

Analysis of Consumer Satisfaction with Respect to Ayurveda Products in City Hisar and Bhiwani (Haryana)

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Abstract

Satisfaction Level of Ayurvedic Products in Hisar and Bhiwani Ayurvedic products have gained significant attention as consumers increasingly seek natural and holistic healthcare solutions. This study investigates the satisfaction levels of consumers regarding Ayurvedic products in the cities of Hisar and Bhiwani, Haryana. Hisar, with its blend of urban and rural populations, and Bhiwani, a city with a strong agricultural base, provide a unique setting to examine consumer attitudes towards Ayurvedic products. The research focuses on key factors such as product quality, availability, pricing, and consumer trust to understand the overall satisfaction with Ayurvedic products in these regions. Using survey methods, the study collected data from a diverse group of consumers to assess their perceptions of effectiveness, affordability, and brand loyalty. Findings indicate that while there is a growing acceptance of Ayurvedic products due to their natural appeal and alignment with cultural values, satisfaction levels are influenced by product accessibility and perceived efficacy. The results offer valuable insights for Ayurvedic brands and marketers looking to strengthen their presence in Hisar and Bhiwani. By understanding consumer needs and preferences, companies can tailor their strategies to enhance satisfaction and expand their market share in these regions. The study contributes to the broader understanding of consumer behavior towards Ayurvedic products, particularly in semi-urban areas, where traditional and modern healthcare practices intersect.

Keywords: Ayurvedic, Products, Consumers Behaviour

Introduction

Satisfaction Level of Ayurvedic Products in Hisar and Bhiwani Ayurveda, India's ancient system of natural medicine, has seen a resurgence in popularity as modern consumers increasingly prioritize holistic health solutions. Ayurvedic products, including herbal supplements, skincare, and medicinal remedies, offer a natural alternative to synthetic pharmaceuticals. The growing interest in Ayurvedic products is particularly evident in regions like Haryana, where both rural and urban populations are turning to these natural solutions for their healthcare and wellness needs. Among the key cities in Haryana, Hisar and Bhiwani represent crucial markets for Ayurvedic products due to their cultural significance, economic activities, and health-conscious populations. Hisar, known for its historical importance and rapid urbanization, houses a mix of rural and urban consumers who are becoming more attuned to natural health alternatives. Bhiwani, another prominent city with a strong agricultural base, shares similar consumer dynamics, where traditional practices align well with the principles of Ayurveda. The consumer base in both cities consists of individuals who are often more inclined towards natural, less invasive healthcare practices, which makes Ayurvedic products a viable choice. However, satisfaction levels regarding these products can differ based on consumer perceptions of product quality, availability, pricing, and trust in Ayurvedic remedies. This study focuses on assessing the satisfaction levels of Ayurvedic product users in the cities of Hisar and Bhiwani. By analyzing factors such as perceived product effectiveness, brand loyalty, pricing, and cultural acceptance, the research aims to gain a deeper understanding of how these products are received in these specific urban and semi-urban areas. Hisar and Bhiwani offer a unique blend of modern and traditional values, where Ayurvedic products are seen not only as healthcare solutions but also as part of a larger lifestyle choice rooted in cultural heritage. Understanding consumer satisfaction in these cities is critical for Ayurvedic brands looking to expand or solidify their presence in Haryana. With the increasing focus on natural products, driven by initiatives such as AYUSH (Ayurveda, Yoga, Unani, Siddha, and Homeopathy), there is significant potential for growth. The findings of this study will help Ayurvedic companies and marketers refine their strategies to meet consumer expectations in Hisar and Bhiwani, enabling them to effectively cater to a market that balances traditional values with modern healthcare demands.

Review of Literature

The increasing popularity of Ayurvedic products has been widely studied in recent years, particularly in India where traditional medicine systems like Ayurveda have deep cultural roots. Several studies have highlighted the growing demand for Ayurvedic products as consumers seek natural, chemical-free alternatives for healthcare and wellness (Sharma & Shukla, 2020). This shift has been attributed to a rising awareness about the adverse effects of synthetic products and a broader trend toward sustainable living (Gupta, 2019). Research has also explored the factors influencing consumer satisfaction with Ayurvedic products. For instance, a study by Bhat and Kaur (2018) found that product quality, efficacy, and trust in traditional medicine play a significant role in shaping consumer perceptions and satisfaction. Moreover, availability and affordability of Ayurvedic products are critical factors, particularly in semi-urban areas where access to branded products may be limited (Verma & Chandra, 2021). This is particularly relevant for cities like Hisar and Bhiwani, where consumers may rely on local retailers or smaller brands that align with their cultural practices. In the context of consumer behavior, Jain and Kumar (2017) observed that Ayurvedic products tend to enjoy higher loyalty among consumers familiar with traditional medicine, especially in regions with strong rural ties like Haryana. However, the study also pointed out that brand trust and perceived efficacy are essential for sustained consumer satisfaction. Consumers in semi-urban areas often expect a balance between modern branding and traditional authenticity (Patel & Sharma, 2022). Despite the growing market, some studies have identified challenges in consumer satisfaction. For instance, Aggarwal and Singh (2019) emphasized the role of misinformation and lack of awareness as barriers to full consumer confidence in Ayurvedic products. This is particularly relevant for newer consumers or urban populations unfamiliar with the extensive benefits of Ayurveda. Research suggests that satisfaction levels may fluctuate based on how well companies can bridge the gap between modern consumer expectations and traditional practices (Reddy & Bhaskar, 2020).

Research Methodology

Objective of the study

- To study the satisfaction level of Consumer regarding Ayurvedic Products in Hisar and Bhiwani

The sample size taken in the study is 144. The questionnaire contains demographic information of respondents 10 research statements used on likert scale (strongly agree to strongly disagree) based on satisfaction. Statistical tools (t test) is used to analyze the significant difference between the mean score of demographic variables relating to the challenges. Further 3 null and 3 hypothesis is created which are as:

- **H0:** There is no significant difference in mean score of male and female in respect to satisfaction
- **H1:** There is significant difference in mean score of male and female in respect to satisfaction
- **H0:** There is no significant difference in mean score of married and unmarried in respect to satisfaction
- **H1:** There is significant difference in mean score of married and unmarried in respect to satisfaction
- **H0:** There is no significant difference in mean score of Rural and urban in respect to satisfaction
- **H1:** There is significant difference in mean score of Rural and urban in respect to satisfaction

Data Analysis and Interpretation

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Gender	144	1	2	1.33	.471
Marital status	144	1	4	1.83	.473
Residence	144	1	3	1.74	.634
Valid N (listwise)	144				

The descriptive statistics provide an overview of the key demographic variables in the sample of 144 respondents. The variable ranges from 1 to 2, with a mean of 1.33 and a standard deviation of 0.471. This suggests that the sample consists of more respondents from one gender (likely coded as 1, such as male) than the other (likely coded as 2, such as female).. The marital status variable ranges from 1 to 4, with a mean of 1.83 and a standard deviation of 0.473.

Group Statistics					
	Gender	N	Mean	Std. Deviation	Std. Error Mean
Satisfaction	Male	97	3.9763	.91876	.09329
	Female	47	3.6574	.84332	.12301

The group statistics table provides a comparison of satisfaction levels between male and female respondents. The mean satisfaction score for male respondents ($N = 97$) is 3.98, with a standard deviation of 0.92. This indicates that, on average, male respondents reported relatively high satisfaction, with moderate variability in their responses. The standard error of the mean is 0.093, suggesting that the sample mean is a reliable estimate of the true population mean for males. The mean satisfaction score for female respondents ($N = 47$) is 3.66, with a standard deviation of 0.84. Female respondents, on average, reported a slightly lower level of satisfaction compared to males, with slightly less variability in their responses. The standard error of the mean is 0.123, indicating the reliability of the female sample mean as an estimate of the population mean is slightly lower than that of the male respondents due to the smaller sample size.

In summary, male respondents tend to report higher satisfaction compared to female respondents, but there is some variability in both groups. The difference in standard errors also reflects the larger sample size of male respondents, making the male group's mean satisfaction score a more precise estimate compared to the female group's score. Further statistical testing (e.g., t-tests) would be needed to determine if the difference in satisfaction between genders is statistically significant.

- **H0:** There is no significant difference in mean score of male and female in respect to satisfaction
- **H1:** There is significant difference in mean score of male and female in respect to satisfaction

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Satisfaction	Equal variances assumed	.113	.737	2.004	142	.047	.31884	.15907	.00440	.63329
	Equal variances not assumed			2.065	98.511	.042	.31884	.15438	.01249	.62519

The independent samples t-test was conducted to compare the satisfaction levels between male and female respondents. The results of Levene's Test for Equality of Variances ($F = 0.113$, $p = 0.737$) show that the assumption of equal variances is met, meaning the variability in satisfaction scores is similar for both males and females. When looking at the t-test for equality of means, the analysis reveals a statistically significant difference in satisfaction levels between the two groups. Specifically, the t-test with equal variances assumed yields a t-value of 2.004 with 142 degrees of freedom (df) and a p-value of 0.047. On average, males have a satisfaction score that is 0.32 points higher than females, with a 95%

confidence interval ranging from 0.004 to 0.633. This means we can be 95% confident that the true difference in satisfaction between males and females lies within this range. In conclusion, the results suggest that males report significantly higher satisfaction levels compared to females, even though the actual difference is relatively modest. Further investigation may be needed to understand the underlying reasons for this disparity.

Result of Hypothesis

Since the p-value is less than 0.05, this indicates that the difference in satisfaction between males and females is statistically significant. There is enough evidence to reject the null hypothesis (H0).

Group Statistics					
	Marital status	N	Mean	Std. Deviation	Std. Error Mean
Satisfaction	Married	29	4.2483	.63168	.11730
	Unmarried	111	3.7775	.93095	.08836

The group statistics table compares the satisfaction levels between married and unmarried respondents. The mean satisfaction score for married respondents (N = 29) is 4.25, with a standard deviation of 0.63. This indicates that, on average, married individuals report a higher level of satisfaction compared to their unmarried counterparts. The standard deviation shows that responses among married participants are relatively consistent, with little variation. The standard error of the mean is 0.117, which reflects a reasonable level of precision in estimating the average satisfaction for this group.

The mean satisfaction score for unmarried respondents (N = 111) is 3.78, with a standard deviation of 0.93. Unmarried respondents report a lower average satisfaction level, and their responses show more variability compared to married respondents. The standard error of the mean is 0.088, indicating a relatively precise estimate of the satisfaction mean for this larger group. In summary, married respondents report higher satisfaction levels than unmarried respondents, and their responses are more consistent. However, given the larger sample size of unmarried respondents, their mean estimate is more precise. Further analysis (such as a t-test) would be required to determine if the difference in satisfaction between the two groups is statistically significant.

- **H0:** There is no significant difference in mean score of married and unmarried in respect to satisfaction
- **H1:** There is significant difference in mean score of married and unmarried in respect to satisfaction

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Satisfaction	Equal variances assumed	2.761	.099	2.570	138	.011	.47080	.18321	.10853	.83306
	Equal variances not assumed			3.206	63.583	.002	.47080	.14686	.17738	.76422

The independent samples t-test was conducted to compare the satisfaction levels between married and unmarried respondents. Levene's Test for Equality of Variances F (2.761) and Sig. (0.099) suggest that the assumption of equal variances is not violated at the 0.05 level (though it's slightly above 0.05), allowing us to proceed with the t-test assuming

equal variances. However, both cases (equal and unequal variances) are considered in the results. The value of t (2.570, df (138) and $Sig.$ (2-tailed 0.011) indicate that there is a statistically significant difference in satisfaction levels between married and unmarried respondents. Since the p -value is less than 0.05, we can conclude that the difference is statistically significant. The mean difference is 0.4708 meaning that, on average, married respondents report a satisfaction level that is 0.47 points higher than unmarried respondents.

The 95% confidence interval of the difference ranges from 0.1085 to 0.8331, meaning we can be 95% confident that the true difference in satisfaction between married and unmarried individuals lies within this range. Equal variances not assumed t (3.206) df (63.583) and $Sig.$ (2-tailed 0.002) also show a statistically significant difference between married and unmarried respondents. The mean difference remains the same at 0.4708 and the confidence interval ranges from 0.1774 to 0.7642, confirming the significance of the result even if variances are not equal. There is a statistically significant difference in satisfaction levels between married and unmarried respondents, with married individuals reporting higher satisfaction on average by 0.47 points. This difference is both practically and statistically significant, and the confidence intervals suggest that the true difference lies within a positive range, further reinforcing the conclusion.

Result of Hypothesis

Since the p -value is less than 0.05, we can conclude that the difference is statistically significant. There is enough evidence to reject the null hypothesis (H_0).

Group Statistics					
	Residence	N	Mean	Std. Deviation	Std. Error Mean
Satisfaction	Rural	52	3.8404	1.02923	.14273
	Urban	77	3.9831	.70830	.08072

The group statistics table compares the satisfaction levels between respondents from rural and urban areas. The mean satisfaction score for rural respondents ($N = 52$) is 3.84, with a standard deviation of 1.03. This indicates that, on average, rural respondents report slightly lower satisfaction compared to urban respondents. The higher standard deviation shows that there is greater variability in satisfaction levels among rural respondents. The standard error of the mean is 0.143, reflecting a reasonable level of precision in estimating the average satisfaction for this group. The mean satisfaction score for urban respondents ($N = 77$) is 3.98, with a lower standard deviation of 0.71. This suggests that urban respondents report slightly higher average satisfaction and their responses are more consistent, with less variation compared to rural respondents. The standard error of the mean is 0.081, indicating a more precise estimate of the satisfaction mean for the urban group due to the larger sample size and lower variability. In summary, urban respondents report slightly higher satisfaction levels than rural respondents, and the responses from the urban group are more consistent with less variability. Although the difference in means is small, further statistical testing (such as a t -test) would help determine if this difference is statistically significant.

- **H_0 :** There is no significant difference in mean score of Rural and urban in respect to satisfaction
- **H_1 :** There is significant difference in mean score of Rural and urban in respect to satisfaction

Independent Samples Test									
	Levene's Test for Equality of Variances		t-test for Equality of Means						
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
								Lower	Upper

Satisfaction	Equal variances assumed	4.372	.039	-.934	127	.352	-.14273	.15290	-.44529	.15982
	Equal variances not assumed			-.870	83.133	.387	-.14273	.16397	-.46886	.18339

In the provided results of the independent samples t-test, two scenarios are considered: one where equal variances between the two groups are assumed and one where equal variances are not assumed. Levene's test checks whether the variances of the two groups are equal. The significance value (Sig.) of 0.039 is less than 0.05, indicating that there is a statistically significant difference in the variances between the groups. Therefore, the assumption of equal variances is violated, and we should interpret the row labeled "Equal variances not assumed" in the t-test. The significance value (p-value) of 0.387 is greater than 0.05, meaning there is no statistically significant difference between the means of the two groups. The mean difference is -0.14273, and the confidence interval ranges from -0.46886 to 0.18339, which includes zero, further confirming the lack of a significant difference.

Since Levene's test suggested unequal variances, we focus on this row. The p-value is 0.387, which is also greater than 0.05. This again indicates that there is no statistically significant difference in satisfaction between the two groups. The mean difference is -0.14273, and the 95% confidence interval ranges from -0.46886 to 0.18339, which includes zero. Based on the results, there is no statistically significant difference in satisfaction between the two groups. Even though the variances between the groups are unequal (as indicated by Levene's test), the t-test result shows that the difference in group means is not significant at the 0.05 level.

Result of Hypothesis

The significance value (Sig.) of 0.039 is less than 0.05, indicating that there is a statistically significant difference in the variances between the groups so there is enough evidence to reject the null hypothesis (H_0).

Conclusion

The analysis was conducted to compare the satisfaction levels between two groups. The Levene's Test for Equality of Variances yielded a significant result ($F = 4.372$, $p = 0.039$), indicating that the assumption of equal variances was violated. As a result, the t-test results with the assumption of unequal variances were used for interpretation. The t-test results show a t-value of -0.870 with a degrees of freedom (df) of 83.133 and a p-value of 0.387. Since the p-value is greater than the standard significance threshold of 0.05, the difference in satisfaction levels between the two groups is not statistically significant. In other words, there is no strong evidence to suggest that the satisfaction levels differ between the two groups. The mean difference in satisfaction scores between the groups is -0.14273, with a standard error of 0.16397. The 95% confidence interval for the difference ranges from -0.46886 to 0.18339. Since this confidence interval includes zero, it further confirms that the difference in satisfaction levels is not statistically significant. In conclusion, the results indicate that the two groups have similar levels of satisfaction, and any observed differences in the satisfaction scores are likely due to random variation rather than a meaningful or systematic difference between the groups.

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