



Green consumption behaviour among generation Z in India: Examining willingness to pay a premium

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Abstract

Particularly among Generation Z in India, sustainability has become a major predictor of consumer conduct. Based on Signaling Theory, this research investigates the variables impacting their readiness to pay a premium for environmentally friendly items. Data was gathered via a structured questionnaire and examined using Partial Least Squares Structural Equation Modelling (PLS-SEM) employing a quantitative methodology. The study looks at how environmental worry, green future prediction, green perceived benefits, and green perceived quality affect the will to pay more for green products. The results show a notable positive impact from environmental concern, green future estimation, and green perceived quality; environmental concern is the most important predictor; green perceived benefits, however, exhibit no major effect. Though Generation Z consumers show great environmental awareness, their readiness to pay a premium is mostly motivated by perceived product quality and future sustainability expectations rather than by functional advantages alone. The study adds to green marketing literature by applying Signaling Theory in the Indian setting and offers practical advice for marketers and politicians to boost sustainable consumption via better product quality, efficient communication, and rival pricing methods.

Keywords: Generation Z, Green products, Willingness to pay, Environmental concern, Signaling theory

Introduction

A major concern among customers is sustainability, which is fueling the quick rise of green marketing techniques and the availability of eco-friendly products (Squires, 2019). For companies trying to match sustainable consumption trends, this change provides both possibilities and difficulties (Jabbour *et al.*, 2015; Tsalis *et al.*, 2020). As a result, scholars are becoming more interested in looking at how different generations consume green goods and figuring out what factors influence consumers' willingness to pay more for them (Sheth, 2021) [15].

According to generational cohort theory, people inside a cohort have similar socio-economic and cultural experiences, which influence their consumer behaviour (Kotler, 2006; Reisenwitz & Iyer, 2009). Among these groups, Generation Z is known to be very aware of the environment and more prone to consume sustainably. They often show a greater willingness to pay for products that are good for the environment (Casalegno *et al.*, 2022; Ham *et al.*, 2022). Rising digital penetration and growing environmental consciousness in the Indian setting magnify the relevance of this group for marketers wanting to create focused and sustainable products (Abdelkader & Attallah, 2021).

Born between 1997 and 2012, Generation Z has been molded by a digitally linked society, which has influenced their tastes, values, and consumption habits (Kardaras, 2016; Kaplan, 2020) [10]. Technological versatility, willingness to diversity, and a strong preference for ecologically and ethically

responsible brands define this group. Though they still exhibit great price sensitivity and value awareness in their purchasing decisions (Chillakuri, 2020) [4], they show a higher tendency toward sustainable products and are ready to pay a premium for related personal and social advantages (First Insight, 2020). Even though Generation Z is becoming more important in terms of demographics and the economy both in India and around the world, there hasn't been much research that looks specifically at their environmental concerns and how they affect what they buy, especially when it comes to being willing to pay more for products that are good for the environment (Dabija *et al.*, 2019 [6]; Biswas & Roy, 2016; Wei *et al.*, 2018) [18].

Therefore, this study seeks to investigate the factors affecting Generation Z consumers' demand for environmentally friendly goods and their readiness to pay a premium in the Indian setting. It particularly explores the functions of environmental concern, green future estimation, green perceived benefits, and green perceived quality, using these factors inside the framework of signalling theory to give a comprehensive knowledge of green consumption behaviour.

Literature review

a) Signaling theory

This research is based on Signaling Theory, which explains how consumers make decisions under information asymmetry, where visible actions indicate unobservable

characteristics (Spence, 1973; Connelly *et al.*, 2011). Buying environmentally friendly items in the Indian green consumption scene signals ethical orientation and environmental responsibility. Unlike conventional status-driven consumption, green buying among Indian Generation Z progressively shows pro-social values and ecological awareness (Berger, 2019^[1]; Ki & Kim, 2022)^[11]. Furthermore, the readiness to pay a premium for green goods suggests self-interest as well as altruistic intent, since such items are sometimes linked with better quality and health (Michaelidou & Hassan, 2008).

b) Environmental concern

Environmental concern measures how much people know about environmental problems and how willing they are to live in ways that are good for the environment (Dunlap & Jones, 2002). Increasing environmental issues in India have greatly raised awareness among younger consumers, especially Generation Z. Previous studies indicate that environmental concern has a positive impact on attitudes and intentions regarding green purchases (Yadav & Pathak, 2016). Price sensitivity and scarce availability, among other things, could limit the translation of worry into real activity (Joshi & Rahman, 2017). Still, higher environmental concern usually translates into a greater readiness to pay for ecologically friendly goods.

H1: Indian Generation Z consumers' desire to pay more for environmentally friendly items is greatly positively affected by environmental concern.

c) Green future estimation

Green future estimation, which is mostly molded by past consumption experiences, mirrors consumers' expectations for the future acceptance of environmentally friendly products. Positive previous experiences in India improve positive attitudes and increase future purchase intentions (Chaudhary, 2018)^[2]. Decision-making depends critically on consumer experiences, which include cognitive, emotional, and behavioural aspects (McColl-Kennedy *et al.*, 2015). Furthermore, even if price remains a major limitation for young customers, green marketing efforts help to establish trust and boost demand, particularly among middle- and lower-income groups.

H2: Among Generation Z consumers in India, green future estimate has a strong positive effect on their readiness to pay more for environmentally friendly items.

d) Green perceived benefits

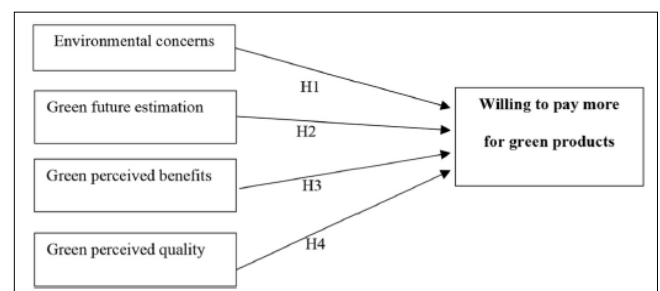
Green perceived benefits refer to the positive value that customers place on green goods, such as health, quality, and happiness, is known as perceived benefits of green products (Chandon *et al.*, 2000). These impressions have been reinforced among young consumers in India by growing health awareness and a concern for sustainability. In organic food and other product categories, empirical research demonstrates that a higher perceived advantage results in a higher willingness to pay a premium and greater purchase intent (Yazdanpanah *et al.*, 2015)^[20].

H3: Green perceived benefits have a significant positive influence on the willingness to pay more for green products among Generation Z consumers in India.

e) Green perceived quality

A product's overall excellence in terms of its functionality and environmental performance is what consumers mean by "green perceived quality" (Zeithaml, 1988). Green goods are frequently thought to be safer, more dependable, and better for the environment in the Indian market. Particularly when prior experience is lacking, perceived quality has a significant impact on the formation of purchase intentions (Chen *et al.*, 2015). Customers are more willing to pay a premium when they believe that the product is of higher quality because it boosts trust, pleasure, and loyalty (Chen & Chang, 2013)^[3].

H4: Green perceived quality has a significant positive influence on the willingness to pay more for green products among Generation Z consumers in India.



Methods

1. Sample and measures

In India, data for the study was gathered through an online survey carried out between January and March 2025 using a quantitative research approach. Given the high online activity of Gen Z, the survey was distributed through digital channels such as Instagram, Facebook, and LinkedIn. All respondents provided informed consent, and participation was voluntary and anonymous. To ascertain the instrument's clarity and appropriateness, a pilot study was conducted.

Out of the 1,300 responses we received, about 950 said they often buy environmentally friendly items. For the last analysis, around 720 members of Generation Z (ages 18–28) from this group were kept. The sample size is sufficient for structural equation modeling and represents the growing acceptance of environmentally friendly consumption habits among young people in India (Statista, 2025).

Based on Nekmahmud and Fekete-Farkas (2020)^[14], the survey was modified to the Indian context and included socio-demographic information as well as five sections. It assessed respondents' willingness to pay more, environmental awareness, perceived advantages of going green, perceived quality of going green, and forecasts for a greener future. A five-point Likert scale, with values ranging from one (strongly disagree) to five (strongly agree), was used to evaluate all products.

2. Data analysis

Data analysis was conducted using IBM SPSS Statistics (Version 26) was used for descriptive analysis, and SmartPLS

(Version 4) was used for hypothesis testing using Partial Least Squares Structural Equation Modeling (PLS-SEM). Because this method is well suited for complicated models and non-normal data, it is acceptable (Hair *et al.*, 2021).

Cronbach's Alpha and Composite Reliability (≥ 0.70), as well as Average Variance Extracted (≥ 0.50), were used to assess the reliability and validity of the construct. The model's explanatory power was analyzed using R^2 values of endogenous constructs, whereas discriminant validity was evaluated using the Fornell–Larcker criterion. This methodology guarantees a thorough analysis of the connections between environmental worries, green future forecasting, perceived advantages, perceived quality, and Gen Z consumers' willingness to pay more for green goods in India.

Results

1. Descriptive analysis

The final dataset consisted of 720 legitimate responses from Indian members of Gen Z who frequently buy environmentally friendly goods. The sample was made up of a disproportionately large number of women (about 62%) and a smaller number of men (38%). There was a little negative correlation between gender and willingness to pay (WTP), which suggests that male respondents were somewhat more willing to pay, but this correlation was not statistically significant.

With a range of 18 to 28, the average age of respondents was about 21. The age of a person in Generation Z had a small positive correlation with their likelihood of paying a premium. Most respondents had finished secondary school or were working toward their undergraduate degree, and a modest negative relationship suggested that lower educational attainment was associated with somewhat higher willingness to pay. Income had a positive correlation with WTP, while profession had no discernible impact, implying that respondents with higher incomes were more inclined to pay for eco-friendly goods.

Table 1: Socio-demographic profile and association with willingness to Pay (WTP)

Variables	Category	% / Mean	β Value	p-value
Gender	Male / Female	38 / 62	-0.05	0.052
Age (years)	Mean = 21.0	—	0.03	0.059
Education	≤ 12 th / Graduate+	58 / 42	-0.06	0.093
Occupation	Student / Others	70 / 30	0.02	0.714
Monthly Income	Low/Medium/High	—	0.01	0.085

Note: WTP = Willingness to pay more for green products

Table 4: Structural model results and hypothesis testing

Hypothesis	Relationship	β Value	Result
H1	Environmental concern \rightarrow WTP	0.289	Supported \checkmark
H2	Green future estimation \rightarrow WTP	0.163	Supported \checkmark
H3	Green perceived benefits \rightarrow WTP	-0.026	Not Supported \times
H4	Green perceived quality \rightarrow WTP	0.165	Supported \checkmark

The strongest predictor of WTP was environmental concern, followed by perceived quality and green future expectations. Green-perceived benefits, however, revealed a negative and insignificant impact, which resulted in the rejection of H3. This

In general, participants held positive opinions of eco-friendly consumption. All independent variables showed high mean values (above 4.0), reflecting a strong pro-environmental attitude, whereas the mean value for WTP was over 3.5, indicating moderate consensus. The greatest agreement was seen on environmental concerns, followed by perceived quality, perceived benefits, and projections for a greener future.

Table 2: Descriptive statistics of study variables

Variables	Mean	Standard deviation
Willingness to Pay	3.54	1.08
Environmental Concern	4.24	0.82
Green Future Estimation	4.15	0.87
Green Perceived Benefits	4.21	0.84
Green Perceived Quality	4.07	0.86

Measurement model evaluation

The validity and reliability of the measurement model were proven to be acceptable. The internal consistency was verified by composite reliability and Cronbach's Alpha values that surpassed the suggested cutoff of 0.70. The Fornell–Larcker criterion, which demonstrates a clear distinction between concepts, was used to confirm discriminant validity, whereas AVE values over 0.50 were used to establish convergent validity.

Table 3: Measurement model (reliability and validity)

Constructs	Cronbach's alpha	Composite Reliability (CR)	AVE
Environmental Concern	0.82	0.88	0.65
Green Future Estimation	0.79	0.86	0.61
Green Perceived Benefits	0.76	0.84	0.58
Green Perceived Quality	0.81	0.87	0.63
Willingness to Pay	0.83	0.89	0.67

Note: All values meet recommended thresholds (Hair *et al.*, 2019)^[8]

Structural model and hypothesis testing

The structural model demonstrated a reasonable level of explanatory capacity, with independent variables accounting for around 26% of the variance in WTP ($R^2 \approx 0.26$). The model fit indicators showed an acceptable fit for the model, and predictive relevance was verified ($Q^2 > 0$).

implies that in the Indian setting, functional advantages alone are not enough to induce people to spend a premium without a strong sense of environmental consciousness and a perception of the product's reliability.

Table 5: Model fit and predictive relevance

Model indicators	Value
R ² (WTP)	0.259
Q ² (Predictive Relevance)	0.251
Goodness of Fit (GoF)	0.957
CFI	0.888
SRMR	0.089

In general, the results show that Indian Generation Z consumers' willingness to pay a premium for green products is primarily determined by environmental concerns and perceived quality, whereas perceived benefits alone do not have a major impact on this behavior.

Discussion and implications

In India, the current study examined the primary factors influencing Generation Z consumers' willingness to pay a premium for eco-friendly goods, including environmental concern, green future assessment, green perceived benefits, and green perceived quality.

According to the findings, environmental concern has a big positive influence on willingness to pay, suggesting that Indian Generation Z consumers are becoming more conscious of environmental challenges like pollution and climate change. Backed by campaigns like Swachh Bharat Abhiyan, this increasing awareness fosters pro-environmental behaviors and enhances consumers' willingness to pay extra for environmentally friendly goods (Kim & Choi, 2005^[12]; Wei *et al.*, 2018).

Additionally, projections about a greener future have a beneficial impact on WTP, implying that people's expectations for the future acceptance and popularity of green products affect how they consume now. Such expectations are reinforced by the growth of environmentally friendly brands in the Indian market. Due to their low disposable income, however, Generation Z is still highly price sensitive, which tempers their purchasing choices (Chaudhary, 2018)^[2]. However, trust is strengthened and the probability of paying a premium is increased by positive previous experiences (Yadav & Pathak, 2016).

Surprisingly, the perceived environmental advantages had a modest and negative impact on willingness to pay. This suggests that consumers recognize the functional and health benefits of green products, but that these benefits alone are not enough to support higher prices. Premium-paying behavior may be less influenced by the widespread normalization of these rewards and external pressures.

Contrarily, green perceived quality had a significant positive effect, suggesting that consumers place a high priority on dependability, longevity, and general product performance when deciding whether or not to pay more. Perceived quality is crucial in establishing confidence and influencing purchasing choices in the Indian market, where there are continuing worries about the genuineness of goods (Wang *et al.*, 2020)^[17]. In general, environmental worry was the most important factor, followed by perceived quality and prediction of a green future. Perceived advantages, on the other hand, had little impact.

Theoretical implications

By showing that buying green goods serves as a sign of environmental consciousness and pro-social values among Indian Generation Z customers, this research expands Signaling Theory in the context of green consumption. Green consumption, in contrast to conventional status-based signaling, demonstrates moral commitment and trustworthiness.

Practical implications

The study has significant implications for legislators and marketers. As it is a major factor in WTP, companies should focus on increasing environmental knowledge. To establish trust and warrant high prices, product quality and reliability must be emphasized.

Businesses should concentrate on cost optimization via innovation and avoid excessive price premiums in light of Indian Generation Z consumers' price sensitivity. Consumers may find genuine green items by looking for transparent communication, certifications, and clear labeling.

Marketing plans for industries like food and personal care should emphasize health benefits and experiential value in addition to environmental features. Furthermore, tactics like circular economy projects, recycling incentives, and discounts can boost repeat purchases.

In order to increase consumer engagement, legislators should continue to promote sustainable consumption through awareness campaigns, educational programs, and supportive policies, as well as encourage cooperation with the industry.

Limitations and future research directions

This study has some drawbacks, even if it makes a valuable contribution. Due to India's Generation Z consumers, the results cannot be generalized. Other generational groups might be compared in future research.

Moreover, socio-demographic factors were not considered as mediators and may be the subject of further investigation. The study also took a broad view of environmentally friendly goods, and future research may concentrate on particular areas like food, clothing, or cars.

Additional research is needed to ascertain the degree to which customers are prepared to pay a premium over traditional goods. This will shed more light on pricing models and sustainable consumer behavior.

Conclusion

Green consumption has become more and more important as sustainability has taken center stage, especially in India's Generation Z, who are environmentally conscious but also very price-conscious due to financial limitations. Based on Signaling Theory, this study found that environmental concern, green future prediction, and green perceived quality were all important positive predictors of willingness to pay a premium for green goods, with environmental concern being the most influential. Conversely, green perceived benefits had no appreciable impact on willingness to pay, suggesting that functional advantages alone are not enough to warrant higher

prices. Overall, the results indicate that although Generation Z has a clear preference for sustainable consumption, their willingness to pay more for it is contingent upon their perception of its value, trustworthiness, and affordability. In order to encourage sustainable consumption and support long-term environmental objectives, the research emphasizes the importance of marketers and politicians increasing awareness, ensuring product trustworthiness, and implementing pricing tactics that make green products more affordable.

References

1. Berger J. Signaling can increase consumers' willingness to pay for green products. *J Consum Behav.* 2019;18(3):233-246.
2. Chaudhary R. Green buying behavior in India: an empirical analysis. *J Global Respons.* 2018;9(2):179-192.
3. Chen YS, Chang CH. Towards green trust: the influences of green perceived quality, green perceived risk, and green satisfaction. *Manag Decis.* 2013;51(1):63-82.
4. Chillakuri B. Understanding Generation Z expectations for effective onboarding. *J Organ Change Manag.* 2020;33(7):1277-1296.
5. Connelly BL, Certo ST, Ireland RD, Reutzel CR. Signaling theory: a review and assessment. *J Manag.* 2011;37(1):39-67.
6. Dabija DC, Bejan BM, Dinu V. How sustainability oriented is Generation Z in retail? *Transform Bus Econ.* 2019;18(2):140-155.
7. Dunlap RE, Jones RE. Environmental concern: conceptual and measurement issues. In: *Handbook of Environmental Sociology.* 2002;482-524.
8. Hair JF, Risher JJ, Sarstedt M, Ringle CM. When to use and how to report the results of PLS-SEM. *Eur Bus Rev.* 2019;31(1):2-24.
9. Joshi Y, Rahman Z. Determinants of consumers' sustainable purchase behaviour. *Sustain Prod Consum.* 2017;10:110-120.
10. Kaplan EB. The millennial/Gen Z shift: emerging consumer expectations. *Sociol Perspect.* 2020;63(3):408-427.
11. Ki H, Kim JY. Sell green and buy green: a signaling theory of green products. *Resour Energy Econ.* 2022;67:101266.
12. Kim Y, Choi SM. Antecedents of green purchase behavior. *Adv Consum Res.* 2005;32:592-599.
13. Michaelidou N, Hassan LM. The role of health consciousness and ethical identity on attitudes towards organic food. *Int J Consum Stud.* 2008;32(2):163-170.
14. Nekmahmud M, Fekete-Farkas M. Why not green marketing? *Sustainability.* 2020;12(19):7880.
15. Sheth J. New areas of research in marketing strategy and consumer behavior. *J Mark Theor Pract.* 2021;29(1):3-12.
16. Spence M. Job market signaling. *Q J Econ.* 1973;87(3):355-374.
17. Wang J, Tao J, Chu M. Consumers' trust and perceived quality on purchase intention. *Food Control.* 2020;108:106825.
18. Wei S, Ang T, Jancenelle VE. Willingness to pay more for green products. *J Retail Consum Serv.* 2018;45:230-238.
19. Yadav R, Pathak GS. Young consumers' intention towards buying green products. *J Clean Prod.* 2016;135:732-739.
20. Yazdanpanah M, Forouzani M, Hojjati M. Willingness of young adults to eat organic foods. *Food Qual Prefer.* 2015;41:75-83.