Such products must be essential, versatile and durable and must be produced using environmentally friendly materials or production processes. They must differ from those of competitors and be sellable at reasonable prices.

The study's results revealed a surprising trend: a negative correlation between knowledge of green products and the selection of environmentally friendly products. However, contrary to this finding, Laroche et al. (2001) discovered that consumers

actively seek information about green products, aiming to understand their ingredients, environmental impact, product functionality and more. Moreover, they engage in knowledge-sharing activities with friends, learning from each other about green products (Khare, 2014; Cheah and Phau, 2011).

The responses revealed that only a few sellers currently offer green products in developing markets. Therefore, general products must be consumed for convenience. The increase in the quantity of green products is less than the consumer demand for them, and most green products are only available in urban areas. Therefore, if an organisation can do timely distribution of products to consumers, it will spur the consumers to opt for their products and this would result in sustainable competitiveness.

Zahoor and Gerged (2021) explained the link between stable social capital and environmental sustainability, as follows: business organisations or SMEs must formulate policies to promote environmental sustainability and entry into emerging markets, including the development and search for resources that competitors lack. Moreover, some abilities that competitors lack must be uplifted to become the core competencies or outstanding abilities of the organisation. These distinctive organisational competencies will result in competitive advantages.

6 Recommendations

The research findings indicate that both environmental knowledge factors and marketing communication significantly impact consumers' decisions to purchase green products. Consequently, government agencies can leverage these results as guidelines for promoting environmental awareness among the public. This includes devising environmental communication policies aimed at enhancing public knowledge and understanding of the associated impacts and benefits, fostering a more positive attitude towards the environment.

Moreover, as society increasingly prioritises environmental concerns, social pressure mounts, drawing greater attention to environmental issues and prompting entrepreneurs to adapt their business models to be more environmentally friendly.

Furthermore, the research underscores that knowledge of green products ranks lower in significance compared to other factors. Hence, pertinent government agencies should disseminate accurate and current information, such as standardised certification labels on products, details about eco-friendly products and comprehensive insights into the benefits for consumers, society and the environment. Accurate knowledge provision is crucial in maintaining the commitment of consumers who already possess a positive attitude towards green products.

Entrepreneurs should strategically enhance marketing communications surrounding green products, given their substantial influence on purchasing decisions. Strategic planning in the production of green products, focusing on meeting consumer needs and offering diverse and appealing options, is imperative in aiding customer decision-making.

Setting appropriate price levels is equally pivotal to ensure easy access for customers and to influence their purchasing decisions. Both product design variety and pricing significantly impact consumers' choices when it comes to purchasing green products.

Additionally, entrepreneurs ought to consider demographic information from research to tailor marketing strategies that align with the preferences of specific consumer groups. Misaligned marketing efforts can lead to budgetary waste for entrepreneurs, emphasising the need for targeted and effective marketing approaches.

7 Limitations and future research

The sample group in this study only comprised Thai consumers as a representative of a developing market. Therefore, the results do not apply to other markets globally and cannot holistically explain consumers' decisions to purchase green products. However, these results can serve as guidelines for other developing markets. Future studies may consider other countries to obtain accurate results and cover the developing-market population.

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