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# A review on consumer's attitude & purchase behavioral intention towards green food products

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**Abstract**---Due to ecological concerns, green products have gained more consideration in recent years, & their accessibility is rising. In addition, the presence of an eco-label encourages people to purchase environmentally friendly products. This paper focus to ascertain customer attitudes regarding green food products and compile data on the subject. This study serves as the foundation for the literature review of this research study. This research focuses on green marketing, more precisely on customers' attitude & purchasing practices when it comes to green food products. It has become a global priority to preserve the environment from human-caused pollution. With this critical knowledge offered by various researchers and experts, businesses have recognized the necessity & value of green marketing. This paper thoroughly examines the most recent and pertinent studies conducted on this topic to date.

*Keywords*---Consumer Attitude, Purchase Behavior Intention, Green Food Products, Environment.

## Introduction

This introduction aims to provide background information on green marketing. While the globalization process continues apace worldwide, it has also introduced significant complications. One of the major issues is environmental degradation, which has a detrimental effect on all living things. These aforementioned environmental issues have risen to prominence in recent years, and people have begun to discuss them openly. [1] Consumers are becoming more worried about the earth's future, and as a result, they prefer ecologically friendly products.

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Businesses have begun to adjust their marketing strategies to enhance awareness of this environmental friendliness in reaction to these customer attitudes.

These marketing tactics, collectively called green marketing, have compelled businesses to include environmentally friendly principles in pricing, advertising, product characteristics, and distribution activities. Climate change and global warming are diverting consumers' attention away from environmental deterioration and toward the unfavorable effects of their consumption on the environment. India is one of the world's most environmentally fragile nations. Environmental conservation has become a top priority in recent years. Additionally, large populations impose constraints on the country's ability to meet unlimited demand with limited resources. [2] To address these issues, governments, individuals, and corporations are increasingly focusing on manufacturing and marketing green products. Consumer interest and motivation can motivate marketers to grow the green movement in our industry. However, the amount of client knowledge regarding green products demands more attention. Consumers are less concerned with environmental issues than in the past, but they will be more receptive to green consumption if marketers can combine additional benefits and attractive prices. Because green products are distinct from conventional products, this study aims to determine whether customers can distinguish between green and conventional items and which aspects work as persuasive determinants for consumers when purchasing green products.

Green marketing research began in the 1980s with the birth of the notion of green marketing. According to early literature, green marketing was a strategy that signaled a move in customer focus for green products. [3] Green marketing studies concentrated on the consumer movement toward green products. Few empirical studies have been done to determine consumer interest in green products & their use and purchase. The early 1990s investigated a green marketing technique from a corporate perspective. According to research, 92 percent of multinational corporations in Europe altered their goods in response to growing worries about environmental contamination. Since then, green marketing research has advanced significantly. Consumers from developed countries such as the USA & Western Europe had a greater awareness of environmental issues. According to research conducted over the last decade, consumers are aware and prepared to spend more to "go green," according to research conducted over the last decade. However, there is a shortage of research on the impact of green marketing on customers in emerging economies such as India.

Ecologically conscious shoppers can purchase environmentally friendly products to help reduce pollution & address the worldwide environmental crisis. [4] While traditional consumers prioritize rapid enjoyment, green consumers consider the long-term effects of their purchases on others & the environment. Green purchasers, for instance, may decide recycled or remanufactured products to add to global sustainability and green development. Meanwhile, businesses can get involved in the green movement & establish a green brand image through offering environmentally friendly goods. Numerous aspects affect green shopping preferences. The TPB states that behavioural intention directly affects behaviour. In the case of green products, attitude is the strongest predictor of purchase intention. Despite growing customer acceptance of green products, real green product purchases continue to be relatively modest. Previously conducted research established a gap between customers' positive views on green purchasing and purchasing behaviour. [5]

Consumption of green products has been described in academic literature as "green purchasing". All these terms are interchangeable in this study. This review relates future research on sustainable consumption to existing research on the subject. Additionally, it explains the observed attitude-behavior disparity. However, high prices and difficulties associated with procuring goods significantly deter green consumer purchasing behaviour. The rest of the paper is organized like this: The next part summarizes research on green buying habits and reported attitude-behavior discrepancy. The next part contains findings and discussion. Finally, conclusions are presented.

## **Theoretical Framework**

Consumer's Purchase intention has been one of the intensive research areas and still continues to attract the attention of academicians and researchers, especially for Green Marketing. Purchasing Intention is intended to precede actual purchase behaviour. This is also steady with the most widely accepted TRA & TPB, which argue that consumer behaviour may be predicted from intentions that are closely related to that consumer behaviour in provisions of action, target, and context. Numerous theories, including the TRA, planned behavior & the technology acceptance model, have been applied explicitly or implicitly in studies on consumer buying behaviour.

## **Theory of Reasoned Action**

The TRA defines the psychological process that underpins conscious human action & seeks to elucidate its determinants. As per TRA, an individual's behavioural intention affects how her behaviour is performed. Her attitudes toward behaviour and subjective norms about the behaviour are two antecedent aspects contributing to her behavioural intention. Behavioral intention quantifies "how far individuals are willing to go to accomplish the activity" and "how much effort they intend to exert to perform the behaviour." By and large, persons' behavioural intentions have a beneficial effect on their ability to do the desired conduct. Attitudes about conduct are a person's assessment of the behaviour. They are determined via her predominant ideas about the rewards and costs associated with the conduct. Subjective norms are determined by an individual's normative ideas about the feasibility of conduct as appraised by referents and their willingness to adhere to these beliefs. Additionally, the TRA presupposes that external factors like an individual's qualities will indirectly affect her behaviour via their influence on attitudes and subjective norms.

## **Theory of Planned Behavior**

The TPB is a supplement to the TRA. The TPB differs significantly from the TRA in that it incorporates perceived behavioural control. The TPB of IcekAjzen provides a persuasive predictive model that connects beliefs and behaviours. In essence,

the TPB asserts that an individual's attitude toward a behaviour, subjective norms & perceived behavioural manage (or capacity/self-efficacy for that conduct) will all contribute to the development of individual behaviour intention & subsequent behaviour.

## Consumer's behavior is guided by 3 types of consideration

- a. "Behavioral beliefs or attitudes," which is defined as the degree of favorableness (or un-favorableness) of a person's evaluation of a behavior.
- b. The term "Normative Beliefs" or "Subjective Norm" refers to an individual's impression of their significant others' approval or disapproval of their behaviour. Direct influencers may include family, friends, coworkers, and immediate neighbours.
- c. Control beliefs, or "perceived behavioural control," are dexplained as an individual's sense of how simple or complex it is to do the preferred action related to resources, opportunities, and self-confidence.

In arrangement, "attitude toward the behavior," "subjective norm," & "perceived behavioral control" guide to the structure of a "behavioral intention". In this study, we looked at the TPB framework in the following manner. Following variables were selected for the TPB framework based on the literature review as applicable for the green food products purchased in the Indian context.

According to a recent KPMG estimate, the processed food market in India is assumed to attain US\$ 470 billion by 2025, up from US\$ 263 billion in 2019-20. According to the study, the pandemic ushered in a new era of sustainable food chains, increased demand for organic goods, and a more localized food supply with increased trade barriers. The research states that innovative health, fitness & nutrition products are projected to gain substantial momentum in the home market. A coordinated strategy is essential to catalyze market development. It should promote public-private partnerships via appropriate PPP models to ensure that it can rapidly build up infrastructural facilities to satisfy industrial demand.

India's food processing industry needs a post-COVID-19 environment that enables the country to exploit new opportunities, optimize its strategy, and prepare for new markets. As per the report, the government's Production Linked Scheme will likely support incentive players to expand processing capacity to keep up with growing demand. "Complementary markets like ingredients, food processing equipment, food logistics, and food packaging provide tremendous opportunity. Players, particularly MSMEs, would require expanded testing and certification infrastructure, as well as increased efficiency and compliance with hygiene requirements on a vast scale." According to the survey, rural areas & tier 2/3 cities would continue to dominate the processed food market. As the industry rebounds from COVID-19's consequences, the Hotel/Restaurant/Café (HoReCa) segment will be critical.

Major economies are expected to rely on non-tariff measures like strong sanitary & phytosanitary measures and technical barriers to trade in the post-COVID-19 future to safeguard food security against chemical & disease spread. There has been a noticeable transition away from non-sustainable to sustainable food

systems throughout the value chain. Additionally, organic & bio-based products have become more prevalent throughout the food supply chain. However, the study finds that India's food processing exports have remained stable. India's exports to the top ten food importers globally have significant potential. Three important & promising segments are fisheries, meat & marine, and dairy. The report says that the government can increase exports by negotiating free trade agreements, eliminating non-tariff barriers, and expediting the implementation of duty remissions.

Additionally, he emphasized the necessity of improving cold storage capacity to maximize perishable products' scalability. India may drastically reduce loss during storage and transportation by leveraging industry 4.0 technologies for a digital supply chain, intelligent warehousing, and logistics. The food processing sector is a bright spot in the global economy, adding US\$ 1.7 trillion in value.

## Literature Review

A. Arvola et al. (2008) [6] investigated the utility of including affective & moral attitudes into the TPB model in assuming green food purchasing intentions. The moral attitude was defined as the positive self-satisfaction from doing the right thing. In March 2004, data from questionnaires were collected in 3 countries: Italy (N=202), Finland (N=270) & the United Kingdom (N=200). Questions centered on whether or not people planned to buy organic apples or organic ready-to-cook pizza in place of their conventional counterparts. Data from the three nations were analyzed using SEM & simultaneous multi-group examination. Moral attitude & subjective norms, in addition to attitudes, explained a major segment of the variance in intentions. However, the proportional importance of these factors differed by country, with moral attitude having a larger explanatory power in the UK & Italy than subjective standards. It was the other way around in Finland. In Finland, moral attitude enhanced the model's fit & predictive performance, but only significantly. As a result, the findings partially maintain the use of including moral measures and emotional elements for attitude in the TPB framework.

Chakrabarti, S. (2010) [7] explained the thorough research on consumer purchase behaviour in the organic food category. The affective commitment was a significant construct that consumers develop for a brand or its supplier over time, leading to loyalty. Given the category's relationship with health and nutrition benefits, the importance of the affective commitment factor was considered relevant in organic food purchases. Therefore, understanding the process of emotional connecting with frequent buyers is crucial for marketers. The survey also identified the barriers preventing regular Indian shoppers from purchasing more organic food. The three most significant reasons given were cost, flavour, and restricted availability of the products, which marketers must address to increase regular usage in the category. To build trust and long-term connections with customers, stores must engage in human interaction with them. Customers' emotional loyalty to the store would be increased if they received superior customer value. According to Golnaz Rezai et al. (2011) [8] consumer food consumption patterns quickly alter. Consumers are getting increasingly mindful about what they eat. They prefer to eat nutritious, healthy, safe, and environmentally and animalfriendly food. This study aims to observe consumers' awareness of & inclinations to consume green vegetables in Malaysia. The TPB is functional in this investigation. A standardized questionnaire was developed and utilized to collect green food consumer behaviour data. In late 2010, a survey was conducted with 1355 respondents. Descriptive statistics & chi-square analysis were used to investigate the data. The findings show that the majority respondents are familiar with the notion of going green. The findings also demonstrate that there are considerable variances in respondents' awareness of green foods based on their age, geographic location, degree of education, and income. As per respondents, green food encompasses food safety, health, environmental danger & animal welfare in contrast to being organic. As a result, most respondents were aware of the green idea, indicating a strong consumer interest in green meals.

According to Zainalabidin Mohamed et al. (2011), [9] the green idea and green foods are still in their early stages in Malaysia. As a result, it is necessary to investigate Malaysian consumers' attitudes, perceptions, and intentions about green food consumption. As a result, this study aims to see how certain socioeconomic/demographic traits & attitudes impact consumers' intentions to buy green foods in Malaysia, especially in light of recent worldwide concerns regarding the environment, food safety & animal welfare. In Peninsular Malaysia, a survey was done with 1,355 respondents using structured questionnaires to acquire critical information on their perceptions of and intentions to purchase green food in Malaysia. The coefficients used to compute the marginal effects and probability were obtained using a binary logistic model. The findings show that educational attainment, money, and other criteria such as food safety & environmental friendliness substantially impact Malaysian consumers' desire to purchase green foods.

According to Zeinab Seyed Saleki et al. (2012), [10] one of the most pressing concerns of humans is the environment and nutritious diet. Therefore, organic food is a significant problem that several academics have focused on. The research aims to determine the effect of product knowledge, price, quality, familiarity, and subjective norms on attitudes and green purchasing behaviour. The TPB investigates customers' organic purchase behaviour in Iran. A total of 150 respondents (consumers) were picked using a primary random sample method and a direct survey method. Except for the influence of subjective standards on organic purchase behaviour, the regression analysis results demonstrate a favorable and significant impact.

According to Mark R.Gleim et al. (2013), [11] Knowledge about the barriers to green consumption is becoming more critical as retail firms place a more significant emphasis on the environment in measuring performance following the triple-bottom-line approach. This paper focus to look at the individual barriers that persuade consumers' perceptions of green items in stores. The paper examines the factors related to non-green purchase behaviour using a critical incident qualitative study and two quantitative analyses. In addition, results from a study suggest that changing the number and type of informational product

signals can help people overcome purchasing barriers. These factors are examined, and the research's consequences for retail organization stakeholders. Vazifehdoust et al (2013) [12] studies an incorporated model that incorporates the Theory of Reasoned Action & 2 categories of variables, personal & marketing, in order to examine the attitudinal & behavioural aspects that effect the purchase of green products. The model was developed & validated using structural equation modeling on 374 customers from Iran's Guilan province. The findings indicate that consumers' environmental awareness, the quality of green products, green promotion & green labeling all contribute to this mindset. The structural equation analysis results reveal that attitude has a favourable consequence on the intention to purchase green items. Additionally, green purchasing intentions have an effect on green purchase behaviour. Additionally, this study addresses the results' ramifications for marketers and researchers.

According to Vega Zamora Manuela et al. (2013), [13] the term "organic" has a vital role because green foods are purchased via people who value health, food quality, safety & genuineness in food. As a result, environmental preservation is a facilitator rather than a final motivation. There is a connection among organic food and the preservation of the ecosystem. Unfortunately, consumers have misinterpreted "organic." The word "organic" conjures up images of a product that boosts its perceived value among consumers. Organic means better because the buyer believes it, not because the producer says so.

Sheikh, Mirza, Aftab, and Asghar (2014) [14] evaluated consumer attitudes about green products and their purchasing decisions. The data were collected from 200 respondents by questionnaire, and the Pearson correlation tested hypotheses. While brand & gender differentiation have a very low link with green customer behaviour, price, quality, and green marketing have a significant positive correlation.

De Medeiros, J. F., Ribeiro et al (2016) [15] examined the association between customer perceived value for green products & price elasticity. The study adapted Zeithaml's (1988) model to the automobile and furniture industries. The perceived value of environmentally friendly products raises willingness to pay. Demographic variables like gender, age & income all have a favorable effect on perceived quality & purchase intention. Using the population sampled, the ecological appeal impacts a 10% price reduction. In addition, it indicates that respondents were willing to pay an additional 10% on green products in the product categories studied.

Liobikienė et al (2016) [16] The TPB is used to assess the primary determinants of green purchase behaviour. We showed how Hostefe's cultural features influence purchase behaviour. The findings revealed large regional disparities in green purchasing behaviour across the EU, with little correlation to economic progress. Knowledge & confidence in green products influence green purchase behaviour in all nations. The cross-cultural investigations found that no cultural variable influenced green purchase behaviour. However, cultural variables directly influence green purchasing behaviour. Thus, the EU cultural convergence & economic crisis may indirectly impact green purchasing behaviour. Marketers and policymakers should take note of these findings.

Mobrezi et al (2016) [17] determined what influences female consumers' desire to buy green in Iran. The research approach is a descriptive survey, and its purpose is applied, fundamental, and developmental. Women from Tehran's west were studied. The findings indicate that having a positive attitude in the direction of green products affects one's self-image, societal impact & purchasing power. Consumers' willingness to purchase eco-friendly products increases as environmental concerns grow. Green products are unaffected by environmental concerns, or personal naturalism. Purchasing green products has a negligible impact on the social environment or one's image.

A. Singh & P. Verma (2017) [18] investigated whether green foods are more nutritious, healthful & environmentally friendly than conventional foods. As a consequence, consumers gravitate toward organic food products & are willing to pay a premium. This paper aims to determine the factors that persuade customers' actual purchasing decisions about organic foods. Six hundred and eleven Indian consumers were surveyed using a standardized questionnaire. Numerous methodologies were utilized to analyze the data, including FA, independent t-test, ANOVA multiple linear regression, & hierarchical multiple regression analysis. The findings confirm that four variables (health consciousness, knowledge, subjective standards, and pricing) affect customer attitudes toward organic food items. However, these four characteristics and one additional element influence purchasing intention for organic goods. Furthermore, the findings indicate that these 5 characteristics also persuade actual purchasing behaviour, but attitude & purchase intention function as moderators.

Additionally, socio-demographic characteristics influenced actual purchasing behaviour. This study contributes to a improved understanding of customers' attitudes regarding green food items, purchase intentions, and actual purchasing behaviour. The findings have ramifications for organic food industry companies, retailers & market regulators. Additionally, the report gives instructions and recommendations for merchants and marketers who deal with organic foods and are interested in growing the organic food market.

Liobikienė, G., Grincevičienė et al (2017) [19] evaluated promoting eco-friendly & green purchasing is one strategy to reduce the environmental effect. This paper aimed to examine the relationship between green purchasing & environmental stewardship. Moreover, using the goal-framing theory, this study examined how green purchases & environmentally friendly behaviour are related to product pricing & environmentally friendly social norms in 2 countries: Lithuania & Austria. Using the 2012 Euro barometer study & SEM, the results showed that green purchasing was highly connected with environmental stewardship, although the determinants were different. Furthermore, green social norms & gender substantially impacted both green purchases and green behaviour. These findings show that policymakers should employ various measures to promote eco-friendly and green purchasing. Moreover, comparing green purchase and its drivers in Lithuania and Austria, Lithuania made recommendations to promote green purchasing and environmentally friendly behaviour.

Yadav, R., et al (2017) [20] studies individual green consumption can help decrease the environmental impact of consumption. However, green consumption research in developing countries like India is rare. The current study sought to analyze green product purchasing behaviour in India, a developing country. The study employed the TPB. It extended it to contain perceived value & WTPP to determine consumer green buying intention & behaviour. A convenience sample strategy acquired 620 usable responses from a questionnaire survey. SEM was performed to assess the strength of correlations between components. TPB fully supported consumers' intention to acquire green items, influencing their green purchase behaviour. The TPB framework's predictive power in forecasting consumer green purchasing intention and behaviour has improved with the addition of more factors. Finally, we addressed the ramifications.

Chaudhary et al (2018) [21] examined the green buying habits of skilled millennials in India. TPB is extended by two new variables, environmental concern & WPP). 202 students from diverse disciplines of an Indian university were interviewed. The suggested model was validated using SEM in SPSS AMOS 24. Except for the clear link among SN & PI, the study backed the TPB framework. EC influenced green PI indirectly via attitude, and perceived behavioural manage. Willingness to pay a premium moderated the PI-green buying association. PIs successfully predicted buying behaviour (PB). This research helped green marketers capture the huge potential inherent in this market section through developing personalized market plans & tactics.

Chen, C. C., Chen, et al (2018) [22] examined customer intentions to buy green products in Belt & Road countries using a decision-making model that includes cognitive, affective & behavioural qualities. The survey obtained 227 genuine replies from customers who had formerly purchased green items. Collective and individual cognitive values influenced environmental and product perceptions. In terms of environmental literacy, objective information had no effect on environmental attitudes, however subjective knowledge did. Awareness of the environment and the role of government (extrinsic motivating qualities) also influenced environmental & product attitudes for sustainable consumption. Media disclosure also improved environmental attitudes toward decreasing, reusing, and recycling emissions.

Cheung, M. F., et al. (2019) [23] on a random sample of 399 Chinese consumers in Hong Kong, this study presented and verified an extended value-attitudebehavior model to give details green purchase behaviour. SEM discovered that consumers' environmental awareness influenced their attitudes toward environmental problems & eco-social profit, which influenced their green purchasing behaviour. A crucial determinant of green purchase behaviour is product information. Quality green products also moderated correlations between eco-social advantages and green purchasing behaviour, but not between environmental issues and green buy behaviour.

Tong, Q., Anders, et al. (2020) [24] examined the factors of Chinese consumers' buying intentions & willingness to pay for rice with environmental features. The study focuses on latent consumer pollution worries & subjective ecological information. The data came from Guangzhou, Wuhan, and Lanzhou (n = 622).

# Unobservable and latent factors affecting customer purchase intentions for green rice were assessed using SEM. Subjective environmental awareness & pollution concerns were found to affect willingness to pay for green rice. Although concerns about food quality influence purchasing intentions & willingness to pay, age, education, health status & income affect customer preferences for green rice. Individuals who saw the government as the key environmental defender favoured green rice less. In general, the findings imply that improving environmental education & segmenting the market are critical preconditions for launching eco-friendly food items successfully in China.

Qi, X., and Ploeger, A. (2021) [25] investigated a suitable framework for describing customers' purchase intentions toward green food in the Chinese context. A model of integrated green food purchase intention was constructed using a variety of cognitive & affective characteristics taken from the altered theory of planned behaviour & customized stimulus-organism-response models. An online poll of Chinese consumers got 1,412 usable responses. SEM was utilized to investigate the research data to ascertain the strength of the association among constructs & to assess the model fit of three different models. Although the IGFPI model explains more than the other two independent models, three models fit reasonably well. The hypothesis testing results indicate that perceived behavioural control, face consciousness, group conformity, utilitarian & hedonic attitudes all substantially impact purchase intentions for green food. Additionally, consumer perceptions of the nutritional value & affordability of green vegetables substantially influence practical attitudes.

By contrast, sensory appeal and price significantly affect hedonic beliefs. The power of the link among confidence, personal attributes, purchasing intention, ecological well-being, and utilitarian attitudes varies significantly across the independent & integrated models. The results of this study assist stakeholders & future researchers better understand the structure & elements influencing consumers' purchasing intentions for green food items in the Chinese culture.

## **Factors of Green Purchase**

Many research cited in this study views green purchasing as a rational consumer action to guard the environment by sacrificing personal interests. On the other hand, as demonstrated in Figure 1, research on consumer green food product selection is influenced through socio-demographic characteristics. Of course, buyers can't just buy items they like. Consumers should consider the product's quality, features, and marketing techniques when choosing green food items. Consumers care about food safety & health [26], but they care more about style & personality when it comes to apparel [27, 28].

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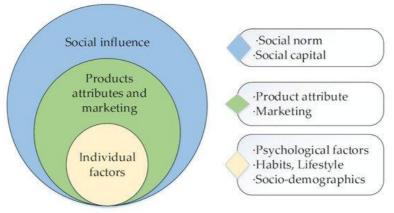


Fig: 1 categorization of determinants of green purchase

Since we all live in groups, individual qualities & product features cannot entirely account for customer attitude and behaviour differences. Thus, researchers have considered macro-level factors such as social growth, industrial structure & culture [29, 30]. The authors classified and discussed human traits, product qualities and marketing, and social influence (Figure 1).

## **Effect of Individual Factors**

First, objective socio-demographic characteristics utilize to compare & assess consumer green food purchase behaviour. Women are more likely than men to care about other people's lives & are willing to purchase green food items, according to Liobikiene et al [31]. However, when gender was used as a mediator, there was no major effect among attitude, perceived behavioural control, subjective norm & green purchases [32, 33, 34, and 35]. The study found that those aged 35–49 have the highest purchase intention for green food products, while those under 19 have the lowest [35]. It may be because most middle-aged adults are the family's primary income source. Therefore they pay close attention to purchase cost and product quality. Children under the age of 19 have a hazy understanding of money and place greater emphasis on product personality. Therefore, the taste of green food products does not match their specific needs. Moreover, the buying intention of eco-friendly food products varies significantly by socioeconomic level. Rich people don't want to buy green products because they want to show their wealth [36].

## **Influence of Social Factors**

Consumers' actions always entail social interaction, determining people's social traits. According to economists, people will make reasonable behaviour judgments after analyzing the pros and disadvantages. Still, according to sociologists, people will be impacted via their social surroundings & the groups around them & the mainly profound persuade is social culture. Consumers who value cooperation above individualism are more inclined to buy sustainable items. Consumers who respect vertical collectivism are more eager to adopt green consumption to put a positive example. Halder et al. [37] observed that consumers who value communal

and long-term growth had a stronger green behaviour inclination than those who value individualism & short-term growth. Fleith and Duarte's [38] study on Indian citizens' green purchase intentions supported this finding. Unlike Westerners who prioritize their interests, Chinese people prioritize collective goals; thus, they will do what others expect them to do to fit in [39].

## Influence of Green Product Attributes & Marketing Strategy

Consumers' preferences for different product qualities vary greatly depending on the product's performance. People are more concerned about the source's credibility & production safety [40, 41]. When showing sustainable apparel to others, customers pay attention to the product's individuality and quality [32, 33]. In the case of electric vehicles, consumers are concerned about price and performance [42] and the vehicle's personality and prestige [40]. Consumers choose green housing, green furnishings, and energy-efficient equipment based on their health and cost performance [23]. Consumers evaluate the country of origin when purchasing green skincare products [42].

Green purchasing behaviour has a direct influence on consumer enthusiasm for green products. Businesses have used marketing methods like eco-labels & commercials to boost sales of green products. Product qualities like production cycle, provenance & environmental footprint are more easily displayed with green packaging & an eco-label [34, 43]. Circular eco-labels also have a higher buying intent than other label forms. [44] Advertising is a marketing strategy with more direction and promotion options. Green product promotion appeals to both abstract & concrete (specific) attractions. When a green product features a link to consumers or other interests, abstract appeal outperforms concrete appeal in terms of publicity. To differentiate themselves from traditional products, firms should educate the public regarding the environmental profit of green products.

## **Research Gaps**

The current review identifies various factors and barriers that influence ecofriendly purchasing decisions & provides possible explanations for observed inconsistencies in green purchasing behaviour. Additionally, it gives a complete review of the available literature, as it is depends on the findings of different previous research investigations. Finally, it identifies significant variables that could be used as explanatory, mediating, or moderating variables in future research to examine their effect on green purchase intention & green purchase behaviour (dependent variables). The distinctions made in this work are depends upon the findings of several research investigations conducted in various cultures & circumstances, and the applicability of these factors must be empirically examined in future researches. Additionally, authors may offer other models and frameworks based on their findings, using the current review's findings as a starting point.

On an academic level, the subject of ecological psychology and related disciplines are conducting extensive research into the drivers affecting the green gap, both favorably & adversely. In the future, research efforts should be directed toward identifying the drivers & environments that promote positive, eco-friendly

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compensating behaviour, primarily personality attributes. On the other hand, it is also necessary to evaluate the variables that lead to maintaining a passive condition of not consistent conduct. Additionally, research incorporating more strongly green ideas into consumer behaviour is necessary to move beyond merely mitigating ecological effects to addressing the inherently unsustainable nature of various parts of consumer lifestyles in contemporary economies.

## Conclusion

Environmental crises and resource depletion have driven human civilization to prioritize environmentally responsible consumerism. Today, many businesses are manufacturing environmentally friendly goods & consumers are increasingly eager to purchase them. However, most prior research indicates that favourable customer attitudes do not translate into actual purchasing behaviour, with major consumers shunning green products. This research reviews the available literature to determine the many aspects that contribute to customers' inconsistent behaviour. The authors conducted a systematic assessment of experiential literature on consumer green food purchasing behaviour & discovered critical factors influencing consumer green food purchasing decisions. Additionally, the authors hypothesize the likely causes of observed inconsistencies in green purchase attitudes & behaviours. Moreover, we determined which features have garnered the most attention in the literature & which have been mostly overlooked.

## Limitation & Future Research

Our research has some limitations. First, we chose publications from Scopus, which does not include all relevant literature. Researchers can combine data from several databases to conduct a literature review in the future. Second, we conducted a literature look for using green food products, green purchases, sustainable products, consumption & willingness to pay. Future scholars can include terms like eco-friendly, organic, and sustainable. Third, our research period was from 2000 to 2020. However, researchers may expand it in the future. Fourth, our study investigated all hypotheses and factors influencing green product purchases rather than focusing on individual categories like apparel and vehicles. We look at green food product purchase behaviour from a single angle like qualities or personal factors.

## References

- 1. Tseng, M. L., Lin, C. W. R., Sujanto, R. Y., Lim, M. K., & Bui, T. D. (2021). Assessing sustainable consumption in packaged food in Indonesia: Corporate communication drives consumer perception and behavior. *Sustainability*, *13*(14), 8021.https://doi.org/10.3390/su13148021
- 2. White, K., Habib, R., & Hardisty, D. J. (2019). How to SHIFT consumer behaviors to be more sustainable: A literature review and guiding framework. *Journal of Marketing*, 83(3), 22-49. https://doi.org/10.1177%2F0022242919825649
- 3. Li, X., Huang, R., Dai, J., Li, J., & Shen, Q. (2021). Research on the evolutionary game of construction and demolition waste (CDW) recycling

units' green behavior, considering remanufacturing capability. International Journal of Environmental Research and Public Health, 18(17), 9268.https://doi.org/10.3390/ijerph18179268

- Xu, Y., Du, J., Shahzad, F., & Li, X. (2021). Untying the influence of green brand authenticity on electronic word-of-mouth intention: a moderationmediation model. *Frontiers in Psychology*, 3812.https://doi.org/10.3389/fpsyg.2021.724452
- 5. De Silva, M., Wang, P., & Kuah, A. T. (2021). Why wouldn't green appeal drive purchase intention? Moderation effects of consumption values in the UK and China. *Journal of business research*, *122*, 713-724. https://doi.org/10.1016/j.jbusres.2020.01.016
- Kaufmann, H. R., Panni, M. F. A. K., & Orphanidou, Y. (2012). Factors affecting consumers' green purchasing behavior: An integrated conceptual framework. *Amfiteatru* Economic Journal, 14(31), 50-69.http://hdl.handle.net/10419/168746
- Kang, K. H., Stein, L., Heo, C. Y., & Lee, S. (2012). Consumers' willingness to pay for green initiatives of the hotel industry. *International journal of hospitality* management, 31(2), 564-572.https://doi.org/10.1016/j.ijhm.2011.08.001
- Vazifehdoust, H., Taleghani, M., Esmaeilpour, F., & Nazari, K. (2013). Purchasing green to become greener: Factors influence consumers' green purchasing behavior. *Management Science Letters*, 3(9), 2489-2500. http://doi.org/10.5267/j.msl.2013.08.013
- Lai, C. K., & Cheng, E. W. (2016). Green purchase behavior of undergraduate students in Hong Kong. *The Social Science Journal*, 53(1), 67-76.https://doi.org/10.1016/j.soscij.2015.11.003
- Arvola, A., Vassallo, M., Dean, M., Lampila, P., Saba, A., Lähteenmäki, L., & Shepherd, R. (2008). Predicting intentions to purchase organic food: The role of affective and moral attitudes in the Theory of Planned Behaviour. *Appetite*, 50(2-3), 443-454.https://doi.org/10.1016/j.appet.2007.09.010
- 11. Chakrabarti, S. (2010). Factors influencing organic food purchase in Indiaexpert survey insights. *British food journal*.https://doi.org/10.1108/00070701011067497
- Rezai, G., Teng, P. K., Mohamed, Z., & Shamsudin, M. N. (2012). Consumers awareness and consumption intention towards green foods. *African Journal of Business* 4496-4503.https://doi.org/10.5897/AJBM11.1414
- 13. Teng, P. K., Rezai, G., Mohamed, Z., & Shamsudin, M. N. (2011, September). Consumers' intention to purchase green foods in Malaysia. In *International Conference on innovation, management and service* (Vol. 14, pp. 112-118).
- 14. Saleki, Z. S., Seyedeh, M. S., & Rahimi, M. R. (2012). Organic food purchasing behaviour in Iran. *International Journal of Business and Social Science*, 3(13).
- 15. Gleim, M. R., Smith, J. S., Andrews, D., & Cronin Jr, J. J. (2013). Against the green: A multi-method examination of the barriers to green consumption. *Journal of retailing*, 89(1), 44-61.https://doi.org/10.1016/j.jretai.2012.10.001
- 16. Vazifehdoust, H., Taleghani, M., Esmaeilpour, F., & Nazari, K. (2013). Purchasing green to become greener: Factors influence consumers' green

purchasing behavior. *Management Science Letters*, 3(9), 2489-2500.http://dx.doi.org/10.5267/j.msl.2013.08.013

- Manuela, V. Z., Manuel, P. R., Eva, M. M. A., & José, T. R. F. (2013). The influence of the term 'organic'on organic food purchasing behavior. *Procedia-Social* and *Behavioral Sciences*, 81, 660-671.https://doi.org/10.1016/j.sbspro.2013.06.493
- 18. Sheikh, F. Z., Mirza, A. A., Aftab, A., & Asghar, B. (2014). Consumer green behaviour toward green products and green purchase decision. *International Journal of Multidisciplinary Science and Engineering*, 5(9), 1-9.
- de Medeiros, J. F., Ribeiro, J. L. D., & Cortimiglia, M. N. (2016). Influence of perceived value on purchasing decisions of green products in Brazil. *Journal* of Cleaner Production, 110, 158-169.https://doi.org/10.1016/j.jclepro.2015.07.100
- Liobikienė, G., Mandravickaitė, J., & Bernatonienė, J. (2016). Theory of planned behavior approach to understand the green purchasing behavior in the EU: A cross-cultural study. *Ecological Economics*, 125, 38-46.https://doi.org/10.1016/j.ecolecon.2016.02.008
- Mobrezi, H., & Khoshtinat, B. (2016). Investigating the factors affecting female consumers' willingness toward green purchase based on the model of planned behavior. *Procedia Economics and Finance*, 36, 441-447.https://doi.org/10.1016/S2212-5671(16)30062-4
- 22. Singh, A., & Verma, P. (2017). Factors influencing Indian consumers' actual buying behaviour towards organic food products. *Journal of cleaner production*, *167*, 473-483.https://doi.org/10.1016/j.jclepro.2017.08.106
- Liobikienė, G., Grincevičienė, Š., & Bernatonienė, J. (2017). Environmentally friendly behaviour and green purchase in Austria and Lithuania. *Journal of cleaner production*, 142, 3789-3797.https://doi.org/10.1016/j.jclepro.2016.10.084
- 24. Yadav, R., & Pathak, G. S. (2017). Determinants of consumers' green purchase behavior in a developing nation: Applying and extending the theory of planned behavior. *Ecological economics*, 134, 114-122.https://doi.org/10.1016/j.ecolecon.2016.12.019
- 25. Chaudhary, R., & Bisai, S. (2018). Factors influencing green purchase behavior of millennials in India. *Management of Environmental Quality: An International Journal.* https://doi.org/10.1108/MEQ-02-2018-0023
- 26. Chen, C. C., Chen, C. W., & Tung, Y. C. (2018). Exploring the consumer behavior of intention to purchase green products in belt and road countries: An empirical analysis. Sustainability, 10(3), 854.https://doi.org/10.3390/su10030854
- Cheung, M. F., & To, W. M. (2019). An extended model of value-attitudebehavior to explain Chinese consumers' green purchase behavior. *Journal of Retailing* and *Consumer* Services, 50, 145-153.https://doi.org/10.1016/j.jretconser.2019.04.006
- Tong, Q., Anders, S., Zhang, J., & Zhang, L. (2020). The roles of pollution concerns and environmental knowledge in making green food choices: Evidence from Chinese consumers. *Food Research International*, 130, 108881. https://doi.org/10.1016/j.foodres.2019.108881
- 29. Qi, X., & Ploeger, A. (2021). An integrated framework to explain consumers' purchase intentions toward green food in the Chinese context. *Food Quality and Preference*, 92, 104229.https://doi.org/10.1016/j.foodqual.2021.104229

- 30. Coderoni, S., & Perito, M. A. (2020). Sustainable consumption in the circular economy. An analysis of consumers' purchase intentions for waste-to-value food. *Journal of Cleaner Production*, 252, 119870.https://doi.org/10.1016/j.jclepro.2019.119870
- Park, H. J., & Lin, L. M. (2020). Exploring attitude-behavior gap in sustainable consumption: Comparison of recycled and upcycled fashion products. *Journal of Business Research*, 117, 623-628.https://doi.org/10.1016/j.jbusres.2018.08.025
- 32. Jacobs, K., Petersen, L., Hörisch, J., & Battenfeld, D. (2018). Green thinking but thoughtless buying? An empirical extension of the value-attitudebehaviour hierarchy in sustainable clothing. *Journal of Cleaner Production*, 203, 1155-1169.https://doi.org/10.1016/j.jclepro.2018.07.320
- 33. Hao, Y., Liu, H., Chen, H., Sha, Y., Ji, H., & Fan, J. (2019). What affect consumers' willingness to pay for green packaging? Evidence from China. *Resources, Conservation and Recycling, 141, 21-29.* https://doi.org/10.1016/j.resconrec.2018.10.001
- Habich-Sobiegalla, S., Kostka, G., & Anzinger, N. (2019). Citizens' electric vehicle purchase intentions in China: An analysis of micro-level and macro-level factors. *Transport Policy*, 79, 223-233.https://doi.org/10.1016/j.tranpol.2019.05.008
- 35. Shiel, C., do Paco, A., & Alves, H. (2020). Generativity, sustainable development and green consumer behaviour. *Journal of Cleaner Production*, 245, 118865.https://doi.org/10.1016/j.jclepro.2019.118865
- 36. Halder, P., Hansen, E. N., Kangas, J., & Laukkanen, T. (2020). How national culture and ethics matter in consumers' green consumption values. *Journal of Cleaner Production*, 265, 121754.https://doi.org/10.1016/j.jclepro.2020.121754
- 37. de Medeiros, J. F., & Ribeiro, J. L. D. (2017). Environmentally sustainable innovation: Expected attributes in the purchase of green products. *Journal of cleaner production*, 142, 240-248.https://doi.org/10.1016/j.jclepro.2016.07.191
- Jung, H. J., Choi, Y. J., & Oh, K. W. (2020). Influencing factors of Chinese consumers' purchase intention to sustainable apparel products: Exploring consumer "attitude-behavioral intention" gap. Sustainability, 12(5), 1770.https://doi.org/10.3390/su12051770
- Carfora, V., Cavallo, C., Caso, D., Del Giudice, T., De Devitiis, B., Viscecchia, R., ... & Cicia, G. (2019). Explaining consumer purchase behavior for organic milk: Including trust and green self-identity within the theory of planned behavior. *Food Quality and Preference*, 76, 1-9.https://doi.org/10.1016/j.foodqual.2019.03.006
- Polimeni, J. M., Iorgulescu, R. I., & Mihnea, A. (2018). Understanding consumer motivations for buying sustainable agricultural products at Romanian farmers markets. *Journal of cleaner production*, 184, 586-597.https://doi.org/10.1016/j.jclepro.2018.02.241
- 41. Liobikienė, G., & Bernatonienė, J. (2017). Why determinants of green purchase cannot be treated equally? The case of green cosmetics: Literature review. *Journal of Cleaner Production*, *162*, 109-120.https://doi.org/10.1016/j.jclepro.2017.05.204
- 42. Ali, A., Xiaoling, G., Ali, A., Sherwani, M., & Muneeb, F. M. (2019). Customer motivations for sustainable consumption: Investigating the drivers of

purchase behavior for a green-luxury car. Business Strategy and the Environment, 28(5), 833-846. https://doi.org/10.1002/bse.2284

- Li, Q., Long, R., & Chen, H. (2018). Differences and influencing factors for Chinese urban resident willingness to pay for green housings: Evidence from five first-tier cities in China. *Applied energy*, 229, 299-313.https://doi.org/10.1016/j.apenergy.2018.07.118
- De Medeiros, J. F., Ribeiro, J. L. D., & Cortimiglia, M. N. (2016). Influence of perceived value on purchasing decisions of green products in Brazil. *Journal* of Cleaner Production, 110, 158-169.https://doi.org/10.1016/j.jclepro.2015.07.100
- 45. Hsu, C. L., Chang, C. Y., & Yansritakul, C. (2017). Exploring purchase intention of green skincare products using the theory of planned behavior: Testing the moderating effects of country of origin and price sensitivity. *Journal of Retailing and Consumer Services*, 34, 145-152.https://doi.org/10.1016/j.jretconser.2016.10.006
- 46. Cerri, J., Testa, F., & Rizzi, F. (2018). The more I care, the less I will listen to you: How information, environmental concern and ethical production influence consumers' attitudes and the purchasing of sustainable products. *Journal of Cleaner Production*, 175, 343-353.https://doi.org/10.1016/j.jclepro.2017.12.054
- 47. Yang, D., Lu, Y., Zhu, W., & Su, C. (2015). Going green: How different advertising appeals impact green consumption behavior. *Journal of Business Research*, 68(12), 2663-2675.https://doi.org/10.1016/j.jbusres.2015.04.004
- Xu, L., Yu, F., & Ding, X. (2020). Circular-Looking Makes Green-Buying: How Brand Logo Shapes Influence Green Consumption. Sustainability, 12(5), 1791.https://doi.org/10.3390/su12051791