

A Study on the Role of Socio-Demographic Variables In Green Marketing of Ayurvedic Products with Special Reference to Maharashtra

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Abstract

This research study focuses on assessing the relationship between socio-demographic variables and green marketing of Ayurvedic Products in Maharashtra. Specifically, the variables considered are age, gender, and education level. Given the increasing global emphasis on health and environmental consciousness, green marketing holds significant relevance in the current landscape. The chi-square test was utilized to test the hypotheses, and the findings indicate that individuals with higher education levels exhibit more favorable consumer behavior towards green marketing of Ayurvedic products. Moreover, gender plays a role in purchase intention, with a majority of females showing a preference for Ayurvedic products over conventional alternatives. This research provides valuable insights for marketers, especially when crafting targeted advertisements on social media, and helps create awareness and establish the importance of Ayurvedic products for consumer profiles that may be less receptive to them at present.

Keywords: *Green Marketing, Socio-Demographic Variables, Purchase Intention, Ayurvedic Products, Consumer Behaviour*

Introduction

According to a 2021 report from Research and Information System for Developing Countries, the AYUSH market has experienced significant growth with a 17 percent increase over the period 2014-2020, reaching a value of 18.1 billion USD. Despite the economic slowdown caused by the pandemic, projections indicate that the AYUSH market is set to further expand to 23.3 billion USD by 2022. To promote traditional systems in

India, the government has introduced initiatives like the AYUSH mark to authenticate Indian Ayush products and AYUSH visas for foreigners seeking treatment using traditional Indian medicine.

During the pandemic, the government endorsed immunity-boosting products, such as Ayurvedic teas and concoctions, which contributed to the industry's growth. As consumers increasingly prioritize health and environmental concerns like climate

change and pollution, green marketing and sustainability have become paramount for businesses, multinational corporations, academia, government, and other stakeholders. Given these trends, the research aims to examine the impact of socio-demographic variables on green marketing of Ayurvedic products.

Theoretical Concepts

Green Marketing – Pride & Ferrel (1993) “Green Marketing also known as environmental Marketing & Sustainable Marketing refers to an organizations effort of designing, promoting, pricing and distributing products that will not harm the environment.” Polonsky (1994) Defines green Marketing as “All activities designed to generate and facilitate any in exchanges intended to satisfy human needs or wants, such that satisfaction of these needs and wants occurs with minimal detrimental effect on the natural environment.” Peattie (1995) Defined green Marketing as “The holistic management process responsible for identifying, anticipating and satisfying the need of customers and society in a profitable & sustainable way.” The American Marketing Association (AMA) defines Green Marketing as “Marketing of the products that are presumed to be environmentally safe.”

Green marketing refers to the process of selling products and/or services

based on their environmental benefits. Such a product or service may be environmentally friendly in itself or produced in an environmentally friendly way, such as:

1. Products with no toxic contents
2. Products which can be recycled
3. Products made from natural ingredients
4. Products with no excess packaging
5. Products which are repairable and reusable & easily disposable

Consumer Behaviour - According to Kotler (1994) “Consumer behaviour is the study of how people buy, what they buy, when they buy and why they buy.” According to Solomon et al. (1995) “Consumer behaviour is the study of the processes involved when individuals or groups select, purchase, use, or dispose of products, services, ideas, or experiences to satisfy needs and desires.” According to Schiffman (2007) “Consumer Behaviour is the behaviour that consumers display in searching for, purchasing, using, evaluating, and disposing of products and services that they expect will satisfy their needs.” More recently, Kotler and Keller (2011) state that “consumer buying behaviour is the study of the ways of buying and disposing of goods, services, ideas or experiences by the individuals, groups and organizations in order to satisfy their needs and wants.”

Ayurvedic Products – The term "Ayurveda" originates from two words, "Ayuh" meaning life and "Veda" meaning knowledge or science. Therefore, Ayurveda is known as the science of life and represents the most traditional approach to healing, aiming to maintain a harmonious balance between the body, mind, and soul. Ayurvedic products are widely available and come in various forms such as tablets, pills, powders, creams, drops, lotions, ointments, herbal oils, teas, and plant extracts. These products serve multiple purposes, including treatment, health enhancement, wellness, beauty, and personal care. In this research paper, the term "Ayurvedic products" specifically refers to products that are deemed safe for health and incorporate the best principles of Ayurvedic practices.

Review of Literature

A study by IIED and ETS (2002) states that Ayurveda is an ancient health system which originated around 5,000 years ago with more than 8,000 plants that are already found to have medicinal value. Morgan (2002) states that Ayurveda is a balance based system of medicine, predominantly practiced in India.

There is a growing move towards the purchasing herbal products, as they are supposed to be less damaging, as compared to the chemical based products and a vast majority of

consumers show brand loyalty towards such Ayurvedic products. (Vaish, 2006). Studies also show that customers have a positive and significant perception towards herbal cosmetics and are also willing to pay a premium and purchase such products. (Makkar et. al., 2007) There is a shift favouring Ayurvedic products due to the cost of modern medicines and the consumer's understanding of consequences of using harmful chemical based products. (Sharma et.al. 2008).

There is more trust in nature based (Ayurvedic) products among consumers situated in rural areas since they associate these products to indigenous treatment. (Sawant, 2013) It has also been found that the younger feminine population is more attracted towards natural products. (Anute et. al, 2015) Rekha and Gokila (2015) also revealed that many consumers have started moving to herbal based cosmetics as they consumers experienced one or more chemicals in the cosmetics, which could lead to many side effects.

Misra et. al. (2020) cited Chandiralekha and Hamsalakshmi (2016) on some factors that are important in increasing brand preference of Ayurvedic products are the use of natural ingredients and the health benefits they have. Data shows that factors like flavour, colour,

quality, freshness, brand image and packing have better impact on consumer buying behaviour where a majority were users of Patanjali products. (Singh et. al., 2021)

Significance of the Study

Firstly, while numerous studies have explored green marketing and consumer behavior, there is limited research specifically focusing on Ayurvedic products, particularly within the context of Maharashtra.

Secondly, the role of socio-demographic variables in influencing consumer preferences for green products remains under-explored. This study aims to bridge this gap by examining how these variables affect the adoption and purchase intention of Ayurvedic products marketed as green and sustainable.

The significance of this study lies in its potential to inform marketers and policymakers. For businesses, insights derived from this research can help tailor marketing strategies to different demographic segments, enhancing the effectiveness of green marketing campaigns. For policymakers, understanding these dynamics can support initiatives aimed at promoting traditional medicine and sustainability, contributing to broader health and environmental goals. Ultimately, this research can foster a deeper

appreciation of the interplay between consumer behavior, socio-demographic factors, and sustainable marketing practices in the Ayurvedic product sector.

Research Objectives

The objectives of this study are:

1. To investigate the impact of gender on purchase intention with respect to green marketing of Ayurvedic Products.
2. To evaluate the role of education level in consumer behaviour towards Ayurvedic Products.
3. To study where age has an impact on the use of Ayurvedic Products.

Research Methodology

The population under study are consumers located in Maharashtra and data was collected using a structured questionnaire. A total of 115 responses were collected. After checking for errors and inconsistent responses, 10 responses were eliminated allowing us to process the data collected from 105 respondents. Based on books by authors like C R Kothari concerning research methodology, it was determined that a sample size larger than 30 is sufficient to carry out the chi square test. The data was then analysed using contingency tables and the hypotheses were tested using chi square test.

Hypotheses and Theoretical Constructs

In order to study the role of socio-demographic variables on Green Marketing of Ayurvedic products, the null and alternate hypotheses are defined as follows:

Null Hypothesis	Alternate Hypothesis
H _{0a} – There is no impact of gender on purchase intention of Ayurvedic products	H _a – There is an impact of gender on purchase intention of Ayurvedic products
H _{0b} - Education level plays no role in consumer behaviour towards Ayurvedic products	H _b - Education level plays a role in consumer behaviour towards Ayurvedic products
H _{0c} - Age has no impact on the use of Ayurvedic Products	H _c - Age has an impact on the use of Ayurvedic Products

Figure 1: Hypotheses

Data Analysis and Findings

Socio-Demographic Profile of Survey Respondents:

Age Group	Gender:		
	Female	Male	Total
Below 20 years	17	3	20
20 - 30 years	36	32	68
31 - 40 years	3	6	9
41 - 50 years	5	1	6
51 - 60 years	2	0	2
Total	63	42	105

Figure 2: Age Group and Gender Profile

Age Group	Education Level:				Total
	Graduate	Post Graduate	Up to Class 10	Up to Class 12	
Below 20 years	4	0	1	15	20
20 - 30 years	34	30	0	4	68
31 - 40 years	4	5	0	0	9
41 - 50 years	3	3	0	0	6
51 - 60 years	2	0	0	0	2
Total	47	38	1	19	105

Figure 3: Age Group and Education Level

Frequencies for Select the most appropriate statement that describes you:		
Select the most appropriate statement that describes you:	Frequency	%
I am aware of Ayurvedic Products and prefer them over other products	20	19
I am aware of Ayurvedic products but don't use them often	81	77
I am not aware of Ayurvedic products	4	4
Total	105	100

Figure 4: Awareness level towards Ayurvedic Products

Close to 96% respondents said they were aware of Ayurvedic products and 47% respondents said that they use Ayurvedic products for body and beauty such as face-wash, soaps, oils, shampoos, make up, hair colour, etc. The second highest preference (36%) was for Ayurvedic medicines, kadhas, etc. for treatment of sicknesses. When asked to name a few Ayurvedic brands - the top 3 names given by the respondents were Patanjali, Dabur and Himalaya.

Gender:			
I always look for Ayurvedic and natural alternatives to the products I purchase because they are good for health	Female	Male	Total
Agree	44	15	59
Disagree	14	18	32
Highly Agree	4	5	9
Highly Disagree	1	4	5
Total	63	42	105
Chi-Squared Tests			
	Value	df	p
X ²	12.985	3	0.005
N	105		

Figure 5: Chi square test for gender and preference towards Ayurvedic products

While analysing the impact of gender on purchase intention, the p value is 0.005 which is statistically significant. We therefore accept the alternate hypothesis H_a – There is an impact of gender on purchase intention of Ayurvedic products. The table above reveals that majority females agreed that they look for Ayurvedic and natural alternatives to products they purchase since they are good for health.

Rate the importance of 'Use of chemicals vs natural ingredients' in order of importance while purchasing a product. (1-Lowest, 4-Highest)	Education Level:				Total
	Graduate	Post Graduate	Up to Class 10	Up to Class 12	
1	2	3	1	0	6
2	6	9	0	1	16
3	16	15	0	7	38
4	23	11	0	11	45
Total	47	38	1	19	105
Chi-Squared Tests					
	Value	df	p		
X ²	24.585	9	0.003		
N	105				

Figure 6: Chi square test for education level and preference towards natural ingredients

Rate the importance of 'quality' of the product while purchasing a product. (1-Lowest, 4-Highest)	Education Level:				Total
	Graduate	Post Graduate	Up to Class 10	Up to Class 12	
1	1	3	1	0	5
2	1	1	0	0	2
3	11	12	0	1	24
4	34	22	0	18	74
Total	47	38	1	19	105
Chi-Squared Tests					
Value	df	p			
X ²	29.16	9	<0.001		
N	105				

Figure 7: Chi square test for education and preference towards quality

The impact of education level on purchase intention considering factors like use of chemicals v/s natural ingredients as well as the quality of the product was also analysed. It was also found that the p value was 0.003 and <0.001 in the case of use of chemicals v/s natural ingredients and quality respectively, which was again found to be statistically significant. We consequently accept the alternate hypothesis H₁ - Education level plays a role in consumer behaviour towards Ayurvedic products. This is important for companies practicing green marketing as it must be targeted at consumers with at least a graduation degree for the marketing activity to be fruitful.

Select the option that applies to you:	Age Group					Total
	20 - 30 years	31 - 40 years	41 - 50 years	51 - 60 years	Below 20 years	
I do not use Ayurvedic products	19	3	1	2	2	27
I started using Ayurvedic products during Covid and now prefer them over others	3	2	2	0	2	9
I was using Ayurvedic products before Covid and continue to do so	46	4	3	0	16	69
Total	68	9	6	2	20	105
Chi-Squared Tests						
	Value	df	p			
X ²	17.398	8	0.026			
N	105					

Figure 8: Chi square test for age and use of ayurvedic products before and after Covid

Chi square test used to examine the relationship between age and the use of Ayurvedic Products revealed a statistically significant p value of 0.026 allowing us to accept the alternate hypothesis H_c - Age has an impact on the use of Ayurvedic Products

Further Scope & Conclusion

The chi-square test used to analyze the data has shown a significant association between socio-demographic variables (such as age, gender, and education level) and consumer behavior and purchase intention of Ayurvedic products.

The significant association between age and consumer behavior and purchase intention of Ayurvedic products suggests that different age groups may have varying preferences and attitudes towards these products. For example, younger consumers might be more open to trying new trends and health products, while

older consumers might prefer traditional remedies or products they have been familiar with for years. The significant association between education level and consumer behavior and purchase intention of Ayurvedic products suggests that individuals with different educational backgrounds may approach these products differently.

The Indian government is already looking at initiatives to promote traditional Indian systems of medicine such as Ayurveda. With increasing consumer interest in Ayurvedic, natural, herbal, and organic products, companies are recognizing the potential market and the importance of offering products that prioritize consumers' health and the environment. This research can be extended to evaluate other socio-demographic variables beyond age, gender and education level; as well as to other states of India and the globe.

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