Customer awareness of green purchase decisions regarding green products in Nepal

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This study focuses on customer awareness of green marketing and determines consumers' purchase decisions regarding green products in Nepal. Following the notion of the theory of planned behavior, this study uses a convenience sampling method to collect data using a structured questionnaire via KOBO Toolbox. The results show that environmental concern, green perceived benefits, green perceived quality, green willingness to purchase, and green future estimates all significantly impact green purchase decisions. Green marketing is an emerging concept that deserves more attention. As a result, more people are urged to adopt green goods for environmental and health reasons. Therefore, these results may help policymakers develop efficient plans and tactics to encourage sustainable consumption.

Introduction

Human wants are infinite, but resources are finite. Thus, marketers use limited resources efficiently and effectively to meet individual and corporate objectives without wasting many resources (Desing et al. 2020). As the globe becomes more globalized, companies are moving from conventional marketing to a contemporary economy that is ready to study green economic parts of firms via various green technology and environmental management tactics (Wahidul et al. 2019). Green packaging, eco-labeling, reuse, reduce, recycle, green disposal, etc. are crucial for sustainable company growth and carbon footprint reduction (Wandosell et al. 2021). From the 1960s ecology movement focusing on pollution and energy

conservation to the recent use of environmental issues as a competitive advantage in business and politics, individual and societal concerns over environmental issues have become increasingly apparent (Juwaheer 2005). From the late 80's, global challenges of climate change, high carbon emission, global warming, natural calamities, etc., green development and green movement get special attention (Peattie 2001). In the 21st century, agriculture and industrial businesses are intimately linked to environmental challenges including global warming, greenhouse gas emissions, pollution, and climate change, which have a disastrous influence on human behavior (Gornall et al. 2010). Consumers must use more green goods to tackle these environmental problems (Handfield et al. 1996). Thus, affluent nations use green marketing more than low- and middle-income nations (Johri 1999).

Green marketing is an important topic in business and academia as people become more conscious of environmental and sustainable development challenges (Dincer & Rosen 1999). Environmental challenges are among the most pressing in the 21st century, and people want to green the planet (Saleem et al. 2021). Since 1987, numerous significant articles have discussed green marketing concerns, including Martínez et al. (2020). Greenwashing is a key problem in green marketing. Greenwashing is when companies deceive consumers about their environmental practices to improve their image. It hurts enterprises' reputations and finances, customers, shareholders, investors, regulators, environmental protection agencies, and society (Zhang et al. 2018). According to Heckman et al. (2019), the most prevalent greenwashing approach is a corporation advertising an eco-friendly program or policy or an area of its manufacturing process. Still, its fundamental business operations are not sustainable. Going green is healthy for the environment and may help Nepal achieve sustainable development. Ghimire (2019) noted that organic product demand is rising in Kathmandu, Chitwan, and Pokhara. Eco-friendly items also command a premium in Nepal (Devkota et al. 2022). Thus, Nepalese service and industrial companies and non-profits are hosting more green fairs and projects. Laxmi Bank built solar lights on the Bagmati Bridge, and the Green Angel initiative has given rural and young Nepali women green employment (Shrestha 2018). Green marketing research is scarce in Nepal. Only a green marketing tool study on customer purchase intention and impression of green goods was included. Thapa (2019) found that urbanites still know about the subject.

Compared to wealthy nations, few developing countries like Nepal have established Green Marketing policies for sustainability. More than thorough studies on green marketing and customer behavior toward green goods are required in Nepal. Although organic and eco-friendly goods are gaining popularity in Nepal, research on the variables affecting consumer behavior toward green products and the efficacy of green marketing methods in the nation are sparse. In addition, some other questions remain unsolved in the context of Nepal. They are: customers' green marketing awareness, factors influencing Kathmandu Valley customers' green shopping decisions, green product marketing: what's hard? What's an excellent green marketing strategy? This study examines Kathmandu Valley customers' green marketing awareness. Nepal has a substantial study deficit in general concerning green marketing, customer behavior, and sustainable company practices.

The purpose of the study is to determine the influence of (1) environmental concern on green purchase decisions; (2) green perceived benefits on green purchase decisions; (3) green perceived quality on green purchase decisions; (4) green awareness of the price on green purchase decision; green willingness to purchase on green purchase; and (5) green future estimation on a green purchase decision.

Theoretical Framework and Hypotheses Development

This study opted to use the theory of planned behavior (TPB), as it is concerned with the prediction of a person's behavioral intentions and behavior based on three fundamental beliefs, namely, behavioral belief, normative belief, and control belief (Ajzen 1991) which are utilized to understand the linkage between green marketing and customer. Thus, TPB is especially used to know how customers' attitudes

about conduct, subjective standards, and perceived behavioral control influence their purchase awareness and intention for green marketing products.
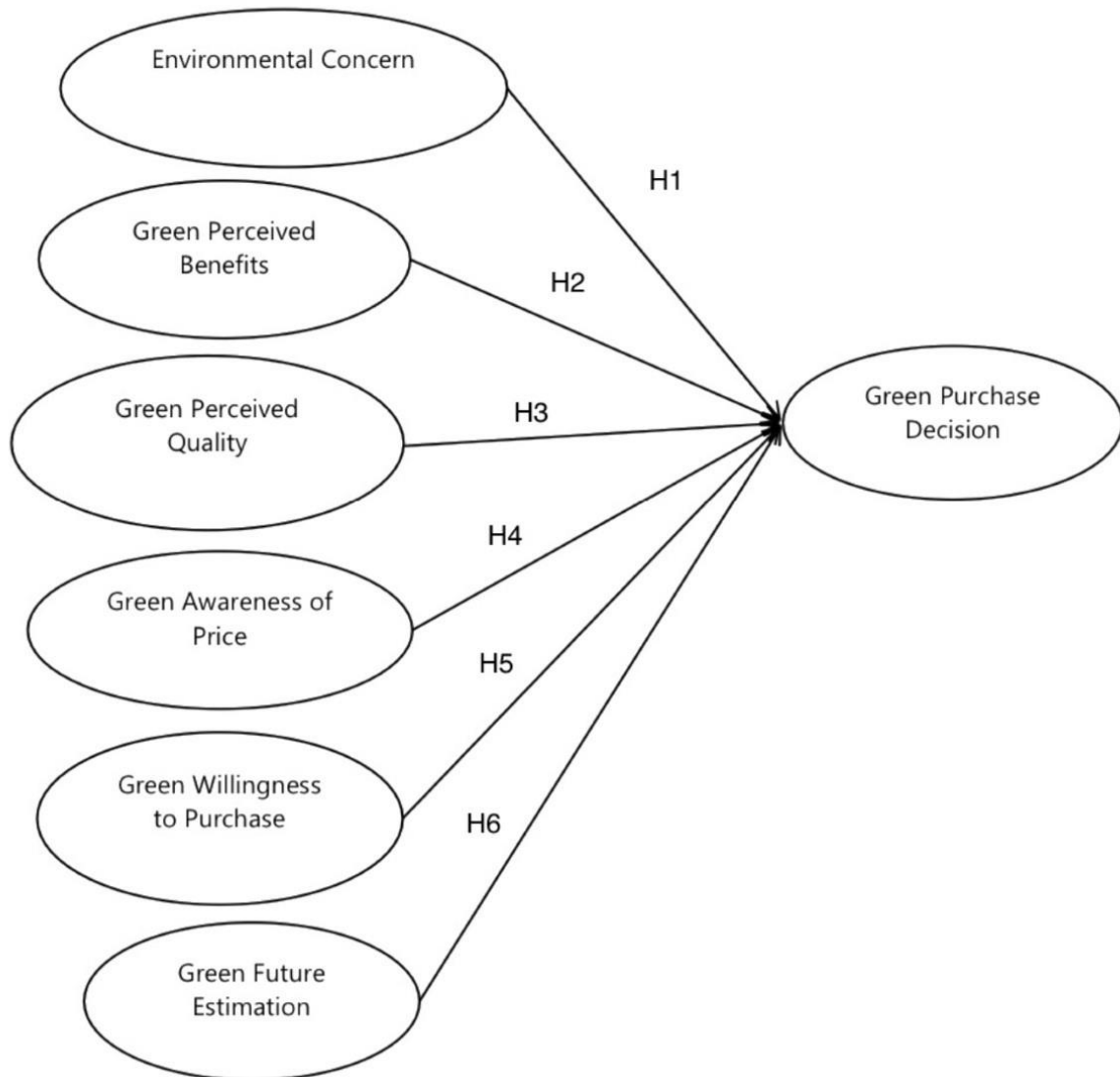

Figure 1. Conceptual Framework
Source: the authors

The models taken into consideration are the model of the Green Purchase Decision (Nekmahmud & Fekete-Farkas 2020), the Green Hotel Visit Intension Model (Verma & Chandra 2018), the Conceptual Model of Green Purchasing, Green Purchase Intension Model (Woo & Kim 2019), and Conceptual Model of Green Product Purchase Intention (Maichum et al. 2016). As a result, figure 1 tries to explain the impact of green purchase decisions based on Environmental concerns, green perceived benefits, green perceived quality, green awareness of price, green willingness to purchase, and green future estimates.

Environmental Concern and Green Purchase Decision
Customers concerned about environmental issues are enthusiastic about products that are safe for the environment and are eager to purchase such products to live a healthier lifestyle (Tompa et al. 2020). Despite this, it is still feasible for it to indirectly impact the objective of gaining things via the medium of perceived behavioral control (Barbaritano & Savelli 2021). In a similar line, the attitudes that people have about purchasing environmentally friendly items have an impact on the amount of green expenditures that they make (Cheung & To 2019). There is a connection between environmental concerns and environmentally conscious purchasing behavior. A link also exists between environmental and social benefits (attitudes) that positively influences environmentally conscious purchasing behavior. Consumers more knowledgeable about the environmental impact of products tend to be more likely to purchase environmentally friendly products (Cheung & To 2019). This suggests that providing more information about the environmental impact of products helps to increase environmentally conscious purchasing behavior. So our first hypothesis:

H1. Environmental concern has a significant positive influence on the green purchase decision.

Green Perceived Benefit and Green Purchase Decision
Perceived benefits are beliefs about the positive results of behaviors in response to perceived risk and include six characteristics: monetary economy, convenience, value, quality, expression, and entertainment (Wu & Chen 2014). Menassa and Baer (2014) highlighted that the perceived benefits correlate with sustainable building design and appear more influential in the economic and environmental aspects. Consumers' perceived benefits of green products will lead to a positive attitude towards purchase intent and higher satisfaction. This is because consumers are more likely to purchase a product if they believe it will positively impact their lives or the environment (Jacobsen 2006). However, by adding actual benefits, greenwashing can positively affect perceived benefits. Companies need to provide accurate information about the environmental benefits of their products to avoid greenwashing and to increase consumer trust and satisfaction. Perceived benefits also mean customers want accurate and useful quality products by reducing uncertainty (Wang et al. 2017). Our second hypothesis:

H2. Green perceived benefit positively influences the green purchase decision.

Green Perceived Quality and Green Purchase Decision
According to Zeithaml (1988), perceived quality is a significant factor that describes consumer judgment about the overall superiority of a product compared to an alternative. It influences consumers in making buying decisions and measures customer satisfaction. In addition, the concept of green perceived quality was referred to as 'the consumers' decision about the overall environmental excellence of the brand' (Chen et al. 2015). This means that consumers assess the environmental performance of a brand or product and use it as a criterion to make purchasing decisions. Therefore, green perceived quality is an important aspect that companies should consider when marketing their products to consumers. Research has shown that perceived green quality can positively impact consumers' purchasing behavior and brand loyalty (Zhao et al. 2022). However, it is important to note that greenwashing, or making false or misleading claims about a product's environmental benefits, can negatively impact green perceived quality and consumer trust. Our third hypothesis:

H3. Green perceived quality positively influences the green purchase decision.

Green Awareness of the Price and Green Purchase Decision
Many researchers have highlighted that price is a crucial factor influencing consumers' purchase decisions when purchasing any product or service (Nekmahmud & Fekete-Farkas 2020; Xiao et al. 2019). This is especially true for green products, which are often more expensive than traditional ones. Companies' management faces the pricing issue of their products with an appropriate choice of reasons related to procurement and marketing. For example, the cost of materials and production processes for green products may be higher than for traditional products, leading to a higher price point (Guo et al. 2020). Additionally, some companies may price their green products higher to reflect their perceived value and environmental benefits (Zhang et al. 2020). However, research has shown that consumers may be willing to pay a premium price for green products if they offer superior environmental performance (Guo et al. 2020). Our fourth hypothesis:

H4. Consumers' awareness of the price of green products positively impacts green purchase decisions.

Green Willingness to Purchase and Green Purchase Decision
Green willingness to purchase refers to the extent consumers are inclined to buy environmentally friendly products. It is influenced by consumers' positive and negative perceived value of green products (Ahmad & Zhang 2020). For example, consumers with a positive perceived value of organic products are highly interested in buying natural products because they believe they are better for their health, the environment, and overall sustainability. On the other hand, when consumers feel negative value, they are less interested in purchasing natural products, as they may perceive these products as being less effective, less convenient, or more expensive than traditional products (Xiao et al. 2019). The price of green products is often higher than traditional products (Witek & Kuźniar 2020). Earlier research has indicated that consumers are willing to pay a premium price for products based on various criteria, such as being eco-friendly, food quality and safety, and health (Ketelsen et al. 2020). However, it is important to note that consumers' willingness to purchase green products is not solely influenced by perceived value. Other factors like availability, accessibility, education, and marketing influence consumers' decision-making process. Our fifth hypothesis:

H5. Consumers' green willingness to purchase influences green purchase decisions.

Green Future Estimation and Green Purchase Decision
Future estimation of green products depends on consumers' present demand for these products or services. If consumers respond positively in the current market, demand for green products will likely increase (Gao et al. 2018). Consumers tend to be positive toward products they believe are good for the environment and their health (Chang & Chen 2012). Research showed that consumers were willing to pay a premium price for green products that were environmentally friendly and suitable for their health (Gao et al. 2018). This indicates that consumers are willing to invest in products that align with their values and are believed to impact their lives and the environment positively. Additionally, as more and more consumers become aware of the environmental and health benefits of green products, demand for these products will continue to grow (Chang & Chen 2012). Therefore, companies should invest in green products and be transparent about the environmental benefits to increase consumer trust and satisfaction. If consumers positively respond to green products in the current market, the demand for these products will increase. Consumers tend to have a positive attitude towards products they believe are good for the environment and their health. Our sixth hypothesis:

H6. Green future estimation of a product significantly impacts green purchase decisions.

Green Purchase Decision
Additionally, earlier research has found that organic food is often perceived as natural, nutritious, healthy, and eco-friendly (Carrigan et al. 2001). These positive perceptions may drive consumers to choose organic food products over conventional options. However, the higher cost of organic food can still act as a barrier to purchasing, which suggest that while consumers may have positive attitudes towards green and organic products, the price can still play a significant role in their purchasing decisions (Thøgersen 1999).

Methodology

Data Collection
Following explanatory research design and quantitative method, this study was conducted in Kathmandu valley—is the capital city of Nepal—comprised of the Kathmandu, Lalitpur, and Bhaktapur Districts. The major motive for selecting this area was the pollution and environmental degradation of the valley were high compared to other areas in Nepal. Hence, it would be easy to acquire enough information on customers' purchase intention of green products. The target population was the people with whom the intervention would conduct research and develop findings. Therefore, this study adopted a non-probability convenience sampling technique. We collected 208 usable responses for this study from shopping stores, malls, and shops. A structured questionnaire with socio-demographic and Awareness Index questions was created to collect data using the KOBO toolbox. A pilot survey of 15 respondents was tested to confirm the consistency and accuracy of the instrument. The data was collected using the 5-point Likert Scale and analyzed using SPSS and AMOS.

Table 1. Socio-demographic Characteristics

Variables	Frequency	%
Sex		
Male	105	58
Female	75	41
Age		
Below 20	21	11
21-30	117	65
31-40	36	20
40 above	6	3
Education		
Below Higher Secondary	10	5
Bachelors	90	50
Masters	74	41
Above Masters	6	17
Profession		
Service	92	42
Industry	25	11
Government	5	2
Student	64	29
Self-employed	30	13
Marital Status		
Unmarried	114	63
Married	66	36

First, the total number of aware customers was identified through 20 questionnaires for the awareness index. All the respondents were asked about awareness indicators (e.g. environmental beliefs, green

labeling, branding, advertisement, and packaging). There were four questions under all the indicators. The respondents who secured more than 15 were considered "aware ."The respondents who secured between 10 and 14 were considered moderately aware, and those who secured less than ten were considered unaware (Paudel et al. 2020). In sampling, only conscious and moderately aware respondents were considered for further analysis. Therefore, out of 218 respondents, only 180 were considered the final samples based on the above condition. Kaiser-Meyer-Olkin test yielded .86 and indicated meritorious sampling adequacy.

Sample Characteristics
The data showed that the majority of the respondents were male (58.33%) who were under the age group of 21-30 (65%), possessed a bachelor's degree (50%), and suggested that young male people nowadays were more concerned about environmental issues and purchasing decisions. Additionally, most respondents are from the service industry (42.60%) and are unmarried (63.33%), as shown in Table 1. The socio-demographic characteristics indicated that the people with the higher study were more willing to purchase green products, while service sector personnel were more aware of green marketing. The unmarried customers knew about green marketing and intended to buy green products more.

<p align="center">**Analysis**</p>

Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA)
The EFA results showed that the data is suitable, normal, and reliable for further analysis. The KMO and Bartlett's test of Sphericity, common method bias, summary statistics, rotated component matrix, and communalities were all within acceptable limits.

Table 2. Measurement Model

Construct	Indicators	Factor Loadings	Cronbach Alpha	CR	AVE	MSV
Environmental Concern (EVC)	EVC1	.85	.86	.87	.69	.39
	EVC3	.83				
	EVC4	.79				
Green Perceived Benefits (GDP)	GPB1	.87	.95	.95	.87	.53
	GPB3	.87				
	GDP4	.88				
Green Perceived Quality (GPQ)	GPQ1	.88	.89	.89	.74	.39
	GPQ4	.88				
	GPQ5	.67				
Green Awareness of Price (GAP)	GAP3	.93	.94	.94	.86	.07
	GAP4	.92				
	GAP5	.94				
Green Willingness to Purchase (GWP)	GWP1	.76	.86	.86	.68	.45
	GWP3	.85				
	GWP4	.80				
Green Future Estimates (GFE)	GFE1	.89	.91	.91	.78	.28
	GFE2	.86				
	GFE3	.87				
Green Purchase Decision (GDP)	GPD1	.69	.90	.90	.76	.53
	GDP2	.70				
	GDP4	.63				

Similarly, the CFA results indicated that the study had an excellent model fit as all indicators (CMIN/df, RMR, RMSEA, GFI, IFI, TLI, and CFI) were within the criteria for good fitting. The CMIN/df was less than 5, RMR was less than .08, RMSEA was less than .08, GFI was greater than .80, IFT was greater than .90, TLI was greater than .90, and CFI was greater than .90, respectively.

The reliability and validity of the data were further confirmed by using convergence and discriminant validity, as shown in Table 2. The data demonstrated convergence validity as it satisfied the condition of CR greater than .70 and AVE greater than .50 (Kim 2010). The data also showed discriminant validity as it satisfied the condition of AVE greater than MSE and the square root of AVE greater than the correlation. Additionally, the reliability of the data was confirmed as the CR was greater than .70. Therefore, the findings of this study demonstrate that the data satisfies the criteria for convergence and discriminant validity as well as reliability, indicating the absence of validity and reliability concerns.

Test of Hypotheses

In Table 3, *H1, H2, H3, H5* and *H6* are accepted, which implies a significant relationship between dependent and independent variables. On the other hand, H4 is rejected, leading to the conclusion that there is an insignificant relationship between the variables in the respective hypothesis. The regression analysis, variable analysis, and assessment of the normality pattern are all analyzed using EM in the inferential phase of the study. Based on latent variables, five factors are studied based on variables relative to observed variables (Rhemtulla et al. 2012). The model's fitness criteria demonstrate fitness. The consequence shows an outcome of X^2/df *(CMIN/DF)* of 1.51 (<3). The result revealed the meaningful relationship between latent variables and observable variables (*p<.05*). The hypothesis in this analysis is substantially endorsed as the meaning level of all the hypotheses (p-value) is smaller than .05. Thus, all independent variables employed in this study have a significant impact on all contingent factor hypotheses, as all hypotheses are dismissed. The structural model of this study is where EVC explains 21 percent, GPB explains 39 percent, GPQ explains 23 percent, GWP explains 22 percent , and GFE explains 14 percent to GPD.

Table 2. Path Estimates for Structural Model

Hypotheses	Estimates	SE.	CR.	P	Hypotheses Results
Environmental Concern → Green Purchase Decision	.20	.07	2.91	.00	Supported
Green Perceived Benefits → Green Purchasing Decision	.38	.06	6.30	.00	Supported
Green perceived quality → Green Purchase Decision	.23	.07	3.15	.00	Supported
Green Awareness of The Price → Green Purchase Decisions	-.03	.04	-.68	.49	Not supported
Green Willingness to Purchase → Green Purchase Decisions	.21	.06	3.56	.00	Supported
Green Future Estimation → Green Purchase Decisions	.13	.05	2.35	.01	Supported

Discussion

This study examines customer awareness of green marketing using five variables: environment Believes, Green Labeling, Green Branding, Green Advertisement, and Green Packaging. Then, factors influencing customers' purchasing decisions on green products in Nepal were determined. The reliability test and

multiple linear correlations were used to develop and test the relationship between the variables in this study. Environmental concern has a significant positive influence on the green purchase decision. It means that the preservation of nature and wildlife, environmental impact and environmental responsibility influences the green purchasing decision. In a similar study conducted between young customers, the result also indicated Environmental concerns strongly influenced young, educated consumers' green purchasing decisions in Bangladesh (Nekmahmud & Fekete-Farkas 2020). These findings supported those obtained in the previous foreign survey in developed countries (Yadav & Pathak 2016). Likewise, this study indicates whether consumers' perceptions of green benefits influence their purchasing decisions regarding a green product. As a result, H2 is supported, indicating a significant relationship between GPB and GPD. Consumers' opinions that a green product offers specific advantages over a non-green one are perceived as green benefits. These advantages include environmental, health, and social advantages. A customer may feel that a green product is better for the environment since its carbon footprint is lower than that of a non-green product (D'Angelo et al. 2022).

Quality is the standard by which something is judged in comparison to other items of a similar nature (Sparkes & Smith 2009). The model approach revealed that Consumers' Perceived Quality of environmentally friendly products emerges as the third vital variable, which affects the consumer's green purchasing decision and makes visible a positive relationship, thus supporting the assumed H3. The perceived quality of green products has been linked to a higher likelihood of purchasing the green brand (Wang 2017). Furthermore, Hypothesis H5 is supported, implying that consumers' green willingness to purchase (GWP) has a strong positive relationship with purchasing decisions for green products. The study can be trusted because a similar study concluded that consumers who are aware of the Earth and the environment in developing countries are highly interested in paying extra for eco-friendly products (NekMahmud & Fekete-Farkas 2020). Furthermore, behavioral controls like willingness to pay significantly influence client purchase decisions (Xu et al. 2020). Finally, the quantitative method confirmed the acceptability of H6, where it was discovered that customers' future estimation (GFE) of green marketing positively impacted green product purchasing decisions. Nekmahmud & Fekete-Farkas (2020) also showed that GFE positively impacts green purchase decision.

Implications for Managers

The study on customer awareness and intention to purchase green products in the Kathmandu Valley has several implications for managers in Nepal. Firstly, the importance of customer awareness in driving green purchase intentions should be emphasized. Thus, managers should create awareness and educate customers about the benefits of green banking products and services through various marketing strategies. Secondly, cost as a barrier to green purchasing should be considered, and managers should strive to offer competitive pricing to make these products more accessible. Thirdly, cultural and educational differences should be considered when developing marketing efforts. Lastly, the availability and environmental concerns should be focused on driving green purchase intentions by implementing sustainable practices and promoting them to customers. Overall, managers should invest in creating customer awareness, offering competitive pricing, tailoring their marketing efforts, and promoting the environmental benefits of green products to drive green purchase intentions.

This study found that most respondents agreed that the environment is severely damaged and consider themselves environmentally responsible individuals. They are willing to change their lifestyle and even pay a premium price for environmentally friendly products. Likewise, the study revealed that people are becoming increasingly aware of the positive impact of green products on their health. The respondents believe that these products are long lasting and have a positive effect on their well-being. Respondents also agreed that the price of green products is fair and acceptable, indicating that people are willing to invest in products that are better for the environment.

Green products are an excellent concept for the future of Nepal and that with proper green marketing, these products will be more prevalent. This research aligns with previous studies, such as the one by Liao et al. (2020), that psychological benefits significantly moderate green purchase behavior. The research by Maichum et al. (2016) are also similar, which found that the willingness of consumers to buy green items is referred to as green buying intention. Thus, people are becoming increasingly aware of the importance of protecting the environment and are willing to change their lives. They are also willing to invest in products that are better for the environment, indicating a shift towards a greener future for Nepal.

Future Directions and Limitations

This study on customer awareness and intention to purchase green products in the Kathmandu Valley has several limitations that could be addressed in future research. One limitation is the small sample size, which limits the generalizability of the findings to other regions and demographic groups in Nepal. Additionally, cultural and educational differences may affect consumer behavior and attitudes toward green products. Future research should consider these differences when conducting similar studies in other countries. Additionally, this study may not account for other factors influencing green purchase intention, such as the availability of green products, price sensitivity, and consumers' environmental concerns. Future research should also investigate these factors and their effect on green purchase intention and actual green purchasing behavior. This study provides valuable insights, but more research is needed to gain a more comprehensive understanding of green marketing in Nepal.

Conclusion

The study shows that the customers of Kathmandu Valley are aware of green products. Kathmandu Valley youth are moderately aware of green products and revealed that customers still need awareness on green marketing. Hence, there is a considerable possibility of Green Marketing that is still untapped. People have concerns about the environment and their health and want to buy organic foods and goods that are environmentally beneficial. The people in the Kathmandu Valley are no exception, as they are interested in purchasing environmentally friendly items and supporting green or environmental marketing. The theoretical framework and SEM have revealed that ecological concern, green perceived benefits, green perceived quality, green willingness to purchase, and green future estimation have positively and positively influenced green purchase decisions. Here, only one predictor, green awareness of the price, showed an insignificant impact on consumer purchasing decisions on green products. The study confirms that the proposed extended TPB is a helpful model for understanding consumers' green purchase decisions. Moreover, the respondents suppose that green products are very beneficial for health and the environment and do not have any harmfulness or side effects on health. The respondents articulate that green products are durable and are easily recycled, disassembled, reused, or decomposed, and green products result in minimum environmental damage. Consumers in Kathmandu Valley believed that green marketing would be an excellent idea and accessible in Nepal.

In Nepal, most consumers are not concerned about green marketing but are aware of eco-friendly products. The major challenges in effective green marketing were awareness level followed by price, accessibility, trust, unclear information, lack of technology, etc. Respondents suggested green environmental benefits should be highlighted, Government policy should be formulated, renewable energy should be encouraged, and standard prices should be maintained. Established on the above findings, the following suggestions are recommended as a recipe by the researcher to implement Green Marketing effectively. As these recommendations are also put forward to better understand Customer Purchase Intention on Green Marketing, government bodies, and top-level managers should act accordingly to promote and raise awareness of green products in Kathmandu Valley.

Acknowledgments

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