

Investigating the Impact of Green Marketing Mix on the Purchase Intention of Gen Z and Millennials in India

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Abstract: With the world paradigm shifting towards sustainability, the beauty and personal care (BPC) industry is experiencing a "green revolution", especially in emerging markets such as India. While environmental awareness is reported to be high amongst the youth in India, the specific marketing stimuli that translate this awareness into actual buying intent has been under-explored. This study aims to empirically investigate the impact of the Green Marketing Mix elements, i.e., Green Product, Price, Place and Promotion on the purchase intention of Millennials and Generation Z consumers in Delhi NCR.

Design/Methodology/Approach: A quantitative research design was adopted in this study whereby a structured questionnaire was used to gather data from 369 respondents using purposive sampling. The data was analyzed with the use of IBM Statistical Package for Social Sciences (SPSS) Statistics 25.0 with the help of Descriptive Statistics, Reliability Analysis, and Multiple Linear Regression.

Findings: The findings show that Green Product, Green Place and Green Promotion have a significant effect on purchase intention. Surprisingly, Green Price has a non-significant effect on intention, which challenges the traditional view that price is the main barrier and that young Indian consumers focus on product efficacy and accessibility rather than price at the intention stage. **Originality/Value:** This research adds to the scant body of literature on green marketing in India by confirming that the "Green Premium" is less of a deterrent for the modern, value-driven youth demographic as compared to functional and promotional factors.

Keywords: Green Marketing Mix, Purchase Intention, Sustainable Beauty, Gen Z, Price Sensitivity, India.

Introduction: In the past few decades, sustainability has moved from being a corporate social responsibility project to being a key strategic imperative for businesses around the world, spurred by growing concerns about climate change and resource depletion. This ideology has permeated far and wide into the consumer goods industry, especially the Beauty and Personal Care (BPC) industry, which is traditionally scrutinized for its use of plastic packaging and chemical formulations. As a result, the concept of "Green Consumerism" has been born, which is characterized by the increase in demand of products that are natural, organic and ethically obtained. India is experiencing a strong growth in this green economy with the help of its demographic dividend. Research shows that Indian consumers, particularly younger consumers (Millennials and Generation Z), are leading this change. These groups are digitally savvy, socially conscious, and increasingly likely to be drawn to brands that show a sense of ethical responsibility. However, despite high levels of reported environmental concern, the market share of green products is still relatively low, a phenomenon described in academic literature as the "Green Gap" or "Attitude-Behavior Gap". Consumers often express a desire to purchase green products, but do

not follow through when it comes to the point of purchase, a critical challenge for marketers. To fill this gap, marketers use the "Green Marketing Mix", which is an adaptation of the traditional 4Ps (Product, Price, Place, and Promotion) created by McCarthy. Yet, there is conflicting literature regarding which of these components is best in an emerging market such as India. While some scholars suggest that high price is the primary obstacle because of the "green premium", others suggest that product quality and functional performance are the deciding factors. Similarly, although availability is important, the influence of digital distribution channels for green adoption requires new empirical validation.

Against this backdrop, the main objective of this study is to empirically analyze the individual impact of Green Product, Price, Place and Promotion on the purchase intention of Indian youth. By doing so, the study aims to identify if the Indian Gen Z consumer is pushed by cost constraints or conscience and convenience. Furthermore, the study is aimed at evaluating the current level of buying intention for sustainable BPC products among Millennials and Gen Z in Delhi NCR and also to help brands with actionable insights on how to effectively target this demographic.

Literature Review and Formulating Hypothesis

The research is based on the Theory of Planned Behavior (TPB) put forward by Ajzen (1991), which suggests that behavior intention is the immediate predecessor of behavior. In the context of green marketing, scholars have succeeded in extending TPB to show that external marketing stimuli, specifically the elements of the marketing mix, have a significant impact on the internal behavioral intentions. This study uses this framework to suggest that the four "Green Ps" are independent predictors of purchase intention.

Green Product is characterized by its environmentally friendly design, non-toxic ingredients and recyclable packaging. Early research often indicated that consumers were skeptical of the functional performance of green products, fearing a trade-off between efficacy and ethics. However, recent research in the cosmetics industry suggests a paradigm shift, with product quality as a better predictor of choice than environmental claims alone. Yadav and Pathak (2016) noted that for the youth consumers in the developing nations, functional value is paramount. Therefore, this research hypothesizes that Green Product attributes lead to a significant positive impact on Purchase Intention (H1) proposing that products perceived as high-quality and eco-friendly will drive higher intent.

The role of Green Price in sustainable consumption is much debated. Traditional economic theory implies that consumers are generally price-sensitive and that they are not willing to pay a premium for public goods. Joshi and Rahman (2015) cited high cost as one of the main obstacles to green adoption in developing nations. Conversely, Signaling Theory argues that a higher price may be a sign of good quality and authenticity. Chaudhary and Bisai (2018) suggest that young Indian consumers perceive green products to be lifestyle choices, and are willing to pay a premium for perceived value. To test these opposing views, the study hypothesizes that Green Price has a

significant positive impact on Purchase Intention (H2) assuming that perceived value justifies the cost.

Green Place refers to the availability and channels of distribution to make sustainable products easily accessible. Vermeir and Verbeke (2008) emphasized that low availability raises the "behavioral cost" of purchasing green, so that intention is lowered. However, with the development of e-commerce and omnichannel retail, accessibility is improving. The study considers that the better availability and sustainable distribution methods have a positive impact on the decisionmaking process. Thus, it is hypothesized that Green Place has significant positive impact on Purchase Intention (H3).

Finally, Green Promotion is the communication of environmental information in order to reduce information asymmetry. Rahbar and Wahid (2011) found that eco-labels and transparent advertising play an important role in building consumer trust. However, over-claims or "greenwashing" can create doubt.

Paul et al. (2016) emphasized on effective communication that highlights both personal and environmental benefits driving intent. Consequently, the study hypothesizes that the Green Promotion has a significant positive impact on Purchase Intention (H4).

Research Methodology: In order to empirically test the proposed hypotheses, a quantitative research approach with descriptive cross-sectional design was used. The target population was Millennials and Generation Z consumers living in Delhi NCR region. This location was chosen as it is a cosmopolitan location with high internet penetration and exposure to global consumption trends, making it a perfect testing ground for sustainable behavior. A non-probability purposive sampling approach was employed to recruit respondents who are potential or current users of personal care products. The final number of samples used for data analysis was $N = 369$, which is above the recommended sample size for regression analysis to provide adequate statistical power.

Data was collected through a structured questionnaire using both online platforms and offline intercept methods to ensure that a diverse demographic is represented. The development of the measurement instrument was based on items that were adapted from validated scales in existing literature to ensure content validity. Specifically, items that measure Green Product, Price, Place and Promotion were adapted from studies such as Yadav and Pathak (2016) and Paul et al. (2016). Purchase Intention items were based on Ajzen (1991) and Chan (2001). All items were scored on a 5-point Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree).

The data obtained was coded and analyzed with the help of IBM SPSS Statistics (Version 25.0). The analysis was carried out in three stages. First, Descriptive Statistics were calculated to analyze the profile of respondent and mean score of variable. Second, the reliability of the scale was tested in terms of Cronbach's Alpha, a cut-off value of 0.70 was used as suggested by Nunnally (1978) to establish internal consistency. Finally, Inferential Statistics, specifically Multiple Linear Regression Analysis was carried out in order to ascertain the strength and direction of the relationship between the independent variables (Green Marketing Mix elements) and the dependent variable (Purchase Intention) for the purpose of testing the proposed hypotheses.

Demographic Characteristics of Respondents: The study used data from 369 respondents to determine the representativeness of the sample. As described in Table 1, the demographic distribution shows that the sample is effective in sampling the target population of Millennials and Generation Z in the Delhi NCR region. The age distribution is highly skewed towards younger age groups, with 42% of the respondents falling in the Gen Z bracket (18-24 years) and 34.1% in the younger Millennial bracket (25-34 years). The representation of the gender is balanced. 47.4% of the respondents are female and 46.1% of the respondents are male, making sure that the findings are not biased by gender. Furthermore, the sample is well-educated with over 73% having either a Bachelor's or Master's degree, which indicates a high level of literacy which is likely to correlate with a better understanding of sustainability concepts.

Table 1: Demographic Characteristics of Respondents (N = 369)

Characteristic	Category	Frequency	Percentage
Age Group (years)	18–24 (Gen Z)	155	42.00%
	25–34 (Young Millennials)	126	34.10%
	35–44 (Older Millennials)	52	14.10%
	45 and above	36	9.80%
Gender	Male	170	46.10%
	Female	175	47.40%
	Other/Non-binary	24	6.50%

Education	High school	36	9.80%
	Bachelor's degree	151	40.90%
	Master's degree	120	32.50%
	Ph.D.	21	5.70%
	Other	41	11.10%
Occupation	Student	96	26.00%
	Employed (jobholder)	125	33.90%
	Self-employed/Business	85	23.00%
	Homemaker	40	10.80%
	Other	23	6.20%
Monthly Income	No income	77	20.90%
	< ₹20,000	92	24.90%
	₹20,000–50,000	113	30.60%
	₹50,000–100,000	53	14.40%
	> ₹100,000	34	9.20%
City (NCR)	Delhi	108	29.30%
	Gurugram (Gurgaon)	74	20.10%
	Noida	67	18.20%
	Ghaziabad	45	12.20%
	Faridabad	43	11.70%
	Other NCR towns	32	8.70%

(Source: Primary data, 2025)

1.1. Reliability and Validity Study: In order to guarantee the robustness of the measurement instrument, reliability and validity tests were performed. As presented in Table 2, the internal consistency of the constructs was measured with the help of Cronbach's Alpha. All values were between 0.75 and 0.85, which is above the recommended cut-off of 0.70 (Nunnally, 1978) and represents good reliability. Convergent validity was measured by Average Variance Extracted (AVE), in which all constructs met the minimum criterion of 0.50. Composite Reliability (CR) values were also found to be satisfactory (>0.70) confirming the reliability of the scale items measuring the theoretical constructs of the Green Marketing Mix and Purchase Intention.

Table 2: Reliability and Convergent Validity of Constructs

Construct	Items	Cronbach's α	Composite Reliability (CR)	Average Variance Extracted (AVE)
Green Product	5	0.78	0.82	0.53
Green Price	5	0.75	0.79	0.5
Green Place	5	0.8	0.84	0.54
Green Promotion	5	0.85	0.88	0.59
Purchase Intention	5	0.83	0.87	0.57

(Source: Data Analysis, SPSS)

Note: All Cronbach's alpha > 0.70 indicating acceptable internal consistency. AVE >= 0.50 for all constructs = satisfactory convergent validity CR = Composite Reliability.

1.2. Hypothesis Testing (Multiple Regression Analysis)

To test the proposed hypotheses (H1-H4), a multiple linear regression analysis was conducted using Purchase Intention as dependent variable and four elements of the Green Marketing Mix as independent variables. The overall model fit was found to be significant with R-Square value of 0.305, which implies that the Green Marketing Mix elements jointly account for 30.5% of variability in the purchase intention of consumers.

Table 3: Purchase Intention Regression to Green Marketing Mix Factors (H1-H4)

Predictor (Independent Variable)	β (Standardized)	t-value	p-value
Green Product	0.20 **	3.01	0.003 **
Green Price	0.05	0.94	0.347
Green Place	0.22 **	3.35	0.001 **
Green Promotion	0.28 ***	4.39	< 0.001 ***
Model Summary: $R^2 = 0.305$ Adjusted $R^2 = 0.298$ $F(4,364) = 39.5***$ ($p < 0.001$)			

(Source: Data Analysis, SPSS)

Note: Dependent Variable = Purchase Intention Significance levels: $p < 0.05$, $p < 0.01$, $p^* < 0.001$. Standardized coefficients are reported. $N = 369$.

Table 4: Summary of Hypotheses and Results

Hypothesis	Supported?	Evidence (Summary)
H1: Green Product $\rightarrow$ Purchase Intention (positive)	Yes (Supported)	$\beta = 0.20$, $p = 0.003$ (Product quality/features significantly increase green purchase intention).
H2: Green Price $\rightarrow$ Purchase Intention (positive)	No (Not Supported)	$\beta = 0.05$, $p = 0.35$ (n.s.). Price perception showed no significant effect on purchase intention.
H3: Green Place $\rightarrow$ Purchase Intention (positive)	Yes (Supported)	$\beta = 0.22$, $p = 0.001$. Easy availability/distribution of green products significantly increases intention to buy.
H4: Green Promotion $\rightarrow$ Purchase Intention (positive)	Yes (Supported)	$\beta = 0.28$, $p < 0.001$. Effective green marketing communications significantly increase purchase intention.

(Source: Data Analysis, SPSS)

Note: Hypotheses H1, H3, H4, H5 are supported by the data. H2 is not supported.

The regression coefficients in Table 3 show clear patterns in terms of the effect of each variable. Green Promotion was the best predictor ($\beta = 0.28$, $p < 0.001$) followed by Green Place ($\beta = 0.22$, $p = 0.001$) and Green Product ($\beta = 0.20$, $p = 0.003$). As shown in table 4, hypotheses H1, H3 and H4 are supported. However, the result of the analysis was non-significant for Green Price (0.05, $p = 0.347$), so H2 was rejected. This suggests that price perception is not an important factor in influencing the purchase intention of the target demographic in this context.

Discussion: The results of this study provide important information about the drivers of sustainable consumption among Indian youth, which is a combination of what is to be expected and what is different from the conventional wisdom of marketing. The significant positive impact of Green Product (H1) is consistent with the recent research by Yadav and Pathak (2016), which reinforces the notion that modern consumers are quality-conscious. For Gen Z, the "green" label is not enough, the product has to provide functional benefits such as non-toxic ingredients and effective performance. This seems to indicate that the skepticism about the efficacy of green alternatives, prevalent in the early 2000s, has largely been overcome among educated urban consumers.

The most provocative is the insignificance of Green Price (H2). Contrary to the popular thought that high prices are the main obstacle for green adoption (Joshi & Rahman, 2015), our results suggest that price sensitivity is not a decisive factor towards this demographic at the intention stage. This lends weight to Signaling Theory and recent findings by Chaudhary and Bisai (2018) that suggests that Indian Gen Z considers higher prices as a proxy for authenticity and safety. In high-involvement categories such as skincare, young consumers do seem willing to ignore the "Green Premium" if they believe in the brand's ethical claims.

The study also justifies the critical role of Green Place (H3), confirming that accessibility is a prerequisite for conversion. The importance of this variable is the success of the digital distribution boom in India. As noted by Kumar et al. (2017), the physical effort needed to purchase green is reduced by omnichannel availability and thus aids in the shift from attitude to intention. Finally, Green Promotion (H4) was the greatest driver, supporting Polonsky's (2011) claim that credible communication helps bridge the trust gap. The high responsiveness to promotion means that this digital-native generation is very dependent on transparent storytelling and eco-certifications to navigate the marketplace.

Conclusion: The study concludes that the "Green Gap" in the Indian BPC sector is being bridged not by decreasing prices, but by increasing product value, accessibility and communication. For Millennials and Gen Z in Delhi NCR, the purchase of sustainable products is based on a sophisticated analysis of quality (Product), convenience (Place) and credibility (Promotion). The irrelevance of price as an obstacle is a sign of maturity of the Indian market, indicating the emergence of a value-driven consumer class with a focus on personal health and well-being of the planet rather than saving money.

Managerial Implications: Marketers are encouraged to shift from price-based competition to value-based competition. Instead of fighting price wars, brands should justify their premium positioning through better ingredients and transparency of ethics. Investments should be directed towards Omni channel distribution to ensure products are where the young consumers are - online and in quick-commerce apps. Furthermore, promotional campaigns should go beyond generic "eco-friendly" claims to specific and verifiable stories about ingredients and impact.

Limitations and Future Research: While the study is robust in providing insights, it is restricted to the Delhi NCR region. Future research should expand to Tier-2 and Tier-3 cities to explore whether price sensitivity re-appears as a major barrier in lower income markets. Additionally, longitudinal studies could confirm whether the stated purchase intention is actually translated into actual behavior over time.

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