

Evaluating the factors responsible for willingness to pay for green products

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Received: 05.04.2021/Accepted: 14.05.2021

ABSTRACT

Environmental concern has been a major issue from the past few decades and the degree of consumer demand for ecofriendly products and services has increased tremendously. Present study was conducted in Udaipur city, Rajasthan. Data were collected regarding respondents' socio-economic status and willingness to pay for green products. Majority of female and male consumers were between the age group of 20-30 years, married; having nuclear and small families of members up to 4. Most of the respondents were well educated. Majority of the respondents fell in the category of upper middle class and were doing job (40 and 41% females and males respectively). They were mainly from general category. For majority of the respondents (72%), price had a strong influence on the green purchasing behavior, 57 per cent were of the opinion that peer influence was not responsible while consumer deciding to purchase green products. About half of the respondents (51%) went for purchase of green products as they possessed knowledge about it. Brand of the product (61%) and quality (54%) were the reasons and only for 46 per cent respondents, environmental concern was the issue for purchase of green products whereas for 64 per cent it was not an issue.

Keywords: Consumer behaviour; willingness to pay; decision making; factors

INTRODUCTION

In the present era of technology, environment is being degraded adversely. It is prime time to take necessary actions rather than regretting after the consequences. Green practices can lower the negative impact on environment and ensure a sustainable future for the coming generations. Through research and development, new products and processes are being developed to meet the day to day needs. It is the time to take wise decisions while purchasing.

Zhang and Dong (2020) studied extensively on green purchasing decisions and found out that consumers were rational in nature; green purchasing decisions were influenced by theoretical mechanism or a fragmented environment. Culture plays a significant role on an individual's value orientation and consumer behavior varies with this attribute. Apart from culture there are many other factors. The present study focuses on those factors responsible for willingness to pay for the green products.

Willingness to pay for different products in different countries depends on various factors like availability, demographic variables etc. However the empirical studies by Bhattarai (2019) found out that consumers' willingness to pay a price and estimate determinants of willingness to pay for organic fruits and vegetables in Nepal were extremely meager.

Leszczynska (2014) found out that consumers showed a strong positive attitude towards green products. Green products were evaluated below their market value compared to the non-green products and were sensitive towards when a group of people with dominating self-transcendence values a connection existed between the purchase of green products and perceived individual benefits. Due to many underlying reasons, consideration on green products are increasing rapidly; mass production of the green products are causing harm to the natural resources which results in the depletion of the distinctive resources. This mass production is seen too often resulting in irreversible negative environmental impact (Diglel and Yazdanifard 2014)

Biswas (2016) explored perceptual and external contextual factors influence on willing to pay for green products. Results stated that products availability, performance, peer review, price and quality motivated the consumers' intention to pay for the green products. Price and quality were the major influencing factors for the market of green products. Johnstone and Tan (2015) observed that the different dimensions of green brand equity reflected this variable and were important factors in its perception by consumers. This study differed from others in that it treated green brand equity as a truly multidimensional variable made up of different dimensions with different measurement scales.

Schuitema and de Groot (2015) stated that consumers considered green attributes when making green purchasing but at the end they tended to purchase the products which were low in price. On contrary some studies showed that purchase behaviour on green products depended when they were sold at higher price. Boys et al (2014) conducted a survey on Dominican consumers and revealed that people were willing to pay for green products when they were produced locally. If the quality of product was enhanced, confidence of consumers increased with sales. If production was more, the consumers' willingness to purchase increased drastically.

With numerous options available on green products, there existed a research gap between the willingness to purchase and consumption pattern (Fuentes 2014). This created a conflict with consumers conscious buying behaviour and decision on choosing the right products in the market. Sheikh et al (2014) investigated about the green products and green purchase decision factors influence on consumer behavior and found that price, quality and green marketing were the strong influencing factors guiding the decision of green purchasing.

According to Park and Ha (2014), willingness to pay the green price premium can be fostered through enhanced environmental awareness programmes. Environmental education campaigns closely linked with daily life and having a more participatory approach can help in the promotion of environmental knowledge, strengthening the perceptual factor.

The present study was conducted near Udaipur city of Rajasthan to evaluate the factors responsible for willingness to pay on green products.

METHODOLOGY

Total sample of 200 respondents comprising 100 males and 100 females was taken for the present study. The subjects were contacted from the four directions of Udaipur city, Rajasthan. Data collection was done regarding respondents' family background and willingness to pay attribute using the questionnaire survey tool. Price, knowledge, environmental concern, quality, peer influence and brand were the factors used to analyse the willingness to pay while green purchasing for the purpose. The data were put to suitable analysis. Frequency, percentages and correlation analyses were done.

RESULTS and DISCUSSION

Socio-economic status of respondents

Majority of female and male consumers were between the age group of 20-30 years with 42 per cent females and 40 per cent males. This was followed by 30-40 years group wherein females and males were 25 and 26 per cent respectively. Majority of the females (70%) and males (56%) were married. Most of the respondents were having nuclear families (80 and 82% females and males respectively) whereas 17 and 14 per cent females and males were having joint families. Majority of them were having small families of members up to 4 (63 and 56% females and males respectively). Most of the respondents were well educated. Out of total females, 40 and 48 per cent were under graduates and post graduates respectively whereas in case of males 45 and 46 per cent were under graduates and post graduates. Majority of the respondents fell in the category of upper middle class (56 and 51% females and males respectively) followed by upper class (36 and 33% females and males respectively). Majority were doing job (40 and 41% females and males respectively). The respondents were mainly from general category (46 and 39% females and males respectively) followed by OBCs (29% females and males each).

Willingness to pay for green products

Fig 1 show that whether price, knowledge, environmental concern, quality, peer influence and brand factors had impact on willingness to pay while making green purchasing. Results revealed that for majority of the respondents (72%), price had a strong influence on the green purchasing behaviour even though consumer was environmental conscious. Majority of the respondents (57%) were of the opinion that peer influence was not responsible while consumer

Table 1. Distribution of respondents according to socio-economic status

Component	Frequency/%	
	Females (n= 100)	Males (n= 100)
Age (years)		
20-30	42	40
30-40	25	26
40-50	23	20
50-60	7	9
>60	3	5
Marital status		
Married	70	56
Unmarried	30	44
Type of family		
Nuclear	80	82
Joint	17	14
Extended	3	4
Family size (members)		
Small (up to 4)	63	56
Medium (up to 8)	33	40
Large (above 8)	4	4
Education level		
Senior secondary	12	9
Under graduate	40	45
Post graduate	48	46
Annual income		
Lower	Nil	Nil
Upper lower	2	5
Lower middle	6	11
Upper middle	56	51
Upper	36	33
Occupation		
Students	18	25
Homemakers	26	4
Job	40	41
Business	13	24
Retired	3	6
Caste		
SC	16	8
ST	8	10
OBC	29	29
General	46	39
Minority	9	14

deciding to purchase green products whereas 43 per cent said that peer influence played an important role.

About half of the respondents (51%) went for purchase of green products as they possessed knowledge about it. Brand of the product (61%) and quality (54%) were the reasons for purchase of green

products for the respondents. Only for 46 per cent respondents, environmental concern was the issue for purchase of green products.

Ritter et al (2015) reported that consumers were willing to spend more money to acquire green products when they perceived that the products improved the well being. Kumar and Ghodeswar (2015) observed that marketers need to emphasis on green marketing as consumers were ready to pay a premium price for green products. Biswas (2016) suggested that the more environmental awareness leads to more sustainable consumption of green products. Groening et al (2018) found out that manufacturers focused on green products using green marketing strategies but consumers were not willing to purchase the products due to premium price, quality, resistance to new technologies, misleading advertisements etc. The authors also observed that environmental values, knowledge, beliefs, attitude, intentions, social information and motivation attributes had influence on willingness to purchase the green products.

Before marketing green products, marketers need to evaluate customer's willingness to pay for the green products by creating awareness, consumers' concern and behavior of conserving nature through activities such as campaigns and demonstrations. Such evaluation can help to facilitate the process of marketing of green products which is beneficial both for the producers and the environment alike.

CONCLUSION

This study highlighted that demographic variables such as age, gender and income had relationship with consumers' purchase decision of green products. Irrespective of demographic variables, most consumers were determined to purchase the green products to protect themselves. With awareness and training the consumers tend to bring the desirable changes in the green market. Availability, price and the quality are the main reasons responsible for willingness to pay.

REFERENCES

- Bhattarai 2019. Consumers' willingness to pay for organic vegetables: empirical evidence from Nepal. *Economics and Sociology* **12**(3): 132-146.

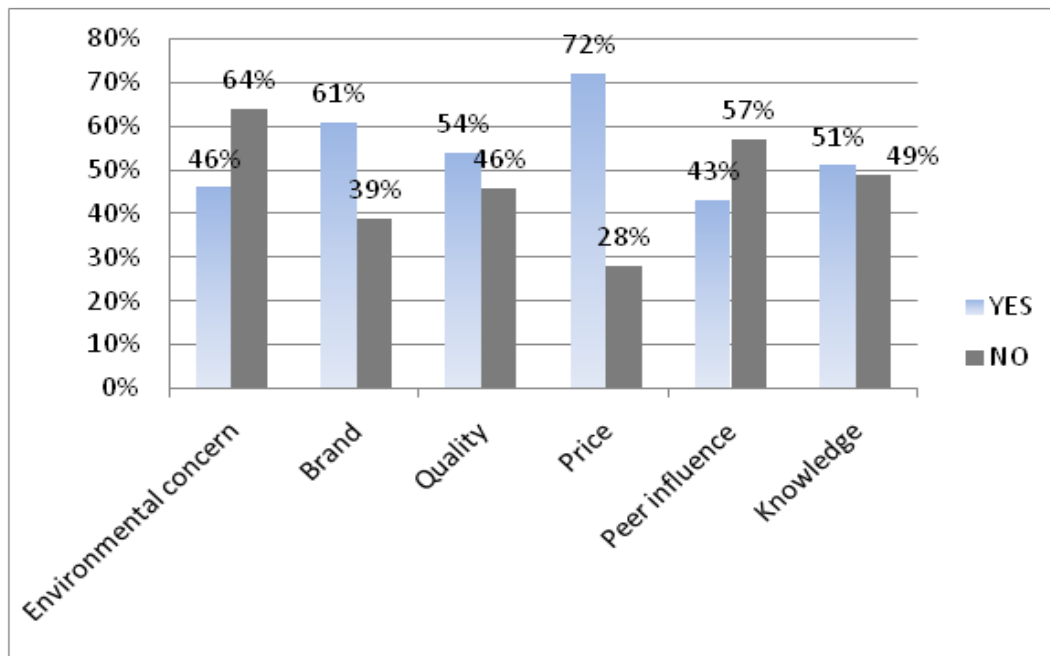


Fig 1. Willingness to pay

- Biswas A 2016. A study of consumers' willingness to pay for green products. *Journal of Advanced Management Science* **4(3)**: 211-215.
- Boys K, Willis D and Carpio C 2014. Consumer willingness to pay for organic and locally grown produce on Dominica: insights into the potential for an Organic Island. *Environment, Development and Sustainability* **16**: 595-617.
- Diglel A and Yazdanifard R 2014. Green marketing: it's influence on buying behavior and attitudes of the purchasers towards eco-friendly products. *Global Journal of Management and Business Research: E Marketing* **14(7)**: 10-17.
- Fuentes C 2014. Managing green complexities: consumers' strategies and techniques for greener shopping. *International Journal of Consumer Studies* **38(5)**: 485-492.
- Groening C, Sarkis J and Zhu Q 2018. Green marketing consumer-level theory review: a compendium of applied theories and further research directions. *Journal of Cleaner Production* **172**: 1848-1866.
- Johnstone ML and Tan PL 2015. Exploring the gap between consumers' green rhetoric and purchasing behaviour. *Journal of Business Ethics* **132(2)**: 311-328.
- Kumar P and Ghodeswar BM 2015. Factors affecting consumers' green product purchase decisions. *Marketing Intelligence and Planning* **33(3)**: 330-347.
- Leszczynska A 2014. Willingness to pay for green products vs ecological value system. *International Journal of Synergy and Research* **3**: 67-77.
- Park J and Ha S 2014. Understanding consumer recycling behavior: Combining the theory of planned behavior and the norm activation model. *Family and Consumer Sciences* **42(3)**: 278-291.
- Ritter AM, Borchardt M, Vaccaro GLR, Pereira GM and Almeida F 2015. Motivations for promoting the consumption of green products in an emerging country: exploring attitudes of Brazilian consumers. *Journal of Cleaner Production* **106**: 507-520.
- Schuitema G and de Groot JIM 2015. Green consumerism: the influence of product attributes and values on purchasing intentions. *Journal of Consumer Behaviour* **14(1)**: 57-69.
- Sheikh FZ, Mirza AA, Aftab A and Asghar B 2014. Consumer green behaviour toward green products and green purchase decision. *International. Journal of Multidisciplinary Sciences and Engineering* **5(9)**: 1-9.
- Zhang X and Dong F 2020. Why do consumers make green purchase decisions? Insights from a systematic review. *International Journal of Environmental Research and Public Health* **17(18)**: 6607, doi: 10.3390/ijerph17186607.