

## Antecedents of Green Purchase Intention: A Case of Biratnagar, Nepal

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Cite this paper as: Udgam Mishra, Rimple Manchanda, Bikash Sharma and Rekha Kapair (2024). Antecedents of Green Purchase Intention: A Case of Biratnagar, Nepal. *Frontiers in Health Informatics*, 13(3), 2565-2573.

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### Abstract

*The current research aims to examine the factors that affect green purchase intention. It investigates the influence of green prices, green advertisements, green perceived value, and environmental knowledge on green purchasing intention. Data were collected from 261 Nepalese individuals from Biratnagar through a self-administered questionnaire to collect cross-sectional data. Structural equation modelling with Amos 21 was used to examine the data. The findings of the study show that green pricing does not significantly affect the green purchase intention unless the product is considered as environmentally friendly. The green advertisement plays a crucial role in shaping consumers' attitudes. The green perceived value showed a significant impact on the green purchase intention and the environmental knowledge is an important determinant as well. The study contributed immensely to the current body of knowledge in the current time and space context. The research has implications for researchers, marketers and policymakers.*

**Keywords** – Green price, green advertisement, green perceived value, environmental knowledge, green purchase intention

### INTRODUCTION

The ongoing alteration of the global climate leads to the persistent emergence of environmental problems, which become pressing social concerns (Bandh et al., 2021). The environment is adversely affected by economic advancement and development, leading to phenomena such as acid rain, global warming, and the depletion of natural resources. This negative impact has been regarded as the outcome of anthropogenic activities (Manchanda, 2024). The exponential expansion of human intervention in natural phenomena caused a lot of environmental contamination and the depletion of natural resources.

While experiencing climate change and with the increase in awareness of the negative impact of human activities on the environment, there is a growing concern and emphasis on the need for environmental and social responsibility. The recognition of undesirable actions of humans is driving responsiveness towards the implementation of ambitious strategies to protect the environment (Komodromos & Melanthiou, 2014). Global businesses are increasingly incorporating corporate social responsibility into their operations, resulting in the production of ecologically friendly products. Thus, the present market is collectively appealing to marketers of eco-friendly products.

The escalating global concerns regarding environmental quality have led to the emergence of green marketing. The global focus on Green Marketing mainly emerges from environmental concerns such as climate change, water management challenges, deforestation, and others (Zhu & Sarkis, 2016). Using eco-friendly products confirms no environmental harm, raising the demand for green products. In addition, a growing consumer consciousness regarding environmental and social matters leads to a demand for responsible items such as recycled and environmentally friendly products. Mokha (2017) asserts that green marketing differs from conventional marketing, offering items or services to deliver environmental advantages. Environmentally friendly products are defined as items that intentionally minimise negative impacts on the natural environment

and are advantageous for restoration and recycling (Zhu et al., 2022). Green products are increasingly expanding from tiny consumer goods and services niche markets to larger markets in the current market. Tulu et al. (2024) state that fragile design and inadequate administration of energy and electricity are responsible for climate change. Consequently, organisations adopt the practice of providing energy-efficient green eco-lighting goods.

Nevertheless, there is some ambiguity regarding customer awareness of green eco-friendly products, consumer impression, and their inclination to acquire them (Sun & Wang, 2020). Furthermore, pertinent studies about customer perception of green, eco-friendly goods still need to be included (Alamsyah & Othman, 2021). Hence, this study investigates the correlation between consumers' inclination to purchase environmentally friendly items and their intention to purchase green products.

### **Theoretical Underpinning**

The value-belief theory of environmentalism suggests that the perceived green value will influence the purchase of green products through personal norms and pro-environmental beliefs. The more aware people are about an environmental issue and their direct or indirect impact, the more likely it is that they will purchase green products (Stern, Dietz, Abel, Guagnano, & Kalof, 1999).

The theory of planned behaviour underpins the current research that individual attitude, perceived behavioral control and social norms shape the behaviour of an individual. In the current context, the intention to buy green product will depend on an individual's attitude towards green products, his perceived value as well as social influence.

### **Green Purchase Intention**

The consumer's intention to purchase has a favourable impact on their decision to buy environmentally friendly products. Furthermore, numerous studies have indicated that green buying intention substantially predicts green purchase behaviour in developing countries (Naalchi, 2020). The intention to buy green products is essential in predicting the actual green purchase behaviour (Sreen, 2023). This indicates that the intention to buy green products strongly influences the likelihood of purchase.

Consumers' proclivity to buy eco-friendly products is affected by various factors that have been thoroughly studied in the literature and shown a significant influence on the willingness to purchase these products. The literature review shows that there has been extensive research on green purchase intention and purchase behaviour. Several factors have been identified that can impact the intention to purchase green products including eco-labels (Manchanda, 2014), green pricing (Tian, Sun, Wang, Su, & Li (2022), green advertisement (Naalchi, 2020), green brand knowledge (Siyal, Ahmed, Ahmad, Khan, & Xin, 2021) green perceived value, green trust, green perceived quality (Manchnada, 2022; Zhuang, Luo, & Riaz, 2021).

### **Green Price**

Price significantly affects consumers' intention to purchase a specific product (Hati et al., 2021). Price premium refers to the extra amount buyers are ready to spend for green products and the standard price. The green variants of the products are priced generally higher as compared to traditional versions of the products as the marketers try to earn a premium while selling the environment-friendly products. People are sensitive to prices, though while purchasing environmentally friendly products, they anticipate higher prices for green products (Büyükdag et al., 2020; Pahlevi & Suhartanto, 2020). Product pricing has been identified as one of the strong variables that impact the purchase intention of people (Rakib et al., 2022).

### **Green Advertisement**

A green advertisement is an innovative approach that centres around promoting green products and the concept of green consumption. It aims to encourage ecological protection, resource conservation, and responsible consumption. The green advertisement strives to bring balance between the development of humanity, nature, economy, and society (Yu et al., 2023). It can influence consumers' purchasing intention by convincing them to purchase environmentally friendly items. Green advertisement entails the endorsement and the acquisition of eco-friendly products. They bring forth and promote the benefits of environment-

friendly products and attract consumers' interest. The study has established that providing reliable information to the customer can significantly impact customers' inclination to buy environmentally friendly products. Other studies have also corroborated a strong impact of green advertising on the intention to purchase green products (Adelina & Hutabarat, 2023). The green advertisement used a novel approach to convince customers to consume environmentally friendly products. It educates people about the importance of protecting the ecological environment, conserving limited resources, and practising moderate and rational consumption (Yu, 2023).

### **Green Perceived Value**

"Green perceived value" refers to a consumer's overall assessment of the advantages gained from a product or service, taking into account how well it meets their environmental needs, sustainable standards, and ecological preferences. In a broader sense, perceived value pertains to the comprehensive evaluation made by consumers on the net advantage derived from products and services. Perceived value is the consumer's comprehensive evaluation of the usefulness of a product or service, which is determined by their perception of what they receive and what they provide in return (Zeithaml, 1988). Consumers are motivated by a product or service's perceived worth or importance. It can impact word-of-mouth recommendations favourably and enhance the likelihood of purchasing. Perceived value plays a crucial role in marketing success by allowing organizations to impact consumers' buying decisions by shaping their perception of value (Dam, 2020). Environmentally conscious consumers will purchase green items due to their environmental advantages. In the process of buying a product, the value of a product as perceived by the consumer is a key element that signals the customers' assessment of the product and impacts the purchase intent (Liu, 2021). A direct correlation has been found between the perceived value of green products and the consumer's propensity to purchase them (Watanabe et al., 2020).

### **Environmental Knowledge**

Environmental knowledge includes the individual's understanding of the issues related to the environment, the causes of these issues and ways to manage them (Xie & Lu, 2022). It entails the individual's capacity to identify the origin and outcomes of the environmental issues, including the essential facts and concepts required for their explanation (Haron et al., 2005). There have been studies that have tried to idealise the area of environmental knowledge research to understand and anticipate what determines the green behaviour of people. The studies have found a positive correlation between people's environmental knowledge and his intention to buy green products (Putri et al., 2024), which may come from the individual's understanding of the environment (Simanjuntak et al., 2023). Multiple research has confirmed that a higher degree of consumer environmental knowledge is crucial for effectively engaging in environmental conservation and significantly influences consumer decision-making (Bibi, 2022).

### **RESEARCH METHODOLOGY**

The exploratory research design is used to conduct the study. The cross-sectional data were collected through a self-administered questionnaire survey from 261 Nepalese individuals from Biratnagar, Nepal. The data were collected through a judgement sampling technique from the residents of Biratnagar, Nepal area, through an online survey platform, Google Docs. The questionnaire was precisely shared with the residents of that area using social media platforms, primarily Facebook and Twitter. The questionnaire comprised closed-ended questions with two distinct sections. The first section included questions for collecting data on demographic attributes such as gender, age, education, and family income. The second section comprised of statements related to the four latent variables under study, that is, green price, green advertisement, green perceived value, environmental knowledge, and purchase intention. Structural equation modelling with Amos 21 was used to analyse the data using the two-step methodology by Anderson & Gerbing (1988). The first stage of the investigation encompasses the measuring model, which includes exploratory factor analysis (EFA), item-to-item correlation, Cronbach's alpha, and confirmatory factor analysis. The subsequent phase is the structural model, which assesses the goodness of the model's fit. Table 1 below shows the scales used to measure variables under study. All the tools have been adapted from existing literature and are valid and

reliable.

**Table 1:** Tools for data collection

Latent variable	Code	Evaluation statement	Source
Green price	GP1	The price of green products is acceptable.	Zhang et al., (2023)
	GP2	The price of this green product is reasonable.	
	GP3	I am prepared to pay the necessary premium for environmentally friendly products.	
Green advertisement	GA1	Advertisements on environmentally friendly products can be trusted.	Shakir et al., (2021)
	GA2	Advertisements on environmentally friendly products are interesting.	
	GA3	Content of eco-friendly product advertising messages relevant to your daily life.	
Green perceived value	GPV1	Green product's environmental functions provide excellent value for me.	Toklu & Kucuk (2017)
	GPV2	I buy green products because they are eco-friendly.	
	GPV3	I buy green products for their superior environmental advantages compared to other products.	
Environmental knowledge	EK1	I am very concerned about the environment.	Siyal et al. (2021)
	EK2	Anti-pollution laws should be enforced more strongly.	
	EK3	I am prepared to decrease my consumption in order to safeguard the environment.	
Green Purchase Intention	GPI1	I plan to purchase eco-friendly products due to my environmental awareness.	Siyal et al. (2021)
	GPI2	I plan to buy green products for their environmental advantages.	
	GPI3	I am pleased to buy green products because they are eco-friendly.	

**Sampling and Data Collection**

Questionnaires were distributed to the participants who were residents of Biratnagar, Nepal using social media platforms, primarily Facebook and Twitter. Three hundred individuals from the Eastern region of Nepal were selected for the study using a convenience sampling method. Two hundred sixty-one genuine questionnaires were received after removing invalid ones, resulting in an 87% response rate. 80.84% of the respondents were male, and 45.97% held a master's degree. Additionally, 54.47% of the participants were between 31 and 40 years old, and 32.56% had a family income exceeding Rs. 60,000. Table 2 shows the sample characteristics.

**Table 2:** Demographic Details of Participants

Demographic	Characteristics	No of Respondents	Per cent
Gender	Female	50	19.15
	Male	211	80.84
Age	18-30 years	80	30.65
	31-40 years	143	54.47
	41-50 years	28	10.72
	Above 50 years	10	3.83
	Education	Schooling	5

	Higher Secondary (+2)	16	6.13
	Bachelors	90	34.48
	Masters	120	45.97
	Above Masters	30	11.49
Family Income	Less than Rs. 15000	51	19.54
	Rs. 15001 to Rs 30000	35	13.40
	Rs. 30001 to Rs 45000	47	18
	Rs. 45001 to Rs. 60000	43	16.47
	Above Rs. 60000	85	32.56

**Measurement Model**

According to Jackson and Tweed (1980), the square of multiple correlations indicates the shared characteristics and relationships between common factors and observed factors. It indicates the reliability of measurement and the percentage of variance explained by the latent variables (R2), as displayed in Table 3. The data are assessed through a two-step process: the measurement and structural models. Table 3 displays the SMC values for each variable, all exceeding the criteria value of 0.70. Cronbach's alpha was utilised to assess the data's trustworthiness. The Cronbach's alpha values for green price, green advertisement, green perceived value, environmental knowledge and green purchase intention are 0.854, 0.871, 0.911, 0.851, and 0.920, respectively, demonstrating the data reliability. Convergent validity must meet three specific criteria: (a) Factor loading must be greater than 0.50, (b) Composite reliability should be higher than 0, and (c) Average variance extracted should exceed 0.50 (Fornell & Larcker, 1981). The factor loadings in Table 3 range from 0.771 to 0.932, all exceeding 0.50. Composite reliability ranges from 0.8651 to 0.9492, all above 0. The average variance extracted for each construct ranges from 0.7745 to 0.8981, all-surpassing 0.50, demonstrating the constructs' reliability. Discriminant validity is evaluated by comparing the correlation between constructs with the square root of the Average Variance Extracted (AVE). Confirmation occurs when the average variance extracted (AVE) of each multi-item concept surpasses the common variance among constructs. The square of AVE is greater than the correlation values indicating discriminant validity in Table 3.

**Table 3** Reliability and validity of constructs

Latent Variables	Code	Factor Loadings	SMC	Cronbach's Alpha	CR	AVE
Green Price	GP1	0.792	0.838	0.854	0.9071	0.8120
	GP2	0.821	0.878			
	GP3	0.856	0.781			
Green advertisement	GA1	0.813	0.779	0.871	0.8651	0.7745
	GA2	0.822	0.771			
	GA3	0.801	0.798			
Green perceived value	GPV1	0.841	0.869	0.911	0.8801	0.8601
	GPV2	0.859	0.912			
	GPV3	0.892	0.932			
Environmental knowledge	EK1	0.822	0.791	0.851	0.9118	0.8741
	EK2	0.910	0.862			
	EK3	0.789	0.795			
Green purchase Intention	GPI1	0.891	0.845	0.920	0.9492	0.8981
	GPI2	0.921	0.9			

	GPI3	0.790	0.812			
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**Structural Model**

The structural model was examined using a covariance matrix was created using maximum likelihood estimation in AMOS. The structural model's fit indices were considered acceptable: CMIN/df=3.256, GFI=0.930, RMESA=0.0330, and AGFI=0.973. The CFI was 0.912, above the threshold of 0.90. t-statistics were employed to evaluate the level of significance. A strong correlation was found between the perceived value of green products and the intention to purchase them, with a correlation coefficient of 0.50 (t=8.651, p=0.000). The correlation between green pricing and green purchasing intention was not statistically significant, with a coefficient of 0.09 (t=2.341, p=0.123). The results are inconsistent with H1 but are in favour of H2, H3, and H4.

**Table 4** Squared correlation matrix of constructs

Variables	GP	GA	GPV	EK	GPI
GP	0.8221				
GA	.709**		0.8478		
GPV	.719**		.713**	0.9446	
EK	.801**		.769**	.856**	
GPI	.794**		.763**	.844**	0.9004

**Table. 5** Path Analysis Outcome

Hypothesis	Effect	P value	Path coefficients	Remarks
H1	GP-GPI	0.123	0.09	Supported
H2	GA-GPI	0.000	0.12	Supported
H3	GPV-GPI	0.005	0.50	Supported
H4	EK-GPI	0.000	0.41	Supported

**DISCUSSION**

This study aims to assess the model's ability to predict the impact of green prices, green advertisements, green perceived value and environmental knowledge on green purchase intention. The study demonstrates a solid and meaningful connection between green perceived value and green purchases. Green perceived value significantly influences green purchasing intention. Green perceived value is a crucial factor that influences green purchase intention in Nepal, as customers, if they do not feel the product is green, will not make the final decision. Nepalese green shoppers mostly share their information and knowledge with their close circle, which will ultimately form their perception. Perception is formed either with prior experience or from other reviews. Green price does not substantially impact green purchase intention, contrary to the results of Martins (2022). Green advertisement and environmental knowledge are also vital predictors of green purchase intention. The result of this study is similar to Siyal et al. (2021). The study's findings did not show a significant association between green prices and green purchase intention. Khayru et al. (2021) also have the same findings.

**IMPLICATIONS**

The marketing manager should examine three crucial variables: green price, green advertisement, green perceived value and environmental knowledge while developing policies and tactics. Marketing managers can impact green buyers by offering satisfied videos from different users and sharing these films on various social media platforms. The marketing manager should start a live video campaign at various intervals. The organisation should consistently improve the awareness of green products by fulfilling the promises made during promotions. A content consumer will likely give favourable feedback to the organisation's products. Marketers should regularly monitor the changing feedback given by users. They should thoroughly examine the responses. They should ensure that the perception is pertinent. Some users may review the product based solely on word-of-mouth without prior experience, and marketers should check those deceptive or fraudulent comments. Precise and comprehensive information can facilitate the buying process. Marketers should

emphasise the most precise and informative user videos to help viewers make purchasing decisions. They should organise many activities that convey genuine and precise information on the users' satisfaction level.

Various pop-up adverts should be enhanced to incentivise individuals to make green purchases. There are some constraints associated with this study. This study focused solely on the critical city of Biratnagar. Future research ought to select a larger sample size and gather responses from many channels to ensure the representation of all regions in Nepal. The study's frameworks are based on prior research, enabling future researchers to investigate the same topic by adding other elements. The study's final shortcoming is that it examines green purchase intention broadly rather than focusing on a specific product or service. The projected conceptual framework should be tried with different moderators and mediators.

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