Market Segmentation of Buying Behavior of Consumers of Health Care Products in Chandigarh India

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Abstract: In this research paper , a study has been con ducted on market sgmentation of buying behavior of customers of health care products in Chandigarh city of India.The majority of the respondents (41.7%) were influenced by the strategies followed by advertising and the media. • The majority of the respondents (40%) disagreed for a usable product due to lack of availability of the full range of product in one company.• The majority of the respondents (61.7%) were excited about a new product due to inner curiosity.

Keywords : Segmentation, Buying behavior, haircare products, Customers, Random sampling

I. INTRODUCTION

A market segment is a group of people with one or more common characteristics that are aggregated for marketing purposes. Each market segment is unique and marketers use different standards to create a target market for their products or services. People in the same segment respond quickly to market fluctuations. A market includes customers with comparable needs. Nonetheless, customers in the market are never homogeneous. They differ in the desired benefits. The amount they can or want to pay for the media they take in and the quantities they purchase. In spite of segmentation requires more than just similar functions. Marketers must also ensure that individuals in the segment respond in a hasty manner to the incentive i.e. the segment must similarly respond to the marketing activities that are deployed. A good market segment is externally and internally always heterogeneous. The market segmentation divides a particular business segment into specific areas where a company can focus more on its key customers. The different types of segmentation variables profiles are printable quantifiable properties of customers such as industry, geographic region, nationality, age and salary. Demographic segmentation is present in

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almost all industries including automobiles, beauty products, mobile phones, apparel, etc. and assumes that consumer buying patterns are strongly influenced by their demographic evolution. This segmentation approach takes into account variables such as climate, terrain, natural resources and population density. Markets can be divided into regions because one or more of these variables can distinguish customers from region to region. For example, coolers are not normally sold in hilly areas. Similarly, wool and woollen garments are less desirable in South India. Lifestyle is how a person lives their life. Personality and lifestyle influence a person's purchase decision and habits to a high degree. The psychographic variables are used when purchasing behavior correlates with the personality or lifestyle of the consumer. Different consumers may react differently to the marketing efforts of the companies.

II. LITERATURE REVIEW

Bawa and Shoemaker (1987) attempted to study the status of coupons prone buyers of a product are also the buyers for some other product. On studying the brand loyalty and store loyalty of the consumers resulted in two different types of consumers such as activist type who are less loyal to brands, stores but prone to coupons and routinized types who are more loyal to brands, store but not prone to coupons. It can be concluded that for at least one type of consumer, the response to the usage of coupons of a product can be used to predict the response for the usage of coupons for some other product. Kalafatis et al. (2000) concluded from a study that business positioning is defined by relationship building factors such as personal contact, hard criteria such as product quality, etc. It was also found that the business positioning factor, also governed by other considerations such as the structure of the company i.e. geographical coverage, degree of integration, breadth of offerings. Laroche et al. (2001) conducted a study on the keenness of consumers to pay more for environment-friendly products. The results indicated a relationship between attitudes and consumers' compliance to spend more on green products which lead to the segmentation between the consumers. The consumers' readiness to pay more for green products behaves in an ecologically favorable manner. It can be concluded that the profile of the consumers willing to pay more for green products and the discussion of the implication for the marketers. Verma et al. (2001) designed a profit-maximizing product/services operating difficulty levels.

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The study shows observed support to an integrated approach to design a product and manage it. Hassan and Craft (2005) investigated the process of understanding of connecting global market segmentation to decisions with strategic positioning options. Silayoi and Speece (2007) attempted to enhance consumer perception by examining the relative importance of weight for packaging.

For benefit segmentation, the conjoint analysis was conducted. The results of this study show that packaging technology plays an significant role in the consumer's probability to buy. The study provides some insight into consumer preferences for food packages in Bangkok, Thailand, which is almost certainly moderately representative of many markets in Asia which is expanding rapidly. Miremadi and Faghani (2012) studied the consumer buying behavior and their preference in the Iranian FMCG market. It was found that factors such as ass reinforcement, anti-dandruff, eye-catching packaging and shiny are the most imperative attributes that influence the consumers to buy branded shampoo. It can be concluded that there exists a correlation between the independent variables (income) and the dependent variable (gender), also, there is a substantial correlation between education as independent variables and gender as dependent variables. Puwanenthiren (2012) reported that an organization has to satisfy the needs of the customers and also, has to create a center of attention new customers in order to increase their business. The study investigated the different market segments and found that the marketing mix concept has a strong impact on customer satisfaction. Romaniuk et al. (2012) found that the brand associated responses are strongly dependent on past brand usage for both qualitative and quantitative approaches. The authors found that the response pattern of non-packaged-goods categories was very similar to that of packaged goods categories. Kumar and Gogai (2013) found that with the introduction of different developmental schemes and programs such as i.e., SGSY, NREGA Sampoorna Swachchta Abhiyan, Gram Vikas Yojna etc. and by developing different institutions has paved different oppourtunites to the rural people. The characteristics of FMCG where the major areas of marketing-brand building and promotion. Suzi (2013) examined the affectance of ecological information, healthy food and a healthy way of life on young consumer in terms of ecological behavior. Kumar and Joseph (2014) investigated the consumer behavior towards FMCG products among the rural- suburban of Ernakulam. The study was conducted on the quality of personal care brands and the difference in the educational level of the respondents and it was observed to be significant.

III. METHODOLOGY

Two-stage purposive random sampling technique was followed to select a sample of markets and the ultimate customers of Hair Care Products.

Stage I of sampling: A complete list of sectors along with the name of their main markets was prepared with the help of officials of the Municipal Corporation of Chandigarh. The sectors and the markets were arranged in descending order i.e. the top-market based on quality products sold and the economic status of customers visiting the markets was placed at number one and so on. In this way, the entire markets were categorized into three groups' namely top-level,

medium-level and low-level. The markets falling at number one and last in each group/category were chosen purposely for the study. Likewise, six sectorial markets in all were purposely being chosen for the study to capture the effect of customers of all income groups. Stage II of sampling: In the second stage of sampling, there were 10 respondents chosen from each sectorial market.

IV. RESULTS AND DISCUSSIONS

A sample survey collection with a sample size of 60 customers through the well-designed questionnaire as a tool of data collection is taken in sectorial markets. The respondents are selected on the basis of convenience sampling research tools like percentage analysis. The formula has been applied to test the significance of the predetermined objectives of the study which are as follows:

To examine the impact of market segmentation on buying behavior of customers using Hair Care Products.

Correlation table of market segmentation on buying behavior of customers using Hair Care Products.

Table 1 Correlation table of market segmentation on buying behavior of customers using Hair Care Products.

S. No.	Variables	1	2	3	4	5	6	7
1	Marketing strategy	1						
2	Advertising effect	-0.060	1					
3	Product area	-0.257*	0.210	1				
4	Buying interest in new brand	0.049	0.120	0.127	1			
5	Qualitative product diversification in each segment	-0.050	-0.056	-0.082	-0.313 *	1		
6	New product awareness	0.076	-0.112	0.010	-0.010	0.28	0.225	1

Source: As per the output of SPSS 20 version

*. Correlation is significant at the 0.05 level (2-tailed).

The bivariate correlation signified the correlation between two continuous variables and it measures the linear relationship. The possible values in this correlation range from -1 to +1. The value indicates the strength in the relationship and sign (-1 or +1) indicates the direction. From table 4.27, shows that all variables are less than 0.07. So, it is represented as less correlation among the variables. Here, only the product area shows the highest correlation i.e. -0.257* among them all variables.

Regression analysis on impact of market segmentation on buying behavior of customers using hair care products.

Table 2 Descriptive Statistics

S. No.	Variables	Mean	Standard Deviation
1	Marketing strategy	2.68	0.983
2	Advertising effect	1.33	0.475
3	Product area	1.63	0.736

4	Buying interest in new brand	2.45	0.891
5	Qualitative product diversification in each segment	1.82	0.854
6	New product awareness	1.80	0.953

Source: As per the output of SPSS 20 version

The regression analysis generates an equation describing the statistical relationship between one or more predictor variables. In this research study, linear regression was used to check the impact of independent variables on the dependent variable. The regression table measures the amount of total variation in the dependent variable due to the independent variable. Table 4.28 shows the linear regression of descriptive statistics.

Linear regression model summary on the impact of market segmentation on buying behavior of customers using hair care products.

Table 3 Linear regression model summary

Model Summary								
R	R Square R2	Adjusted R Square R̄2	Std. Error of the Estimate	Change Statistics				
				R Square Change	F Change	df1	df2	Sig. F Change
0.542a	0.293	0.213	0.915	0.293	3.665	6	53	0.004b

a. Predictors: Constant, new product awareness, buying interest in new branded product, area wise product, advertising effect, the effect of marketing strategy, the effect of qualitative products diversify in each segment.

b. Dependent variable: Respondent age.

Source: As per the output of SPSS 20 version

Table 3 shows that the value of the adjusted R square is 0.213. This value indicates that there is almost 21.3% variation in the dependent variable (respondent age) due to a one-unit change in the independent variables. F value is 3.665 at 0.004b significant level, which shows that the model is good as its value is less than 0.922.

Table 4 ANOVA table of the impact of market segmentation on buying behavior of customers using hair care products

ANOVA					
	Sum of Squares	Df	Mean Square	F	Significance
Regression	18.398	6	3.066	3.665	0.004b
Residual	44.336	53	0.837		
TOTAL	62.733	59			

a. Dependent variable: Respondent age.

b. Predictors: Constant, new product awareness, buying interest in new branded product, area wise product, advertising effect, the effect of marketing strategy, the effect of qualitative products diversify in each segment.

Source: As per the output of SPSS 20 version

The ANOVA table 4 is explained in such a way about explaining how well the regression equations fit with the data. Here, the regression model predicted the dependent variable significantly well.

Table 5 Coefficient table of the impact of market segmentation

Coefficients						
Sr. No.	Variable	Unstandardized Coefficient		Standardized Coefficient		Significance
		B	Standard Error	Beta	t	
	Constant	0.256	0.755		0.340	0.735
1	Marketing strategy	0.065	0.127	0.062	0.516	0.608
2	Advertising effect	0.166	0.259	0.077	0.641	0.524
3	Product area	0.346	0.143	0.299	2.413	0.019
4	Buying interest in new brand	0.011	0.173	0.008	0.63	0.950
5	Qualitative product diversification in each segment	0.131	0.152	0.109	0.864	0.392
6	New product awareness	0.450	0.130	0.416	3.453	0.001
a. Dependent Variable: Respondent age.						

Sources: As per the output of SPSS 20 version

The coefficient table 5, provides the necessary information to predict the effect of an independent variable on the dependent variable. To move with the beta value of the independent variable (marketing strategy) is 0.062 with a t-value of 0.516 and a significant level of 0.608. The beta value of the independent variable (advertising effect) is 0.077 with a t-value of 0.641 and a significant level of 0.524. The beta value of the independent variable (product area) is 0.299 with a t-value of 2.413 and a significant level of 0.019. The beta value of the independent variable (buying interest in a new brand) is 0.008 with a t-value of 0.63 and a significant level of 0.950. The beta value of the independent variable (qualitative product diversification in each segment) is 0.109 with a t-value of 0.864 and a significant level of 0.392. The beta value of the independent variable (new product awareness) is 0.416 with a t- value of 3.453 and a significant level of 0.001.

Table 6 Multicollinearity coefficient of independent variables of market segmentation

Coefficients								
Sr. No.	Variable	Unstandardized Coefficients		Standardized Coefficients	t	Significance	Collinearity Statistics	
		B	Standard Error	Beta			Tolerance	VIF
	Constant	0.256	0.755		0.340	0.735		
1	Marketing strategy	0.065	0.127	0.062	0.516	0.608	0.917	1.090
2	Advertising effect	0.166	0.259	0.077	0.641	0.524	0.934	1.071
3	Product area	0.011	0.173	0.008	0.063	0.950	0.878	1.139
4	Buying interest in new brand	0.346	0.143	0.299	2.413	0.019	0.870	1.150

5	Qualitative product diversificati on in each segment	0.131	0.152	0.109	0.86 4	0.392	0.84 1	1.18 9
6	New product awareness	0.450	0.130	0.416	3.45 3	0.001	0.91 9	1.08 9
a. Dependent Variable: Respondent age.								

To determine whether there is similarity between the independent variable i.e. marketing strategy, advertising effect, product area, buying interest in new brand, qualitative product diversification in each segment. Based on the table 4.32, coefficient output, collinearity statistics obtained all VIF values of 1.090 for marketing strategy, 1.071 for advertising effect, 1.139 for product area, 1.150 for buying interest in new brand, 1.189 for qualitative product diversification in each segment, 1.089 for new product awareness.

So, all VIF values of independent variables lies between 1to10. Therefore, it is concluded that there is no multicollinearity relations among independent variables.

Summarized outcomes of the formulated hypothesis.

Formulate Hypothesis Outcomes	A significant value of test (two-tailed)	Condition for Acceptance and Rejection
There is no significance influence of buying attitude on buying behavior of consumer using hair care products.	0.004	**Rejected** (there was a significant influence of buying behavior of consumer using hair care products).

Major Findings

- Regarding the ratio of male and female respondents, both respondents were equal i.e., 50% male and 50% were female.
- The majority of the sample respondents are belonging to the age group of 20 years to 30 years.
- The majority of sample respondents in the study are having the maximum educational qualification as postgraduate.
- Regarding the holding of current employment status, the majority of the sample respondent were self-employed.
- Regarding the holding of income status of respondents, the majority of the respondents come under (Rs.) 30,000-45,000.
- The majority of the respondents (50%) were given place preference i.e. a supermarket. The respondents were getting more comfortable to buy hair care product in a supermarket as compared to other like a departmental store, a convenience store, a grocery store because they found more options of Hair Care products with the reasonable price in that place.
- The majority of the respondents (75%) gave price-wise preference to the product due to their brand loyalty nature and the respondents are also believing higher price product i.e. the branded products than better as compare to the unbranded of hair care product.
- The majority of the respondents (51.7%) were product preference shampoo because it is more healthy, shiny and mild in nature.

- The majority of the respondents (36.7%) were used Patanjali products level due to herbal in nature and influenced by Baba Ram Dev.
- The majority of the respondents (38.3%) were happy to money expend Rs.100 to Rs.500 per month because of its inconvenience of each income group.
- The majority of the respondents (61.7%) were like to review the product before purchase.
- The majority of the respondents (38.3%) were like to purchase the packaging of 250ml becomes it is enough to consumption for the household.

V. CONCLUSIONS

The objectives of the study are addressed and collected through the analysis of primary data. In today's world, fast-moving consumer goods have become an integral part of human life. This sector is recession- proof and has created tremendous job opportunities in India. This makes it one of the most important pillars of the Indian economy.

From the regression analysis, the result has been found that the R-value was 0.542a and the value of R square is 0.213. This value indicated that there is almost 21.3% variation in dependent variable (respondent age). Therefore, 21.3% impact of market segmentation dimensions i.e. new product awareness, buying interest in new branded product, area wise product, advertising effect, the effect of marketing strategy, the effect of qualitative products diversify in each segment, etc. on buying behavior of customers using Hair Care products.

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