Consumer Preference Towards Soft Drinks: A Perceptual Study

Dr. Satnam Ubeja*
Ranjana Patel*

*Asst. Professor
Prestige Institute of Management and Research, Indore.

Abstract
The beverages sector in India has undergone significant transformation in the past 10 years. The carbonated and non carbonated drinks industry in India is to grow near about 45 per cent annually and would triple or four times in size by 2014. Customer preferences are more complex and even more important for retailers today than in past. The objectives of this study to identify the factors affect on consumer preference towards carbonated and non carbonated drinks with respect to gender wise. This intercept survey was conducted to study of consumer preferences towards soft drinks in Indore cite. The sample included 150 active mall shoppers. The consumer preferences were identified by a structure questionnaire and captured in 6 factors of preferences. These sales promotion mix factors Satisfaction of mental thirst, Price and availability through ambassador promotion, Relaxation and refreshment on celebration, Brand Positioning, Reliability and cleanness and Taste .The study will help the retailers and manufacturers of soft drinks to understand the underlying consumer preferences factors and which factor mostly like by the customers of Indore city and help them to craft their marketing strategies. Profiling customers by their choice of preferences provide more meaningful ways to identify and understand various customer segments and marketing strategies.

Keywords:
Consumer Preference, Soft Drink, Carbonated Drink, Non Carbonated Drinks

Introduction
The soft-drink industry comprises companies that manufacture nonalcoholic beverages and carbonated mineral waters or concentrates and syrups for the manufacture of carbonated beverages. Soft drink products have been well accepted by consumers and gradually overtaking hot drinks as the biggest beverage sector in the world. In the midst of the rapidly growing soft drink demand, the industry on the whole is encountering new opportunities and challenges. Changing consumer demands and preferences require new ways of maintaining current customers and attracting new ones. Amid ever increasing competition, beverage companies must intensely court customers, offer high quality products, efficiently distribute them, ensure safety and keep prices low all while staying nimble enough to exploit new markets by launching new products. Recent developments in soft drink consumption and challenges in marketing have heightened the need for searching the consumers' needs and preferences.

It is becoming increasingly difficult to ignore the existence of soft drink in today's markets. Since the inception of soft drink in the 1830's, its
consumption has steadily increased with technological advances in production and increased product availability. Recent statistics suggest that despite India’s huge population and the fact that around 47% of the population is composed of persons below 30 years of age, the per-capita consumption of soft drinks in India remains very low, at approximately 5.2 liters against the world average of nearly 85.22 liters which indicates huge potential for market of soft drinks in India.

**Consumer Preferences**

Consumer preferences is used primarily to mean to select an option that has the greatest anticipated value among a number of options by the consumer in order to satisfy his/her needs or desires. Preferences indicate choices among neutral or more valued options available. The preference of the consumer is the result of their behaviour they show during searching, purchasing and disposing the products.

Consumer preferences are defined as the subjective (individual) tastes, as measured by utility, of various bundles of goods. They permit the consumer to rank these bundles of goods according to the levels of utility they give the consumer. The preferences are independent of income and prices. Ability to purchase goods does not determine a consumer's likes or dislikes. In other words, the consumer has different preferences over the different combinations of goods defined by the set of commodity bundles.

Consumer preferences are measured in terms of the level of satisfaction the consumer obtains from consuming various combinations or bundles of goods. The consumer’s objective is to choose the bundle of goods which provides the greatest level of satisfaction as they the consumer define it. But consumers are very much constrained in their choices. These constraints are defined by the consumer's income, and the prices the consumer pays for the goods. Consumer value is measured in terms of the relative utilities between goods and these reflect the consumer’s preferences.

**Soft Drinks**

Soft drinks can be classified into major heads namely carbonated and non-carbonated drinks on the basis of their composition. A soft drink carbonated beverage is a non-alcoholic beverage that typically contains water a sweetener, and a flavoring agent. The sweetener may be sugar, high-fructose corn syrup, or a sugar substitute (in the case of diet drinks). For e.g.: Coca-cola, Thumbs-up, Mountain Dew, Sprite, 7Up, Marinda, Fanta, Limca Appy Fizz, Grappo Fizz, whereas non-carbonated drinks can be further classified into nectar and juices. Nectar is made from fruit or vegetables but with 25-99 % juice content and usually with added sugar and juice mostly contains natural fruit or vegetables. It is prepared by mechanically squeezing or macerating fresh fruits or vegetables. Juice is always 100 % fruit juice For example, Saint Juices, Real Fruit and Vegetable Juices, Tropicana Juices etc to name a few.

**Review of Literature**

There are numerous studies on consumer preferences but there are only few studies on consumer preference towards soft drinks in a study done by Dube (2004). For several of the largest supermarket product categories, such as carbonated soft drinks, canned soups, ready-to-eat cereals, and cookies, consumers regularly purchase assortments of products. Within the category, consumers often purchase multiple products and multiple units of each alternative selected on a given trip. This multiple discreteness violates the single-unit purchase assumption of multinomial logit and probit models. The misspecification of such demand models in categories exhibiting multiple discreteness would produce incorrect measures of consumer response to marketing mix variables. In studying product strategy, these models would lead to misleading managerial conclusions.

Adriant.Beverly (1998) said that the relative contributions of taste and health considerations on consumer liking and purchase intent of cola drink. Eight types of commercial cola drinks were evaluated by 305 adult consumers who also completed a brief questionnaire on food habits. Data were analyzed using factor analysis. These data suggest that in spite of current concern about reducing dietary fat, health remains secondary to taste in the selection of cola drinks for consumers in this population.

Banumathy and Hemameena (2006), while studying consumer brand preference with respect to soft drinks, found that after globalization most of the consumers like the international brands such as Pepsi and coco-cola. Consumers preferred a certain brand or a particular drink mainly because of its taste and refreshing ability.

Chia-Hsien Chu, (2000), Taiwan, and This article investigates factors of marketing communications and consumer characteristics that induce reminder impulse buying behavior. Study 1 applies the antecedent, process and consequence approach to investigate the essential differences between reminder impulse buying and pure impulse buying. The results of Study 1 reveal that reminder impulse buying significantly differs from pure impulse buying on motivation, buying goal and decision evaluation. Study 2 further examines how sales promotion strategy might affect reminder impulse buying, with product appeal and consumer traits as moderating factors. Both sales promotion strategy and its interaction effects with product appeal are found to have significant influences on reminder impulse buying. Specifically, an instant reward promotion promotes stronger reminder impulse buying than a delayed-reward promotion. Furthermore, both a utilitarian product appeal with a price discount promotion and a hedonic product appeal with a premium promotion can encourage greater reminder impulse buying.

Gluckman (1986) studied the factors influencing consumption preference for wine. The explicit factors identified were, the familiarity with brand name, the price of wine, quality or the mouth feel of the liquid, taste with regards to its sweetness or dryness and the suitability for all tastes. Some of the implicit factors identified through extensive questioning were, colour and appearance. Most consumers seemed to prefer white wine to red. Packaging, appearance, colour, ornateness, use of foreign language and graphics were taken as important clues for quality and price. Consumers preferred French or German made wines to Spanish or Yugoslavian wines.

Gibson (1998) Sugar-sweetened soft drinks are a special target of many obesity-prevention strategies, yet critical reviews tend to be more cautious regarding the epidemiological role of Sugarsweetened soft drinks in promoting excess body weight. Progress in reaching a definitive conclusion on the role of Sugar-sweetened soft drinks in obesity is hampered by the paucity of good-quality interventions.
which reliably monitor diet and lifestyle and adequately report effect sizes. We use an alternative microeconomic model of demand for categories that exhibit the multiple discreteness problems. Recognizing the separation between the time of purchase and the time of consumption, we model consumers purchasing bundles of goods in anticipation of a stream of consumption before the next trip. We apply the model to a panel of household purchases for carbonated soft drinks.

**Manoj Patwardhan (2007)**, they aims at improving business performance through an understanding of customer's preferences and desires. In today's world of growing competition where there are numerous brands selling the same products, consumers have an abundant number of choices and many diverse factors influence their buying behavior. In such a scenario, this analysis can help in structuring and formulating different strategies for maximizing profit. This study made an attempt to find the factors affecting consumer's buying behavior, with the focus on two commonly used products (soaps and chocolates). These factors are based on certain variables used in the survey. These variables were aimed at identifying the secondary factors that influenced the choice of soaps/chocolates at the point of purchase or due to other contextual reasons. The variables include packaging, cost, availability, ingredients, product popularity, etc., that influence the choice of a brand from among those in the consideration list, but may not be the most important and primary determinants for short listing brands. The study is useful to the marketers as they can create various marketing programs that they believe will be of interest to the consumers. It can also boost their marketing strategy.

**Noe (2000)** says that the purpose of this paper is the study of factors responsible for brand preference in FMCG products, increasing competition, more due to globalisation, is motivating many companies to base their strategies almost entirely on building brands. Brand preference means to compare the different brands and opt for the most preferred brand. This brand preference is influenced by various factors. Identification of factors affecting the brand preference, it was concluded that brand persona is the most effective factor that affects the brand preference. This brand person deals with the personality aspects or the external attributes of brand, thus it can be said that consumer prefer any brand by looking at the external attributes of a brand.

**Nandagopal and Chinnaiyan (2003)** conducted a study on brand preference of soft drinks in rural Tamil Nadu, using Garret's ranking technique, to rank factors influencing the soft drinks preferred by rural consumer. They found that, the product quality was ranked as first, followed by retail price. Good quality and availability were the main factors, which influenced the rural consumers of a particular brand of a product.

**Reddy Yella D & Ramesh A (2007)**, With the rising popularity of packaged fruit drinks, the cola wars might extend beyond the traditional boundaries as they face fierce competition from the former. India is the second largest producer of fruits and vegetables in the world. There is enormous potential to be tapped which will also be advantageous for both domestic and export markets. The youth market and the middle class provide exciting opportunities for market penetration and development. It becomes imperative to examine the attitude towards packaged fruit drinks, as attitude influences buying behavior. The study identifies the key factors that reflect attitude using factor analysis and examines their managerial implications.

The four factors identified through factor analysis provide an insight into the attitude towards PFDs which influences consumption. Consumers give importance to taste and benefits (health/nutrition). Therefore, marketers need to highlight these in advertisements using a mix of emotional and rational appeal. There is a need to increase promotional efforts to increase consumption and for market penetration and development. Usage occasion has to be increased. There is no individual inhibition for the consumers to drink PFDs, which indicates acceptance and popularity in the chosen segment.

**Shanmuga sundaram (1990)** studied about soft drink preference in Vellore town of north Arcot district in Tamil Nadu. The study revealed that, the most preferred soft drink among respondents as Gold Spot (26%), followed by Limca (24.80%). It was found that taste was the main factor for preference of particular brand and among the media; television played a vital role in influencing consumer to go for particular brand. Because of convenience in carrying, tetra pack was most preferred one studied factors influencing consumer preferences for milk. They were milk quality, convenient availability, supply in quantity desired, flavor, color, freshness and mode of payment showed higher levels of consumer satisfaction. But packaging and labeling are not as important for winning over consumers, according to findings published in the journal Food Quality and Preference. The study involved consumers at different stages of development and highlights the importance of adopting a “sensory marketing approach,” said the researchers from French research organization.

**Rationale of Study**

The beverage market in India is worth 2074.67 Million INR. Though the major portion of the market is still dominated by the carbonated soft drinks there is major shift towards Non-carbonated segment. There was a growth of 31.52% in the Juice segment from 2007 to 2011. As a result of this phenomenal growth, a lot of competition has entered the market. A number of new brands have flooded the market. The competition from Indian beverages such as Sugarcane Juice, Buttermilk, and Fresh Juices etc has also captured a sizeable share of the market. Due to these changes in the beverage market there is a need to identify and evaluate the reasons for the shift in the consumer purchasing pattern.

The present study is an attempt to find out the various factors influencing the consumer preference for purchase of carbonated drinks and non-carbonated drinks in the age group of 17-30 in the city of Indore. Also, due to the increase in the competition there is a need to understand the awareness levels towards various brands amongst the consumers. The study will help companies in identifying the awareness levels of their respective brands in the various soft drink category.

**Objectives**

- To identify the factors affect on consumer preference towards carbonated and non carbonated drinks
- To assess the combined effect of factors on consumer preference towards carbonated drinks with respect to gender wise.
To assess the combined effect of factors on consumer preference toward non-carbonated drinks with respect to gender wise.

Research Methodology

The Study

To study the factors influencing the consumer preference towards carbonated drinks and non-carbonated drinks within the age group of 15-30yrs in the city of Indore. The present study is descriptive in nature.

The Sample

The study was conducted on 150 respondents. The sampling method was random convenience sampling. The demographic variables were:

- Age: - 15-30 years
- Gender: - Male/Female
- Working Class: - Student/Working Professionals

The Tool:

(a) For Data Collection: The data for the present study was collected with the help of self designed questionnaire. The responses were collected on a five point likert scale.

(b) For Data Analysis: The collected data was analyzed with the help of ANOVA.

Hypothesis:

- Null Hypothesis $H_0$: There is no significant impact or difference in mean satisfaction level of customers because of carbonated and non-carbonated drink factors according to gender wise.

- Alternative Hypothesis $H_1$: There is significant impact or difference in mean satisfaction level of customers because of carbonated and non-carbonated drink factors according to gender wise.

Factor Analysis

- The normal varimax solution is not obtained directly from a correlation matrix. It is obtained by rotating other types of factor solutions to the varimax form. In the present study it was considered desirable to use the highest factor loading criterion to select customer satisfaction included in sales promotion mix and all group of factors. This criterion was uniformly used in the factor analyses carried out on the total sample of the study.

ANOVA Test

- The generated factors which have got with factor analysis by using SPSS software (17.1) version, with the help of these factors we have applied ANOVA test by using SPSS software(17.1) to measure the variance among different variables. Tukey Kamen multiple comparison has been used to get the mean difference and analyzing the results. It has been applied on 5% level of significance, to test the variance between different demographic variables on sales promotion mix and over all customer satisfaction in shopping malls.

RESULT and DISCUSSION

Factor analysis was adopted to capture the factors on consumer preference towards carbonated and non-carbonated drinks. (Annexure 2) It summaries the results of the factor analysis which was run using the Principal Component Approach with a varimax rotation.

Bartlett's test of sphericity and Kaiser-Olkin (KMO) measure are adopted to determine the appropriateness of data set for factor analysis. High value (between0.5 to 1) of KMO indicates that the factor analysis is appropriate, low value below the 0.5 implies that factor analysis may not be appropriate. In this study, the result of Bartlett's test of sphericity (0.00) and KMO (0.683) indicates that the data are appropriate for factor analysis.

In this study, factor analysis was carried out in two stages. In stage one; known as the factor extraction process, objective was to identify how many factors to be extracted from the data. Using principal component analysis, 17 items were extracted by 6 factors. Only the factors having latent roots or eigen value greater than 1 were considered significant; all factors having eigen value less than 1 were considered insignificant and were discarded. All the five factors together accounted 67.8% of the total variance.

In the second stage, all the factors were interpreted and labeled. Items having factor loading more than 0.4 were included in the interpretation. More detailed descriptions of the factors are presented in the next section.

Impact of Gender on Consumer preference with respect to carbonated and non carbonated Drinks

As discussed above, 6 factors have been extracted (Annexure 2 and 3) with the help of factor analysis and ANOVA was used to study the variation in the consumer preference across gender. The 6 factors are summarized in the Annexure 2 and 3.

Factor 1: Satisfaction of mental thirst (Annexure 2)

The factor measures the mental thirst and satisfaction of the consumers offer from different consumer preferences taken in our sample of Indore city. Customers who score high on this factor are very conscious about mental satisfaction. They are very conscious about for the products they buy should give satisfaction of mental thirst. They always check and compare the quality before purchasing the products of any type carbonated or noncarbonated drink. They even go to more than one choice of drinks for the satisfaction. Annexure 2 indicates that; the highest loading (0.826) item in this factor is “Mental relaxation”. (Annexure 2)

Factor 2: Price and availability through ambassador and promotion (Annexure 2)

The factor measures the price, level of promotion through celebrities and that gives satisfaction of the consumers.. Customers who score high on this factor are very conscious about price and promotion. They are very conscious about for the products they buy should be more promoted by ambassador and give more information about drink through promotion. They always check and compare the price before purchasing the products of any type carbonated or noncarbonated drink. They even go to more than one choice of drinks for the satisfaction in
price level. Annexure 2 indicates that; the highest loading (0.750) item in this factor is “Price”. (Annexure 2)

Factor 3: Relaxation and refreshment on celebration (Annexure 2)
The factor measures the refreshment and relaxation with respect to satisfaction of the consumers. Customers who score high on this factor are very conscious about celebration and parties and they want refreshment through soft drinks. They are very conscious about the drinks category they buy should give enjoyment and relaxation. They always check and compare the quality before purchasing the products of any type carbonated or noncarbonated drink regarding refreshment. They even go to more than one choice of drinks for the satisfaction. Annexure 2 indicates that; the highest loading (0.742) item in this factor is “Refreshment”. (Annexure 2)

Factor 4: Brand Positioning (Annexure 2)
The factor measures the name of brand with respect to position in consumers mind. Customers who score high on these factors are very conscious about packaging, color of soft drinks both carbonated and noncarbonated. They are very conscious about the drinks category they buy should give enjoyment and relaxation. They always check and compare the quality before purchasing the products of any type carbonated or noncarbonated drink regarding brand name their image and packaging. They even go to more than one choice of drinks for getting the satisfaction. Annexure 2 indicates that; the highest loading (0.837) item in this factor is “Brand Name”. (Annexure 2)

Factor 5: Reliability and cleanliness (Annexure 2)
The factor measures the name of brand with respect to reliability, and hygiene consciousness toward soft drinks for both carbonated and noncarbonated. They are very conscious about the drinks category, they want reliability as compare to taste and refreshment. They always check and compare the expire date before purchasing the products of any type carbonated or noncarbonated drink and also they want pure hygiene products. They even go to more than one choice of drinks for getting the satisfaction. Annexure 2 indicates that; the highest loading (0.860) item in this factor is “Hygiene”. (Annexure 2)

Factor 6: Taste (Annexure 2)
The factor measures the name of brand with respect taste consciousness toward soft drinks for both carbonated and noncarbonated. They are very conscious about the drinks category; they want reliability on taste and refreshment. They always check and compare the flavor before purchasing the products of any type carbonated or noncarbonated drink and also they want pure tasty products. They even go to more than one choice of drinks for getting the satisfaction. Annexure 2 indicates that; the highest loading (0.766) item in this factor is “Taste”. (Annexure 2)

It (Annexure 3) indicates that the significance value of F for sex is greater than 0.05. So, Indore city’s customers do not have significant impact on preference towards carbonated or non carbonated drinks with respect to these demographic variables.

CONCLUSION
The objectives of this study were to investigate the Consumer preferences with respect to carbonated and non carbonated drinks in Indore city and to study variations in the consumer preferences with respect to carbonated and non carbonated drinks across gender wise.

Following the study of Adriant.Beverly (1998), B Banumathy and Hemameena (2006), Chia-Hsien Chu, (2000), an attempt was made to profile the consumer preferences towards soft drinks. They all have identified many factors related to consumer preferences; from which we have selected 19 factors consumer preferences and tried to measure the preferences for carbonated and non carbonated drinks. With the help of factor analysis we have found 6 new factors.

In addition, this study shows that the average customer of Indore city in our sample was not very conscious about carbonated or non carbonated drinks, but gender wise they are also not conscious about any types of consumer preferences factors. Soft drinks consumption and their use is funny activity for them. They are coming stores for purchasing drinks but for getting refreshment and taste.

References
Books

Journal


http://www.tetrapak.com/food_categories/softdrinks/juice_nectar_still_drinks/Pages/default.aspx
www.tnbnews.com/article/articleid.17176

Annexure 1

Reliability Statistics

<table>
<thead>
<tr>
<th>Cronbach's</th>
<th>N of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alpha</td>
<td>19</td>
</tr>
</tbody>
</table>

KMO and Bartlett's Test

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .683 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 528.456 |
| Df | .000 |

Annexure 2

<table>
<thead>
<tr>
<th>Factors Label and Items</th>
<th>Rotated Factor Loadings</th>
<th>Reliability Coefficient (Cronbach Alpha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1: Satisfaction of mental thirst</td>
<td>Mental relaxation</td>
<td>.826</td>
</tr>
<tr>
<td></td>
<td>Give me vitality</td>
<td>.819</td>
</tr>
<tr>
<td></td>
<td>Satisfy thirst</td>
<td>.650</td>
</tr>
<tr>
<td>Factor 2: Price and availability through ambassador and promotion</td>
<td>Price</td>
<td>.750</td>
</tr>
<tr>
<td></td>
<td>Availability</td>
<td>.594</td>
</tr>
<tr>
<td></td>
<td>Frequency of advertisement</td>
<td>.528</td>
</tr>
<tr>
<td></td>
<td>Brand ambassador</td>
<td>.529</td>
</tr>
<tr>
<td>Factor 3: Relaxation and refreshment on celebration</td>
<td>Refreshment</td>
<td>.742</td>
</tr>
<tr>
<td></td>
<td>Social Occasion</td>
<td>.727</td>
</tr>
<tr>
<td></td>
<td>Taste</td>
<td>.631</td>
</tr>
<tr>
<td></td>
<td>Provide Enjoyment</td>
<td>.561</td>
</tr>
<tr>
<td>Factor 4: Brand Positioning</td>
<td>Brand Name</td>
<td>.837</td>
</tr>
<tr>
<td></td>
<td>Packaging</td>
<td>.819</td>
</tr>
<tr>
<td>Factor 5: Reliability and cleanness</td>
<td>Hygiene</td>
<td>.860</td>
</tr>
<tr>
<td></td>
<td>Manufacturing and expire date</td>
<td>.773</td>
</tr>
<tr>
<td>Factor 6: Taste</td>
<td>Flavor</td>
<td>.766</td>
</tr>
</tbody>
</table>
### Annexure 3

#### One way ANOVA for Carbonated Drinks

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>345.165</td>
<td>1</td>
<td>345.165</td>
<td>3.589</td>
<td>.062</td>
</tr>
<tr>
<td>Within Groups</td>
<td>7213.822</td>
<td>75</td>
<td>96.184</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7558.987</td>
<td>76</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### One way ANOVA for Non-Carbonated Drinks

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1459.409</td>
<td>1</td>
<td>1459.409</td>
<td>3.236</td>
<td>.076</td>
</tr>
<tr>
<td>Within Groups</td>
<td>33826.689</td>
<td>75</td>
<td>451.022</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>35286.078</td>
<td>76</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>