# A study on impact of Consumers preference (7 P's) and consumers buying behavior towards soft drinks with special reference to youth 

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#### Abstract

It is well known that consumers brigs business to organizations and hence is a critical aspect in the context of stable business. It is thus required to understand their behaviour as a key aspect in developing and implementing any marketing strategy. Consumer behaviour is the study of why they buy (price, promotion), what they buy (product), where they buy (place), how they buy (shopping methods) and so on. It is also the study of factors that affect the behaviour both internal and external such as, self-concept, social and cultural background, age, family, attitudes, personality and social class. In this study, an attempt is made to investigate the consumer preference on buying behaviour towards soft drinks. For this purpose, 292 sample respondents were selected from selected area (Kandivali to Virar) in Mumbai suburban area. All the respondents are between the age group of 16 to 30 years. For the primary data researcher has used the questionnaire. Author has also formulated few hypotheses and used $F$ test, $t$ test to test them. Product innovation, price, promotion and distribution are important factors that have influence on consumer buying behaviour. Finally, researcher was able to found some of the buyer characteristics. Knowing such features of the buyers by their choice of preferences provide more meaningful ways to identify and understand different customer segments and marketing strategies.


Key Words: Consumer buying behaviour, buying soft drinks, product, price, place, promotion.

Objective: The main objective of this paper is to highlight findings of the study in the context consumers buying behavior towards soft drinks with special reference to youth.
Methodology: This paper is mainly based on primary data collected by the author. The articles which are published on consumer buying behavior related to soft drinks have been studied for the study.

## 1 Introduction

## What is Soft Drink?

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 nonalcoholic beverage that typically contains water a sweetener, and a flavoring agent. The sweetener may be sugar, highfructose corn syrup, or a sugar substitute (in the case of diet drinks).For e.g.:- Coca-Cola, Thumbsup, Mazza, Mountain Dew, Sprite, 7Up, Mirnada, Fanta, Limca Appy Fizz, and so on. Non-carbonated drinks can be further classified into nectar and juices. Nectar is made from fruit or vegetables but with $25 \%$ to $99 \%$ 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 e.g. Real Fruit and Vegetable juices, Tropicana Juices and so on to name a few. (Ubeja and Patel, 2014) [1].

A soft drink (also referred to as soda, pop, soda pop, coke or fizzy drink) is a drink that typically contains no alcohol, though may contain small amounts (typically less than 0.5\% by volume) and is usually referred to as a sugary drink. Soft drinks are often carbonated and commonly consumed while chilled or at room temperature. Some of the most common soft drinks include cola, flavored water, sparkling water, iced tea, sweet tea, sparkling lemonade (or other lemon-lime soft drinks), squash, fruit punch, root beer, orange soda, grape soda, cream soda, and ginger ale. The term "soft" is employed in opposition to "hard", i.e. drinks with high alcoholic content by volume. Generally, it is also implied that the drink does not contain milk or other dairy products. (Ramana and Mallaiah, 2018) [2].

India's soft drink industry is growing and its per-capita soft drink consumption to be almost double to 84 bottles a year by 2021. The industry growth is supported by various factors or the key growth drivers. These are increasing youth population that has attraction towards soft drink, underpenetration of the segment, growing middle class, rising affordability and urbanization, and continued innovations towards product, packaging and sizing. With changing times the situation is changing now. Within carbonated drinks, non-cola carbonates, especially lemon-based ones, are expected to grow faster. It is observed that carbonated beverages account for $51 \%$ of PepsiCo's sales volumes in India. It is also seen that the bottled water category is expected to see a robust volume growth in urban areas. This is mainly due to the increasing awareness about water-borne diseases among consumers and scarcity of drinking water in the urban areas. Moreover, rising health awareness is also resulting in growth of juice consumption and it is increasingly becoming part of the regular breakfasts and social gatherings (ETNews, 2019) [3].

## 2 Literature Review

Consumer buying behavior is a human behavior with a procedure associating numerous events which involves analyzing, feeling and behaving, as an individual address the existing needs. As a field of study, consumer behaviour is the science of studying a set of value-seeking activities in exchange of their existing resources such as; time, money and effort of consumers which is motivated by addressing real needs. There are several definitions of consumer buying behaviour; however most of the definitions are similar in
scope. As stated by Solomon, consumer behaviour is the study of process when individuals make selection, usage or disposal of products and services during purchase in order to meet their needs and fulfill their desires (Solomon, Bamossy, Askegaard, and Hogg, 2010) [4].

Various marketing efforts are used by companies to influence the decision of consumers. But it is full of challenge to know exactly how buyers will respond to them. Marketing stimuli comprises 4 Ps, which would be Product, Place, Price and promotion. Mobile phone companies use these stimuli to persuade consumers to buy new mobile phone. Environmental stimuli that the consumer may take into account are political, economic, cultural and technological factor. Consumers make different types of decisions in everyday life. The decision consumer makes while purchasing is the focal point that marketers try to study. In this competitive business world, it has become important for every organization to put great effort on researching consumer buying behaviour to find out detailed information on what consumers purchase, where, when and why they purchase, how and how much they purchase. In general consumer behaviour theory, a need can be triggered by either internal stimuli such as hunger and thirst or external stimuli such as advertisement or suggestion from friends. Consumer will acquire information after the problem has been recognized. The information can be obtained from various sources like family, friends, acquaintances, websites, trader, mass media, promotion and displays in shops, advertising, or using the product (Kotler and Armstrong, 2012) [5].

Consumer buying behaviour is determined by several factors. To list a few are culture, social factors, personal factors and psychological factors. Consumer's preferences are determined by several aspects such as 4Ps. To list few are perceived product, perceived price, perceived place, and perceived promotion. It was observed that there is the significant positive relationship between consumer's preference and buying behaviour as well as there is the significant impact of the consumer's preference on buying behaviour (Anojan V. and Subaskaran T., 2015) [6].

## 3 Need of the Study

## Statement of the Problem:

The problem of this research is to find out the relationship of consumer buying behavior and 7 P's on soft drinks among young customers. Today the majority of soft drinks products target all kind of people such as children, adults, middle age and old age but this research targets youth as they form a large chunk of the Indian population. The purpose of this study is to develop a better understanding of consumer preferences and buying behavior on soft drinks and find out which factors are more impact on consumer preference and buying behavior. It is one of the most important segments in products as customer's life style is changing every day and that companies need to give more consideration on customer preferences and buying behavior because they are kings in the market. Based on the research problem of the study research question (RQ) was formulated.

## 4 Objectives of the Study

There study objectives are:

- To study the impact of price on purchase behaviour
- To study whether advertisements of soft drinks have any effect on the purchase behavior or not.
- To identifying the factors which influence the consumer preference with regard to soft drinks apart from 7 P's especially the top 2 most important factors influencing the decision.
- To identify the types of carbonated drinks available in the market.
- To study the average ad spends on soft drinks and their effect on potential customers vis-a-vis the top two factors influencing buying behavior.


## 5 Data Collection Method

This empirical research is basically based on Primary data collected from the respondents.

Methods and Materials:

- Primary Data: A structured questionnaire was prepared and distributed among 292 youth people.
- Secondary Data: The researcher gathered required information from various books, journals and published articles, besides gathering data from the Internet.
Sampling Unit:
- Geographical sample unit- Kandivali to Virar between the age group of 16 to 30 years.
- Parameter of interest: The most popular soft drinks consumed by youngsters and the criteria for selection of soft drinks by them.
- Sampling: Convenient sampling (non probability).

Tools used:

- Suitable statistical tests were used for testing the hypothesis.


## 6 Data Analysis

The data collected has been analyzed with the help of different statistical tests. Suitable statistical techniques such as percentage, correlation were used. Also combination of statistical tests (e.g. F test, t test and Mann-Whitney test) was used for hypothesis testing.

## Hypotheses:

$\mathbf{H}_{\mathbf{1}}$ There is a significant impact of price and buying behavior on soft drinks among youth.
$\mathbf{H}_{\mathbf{2}}$ There is a significant impact of promotion and the buying behavior of soft drinks among youth.
$\mathrm{H}_{3}$ The frequency of consumption of soft drink is more among the youth.
$\mathbf{H}_{4}$ There is significant relationship between the drinkers and non drinkers of soft drink and their health consciousness among youth.

## Limitations of the study:

The study, which is based chiefly on, the primary data collected from youth population. This data is limited within the area. Time and cost are the major factors, which prevented the researcher from adopting a larger panel size.

## ANALYSIS OF SURVEY DATA

Understanding the views and opinions of the respondents is one of the most important aspects to be considered which helps in understanding consumer behaviour in the context of buying soft drinks. It is helpful in
knowing what they buy, where they buy, why they buy. This also includes their opinion about various statements about buying of soft drinks.

## Demographic Profile

Views and opinions of the respondents are largely depends on the demographic factors such as like gender, age, as well as other factors such as frequency of drinking the soft drink, place of purchasing and so on.

The Table 1.1 reveals that, out of the total respondents $(\mathrm{n}=292), 60 \%$ are female respondents and $40 \%$ are male respondents.

Age-wise analysis shows that about $70 \%$ of them belong to age group of 16 to 25 years and $30 \%$ of them belong to age group of 26 to 30 years.

Table 1.1 Demographic Profile (No. of Respondents)

|  | Gender |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Total | In \% |
| Age Group |  |  |  |  |
| 16-25 Yr. | 86 | 118 | 204 | 70\% |
| 26-30 Yr. | 30 | 58 | 88 | 30\% |
| Total | 116 | 176 | 292 | 100\% |
| Do you drink soft drinks? |  |  |  |  |
| Yes | 103 | 155 | 258 | 88\% |
| No | 13 | 21 | 34 | 12\% |
| Total | 116 | 176 | 292 | 100\% |
| Frequency of Drinking Soft Drink |  |  |  |  |
| Monthly | 58 | 126 | 184 | 63\% |
| Weekly | 41 | 33 | 74 | 25\% |
| Never | 10 | 15 | 25 | 9\% |
| Daily | 7 | 2 | 9 | 3\% |
| Total | 116 | 176 | 292 | 100\% |
| Place of purchasing the soft drink |  |  |  |  |
| Convenience Stores | 58 | 75 | 133 | 46\% |
| Grocery Stores | 35 | 67 | 102 | 35\% |
| Restaurants | 23 | 34 | 57 | 20\% |
| Total | 116 | 176 | 292 | 100\% |
| How health conscious are you? |  |  |  |  |
| Somewhat | 63 | 96 | 159 | 54\% |
| Very | 19 | 38 | 57 | 20\% |
| Extremely | 23 | 24 | 47 | 16\% |
| Not at all | 11 | 18 | 29 | 10\% |
| Total | 116 | 176 | 292 | 100\% |
| Which type of packages do you prefer most? |  |  |  |  |
| PET Bottle | 49 | 87 | 136 | 47\% |
| Small Can | 39 | 40 | 79 | 27\% |
| Glass Bottle | 27 | 46 | 73 | 25\% |
| No Response | 1 | 3 | 4 | 1\% |
| Total | 116 | 176 | 292 | 100\% |
| Which quantity do you prefer most? |  |  |  |  |
| 100 ml | 22 | 74 | 96 | 33\% |
| 200 ml | 33 | 52 | 85 | 29\% |
| 500 ml | 35 | 32 | 67 | 23\% |
| 300 ml | 20 | 12 | 32 | 11\% |
| Others | 6 | 6 | 12 | 4\% |
| Total | 116 | 176 | 292 | 100\% |

## Source: Survey Data

With regards to consumption of soft drinks, analysis of the respondents ( $\mathrm{n}=292$ ) shows that $88 \%$ of them
are drinking the soft drink whereas only $12 \%$ had said that they are not drinking the soft drinks.

When asked about (their) frequency of drinking the soft drinks, analysis of the respondents reveals that $63 \%$ of them said 'monthly', whereas about $25 \%$ of the respondents said 'weekly'.

When asked about (their) place of purchase of the soft drinks, analysis of the respondents reveals that $46 \%$ of them said 'convenience stores', whereas about $35 \%$ of the respondents said 'grocery store'. Remaining $20 \%$ of the respondents said 'restaurants'.

When asked about (their) health consciousness, about half of the respondents (54\%) said 'somewhat', about one fifth of the respondents ( $20 \%$ ) said 'Very', about $16 \%$ of the respondents said 'Extremely'.

When asked about packages (of their) preference, about $47 \%$ of the respondents said 'PET Bottle', about $27 \%$ of the respondents said 'Small Can' and about one fourth of the respondents ( $25 \%$ ) said 'Glass Bottle'.

When asked about quantity (of their) preference, about $33 \%$ of the respondents said ' 100 ml ', about $29 \%$ of the respondents said ' 200 ml ' and about $23 \%$ of the respondents said ' 500 ml '.

## RESPONSE TO VARIOUS STATEMENTS

We have asked the respondents to rate various statements related to buying of soft drinks on the scale of 1 to 5 where, $1=$ Strongly Disagree, 2=Disagree, 3= Neither disagree nor agree, $4=$ Agree, $5=$ Strongly Agree

There are different numbers of responses to different statements and are as shown below.

Statement - S1 ( $\mathrm{n}=289$ )
The price of the soft drinks is reasonable.
Table 1.2 Responses - S1

| Response | In \% |
| :---: | :---: |
| Strongly Disagree | $13 \%$ |
| Disagree | $28 \%$ |
| Neither disagree nor agree | $27 \%$ |
| Agree | $26 \%$ |
| Strongly Agree | $6 \%$ |

Source: Survey Data
It was observed that nearly an equal number of respondents are having different opinions ranging from disagree, neither disagree or agree to agree. This indicates that price has some influence on buying behaviour.

Statement - S2 ( $\mathrm{n}=288$ )
Soft drinks consistently provide the best values for money.

Table 1.3 Responses - S2

| Response | In \% |
| :---: | :---: |
| Strongly Disagree | $14 \%$ |
| Disagree | $38 \%$ |
| Neither disagree nor agree | $35 \%$ |
| Agree | $10 \%$ |



## Source: Survey Data

It was observed that about $35 \%$ of the respondents neither disagree nor agree with this statement. Also about $38 \%$ of the respondents have indicated their response as 'disagree'. This indicates that offering a good product that fulfills consumer needs is one of the important parameters that influence the buying behaviour.
Statement - S3 (n=292)

Soft drinks are available at local stores near to you.
Table 1.4 Responses - S3

| Response | In \% |
| :---: | :---: |
| Strongly Disagree | $8 \%$ |
| Disagree | $4 \%$ |
| Neither disagree nor agree | $29 \%$ |
| Agree | $40 \%$ |
| Strongly Agree | $19 \%$ |

Source: Survey Data
It was observed that about $29 \%$ of the respondents neither disagree nor agree with this statement. Also about $40 \% \%$ of the respondents have indicated their response as 'agree' whereas about $19 \%$ of the respondents have indicated their response as 'strongly agree'.

This indicates importance of place in the minds of consumer. One can say that place (or distribution) is one of the important parameters that influence the buying behaviour.

Statement - S4 ( $\mathrm{n}=291$ )
The promotions (for soft drinks) are always attractive.

Table 1.4 Responses - S4

| Response | In \% |
| :---: | :---: |
| Strongly Disagree | $13 \%$ |
| Disagree | $14 \%$ |
| Neither disagree nor agree | $32 \%$ |
| Agree | $26 \%$ |
| Strongly Agree | $15 \%$ |

Source: Survey Data
It was observed that about $32 \%$ of the respondents neither disagree nor agree with this statement. Also about $26 \%$ of the respondents have indicated their response as 'agree' whereas about $15 \%$ of the respondents have indicated their response as 'strongly agree'.

This indicates importance of promotion in the minds of consumer. One can say that promotion is one of the important parameters that influence the buying behaviour.

## HYPOTHESIS TESTING

Summary of Hypothesis Testing is as follows:
Table 1.6 Summary of hypothesis Testing

| Hypothesis <br> Code | Hypothesis Description | Inference |
| :--- | :--- | :--- |
| H1 | There is a significant impact of <br> price and buying behaviour on <br> soft drinks among youth. | Accepted |
| H2 | There is a significant impact of <br> promotion and the buying <br> behaviour of soft drinks among <br> youth. | Accepted |
| H3 | The frequency of consumption <br> of soft drink is more among the <br> youth. | Accepted |
| H4 | There is significant relationship <br> between the drinkers and non <br> drinkers of soft drink and their <br> health consciousness among <br> youth. | Accepted |

For testing hypothesis we have used combination of statistical tests (such as F test, t test and MannWhitney test).

The details of hypothesis testing are provided in Appendix 1.

## 7 Conclusion

Based on the analysis of the data for this study it may be concluded that soft drink is preferred by the youth. Some of the characteristics as mentioned by the survey respondents are as listed below.

- About $88 \%$ of them are drinking the soft drinks.
- About $70 \%$ of them belong to age group of 16 to 25 years.
- About $63 \%$ of them said that (their) frequency of drinking the soft drinks is 'monthly'.
- About $46 \%$ of them said that (their) place of purchase of the soft drinks is 'convenience stores'.
- About $54 \%$ of them said that they are 'Somewhat' health conscious.
- About $47 \%$ of them said that (their) package of preference is 'PET Bottle'.
- About $33 \%$ of them said that (their) quantity of preference is ' 100 ml '.

Product innovation, price, promotion and distribution are important factors that have influence on consumer buying behaviour.

## References

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## Appendix 1

## Details of Hypothesis Testing

## Hypothesis 1 Testing

Null Hypothesis
H01: There is no significant impact of price and buying behaviour on soft drinks among youth.

Alternative Hypothesis
H 1 : There is a significant impact of price and buying behaviour on soft drinks among youth.

For testing this, we have considered responses for the following two datasets:

- Gender (Q3) and What factor (Price) motivates you the most to purchase soft drinks? (Q15)

Coding of responses is as follows:
Others 1, Place 2, Product 3, Promotion 4 and Price 5
Male 1 and Female 2
Statistical tests applied and their results are given subsequently.

Data obtained for (Gender) and (Price)

| Description / Statistics | Gender | Price |
| :--- | :---: | :---: |
| n (Count) | 292 | 292 |
| Mean (Average) | 1.60 | 3.16 |
| Median | 2.00 | 3.00 |
| Standard <br> (Variance) | 0.49 | 0.82 |
| Standard Error | 0.03 | 0.05 |
| F-Test - Variance |  |  |
| Condition is True  <br> Accept alternative  <br> hypothesis  | Gender variance < |  |
| Price variance |  |  |

Inference: The alternative hypothesis H1 stands accepted.

## Hypothesis 2 Testing

## Null Hypothesis

H01: There is no significant impact of promotion and buying behaviour on soft drinks among youth.

Alternative Hypothesis
H 1 : There is a significant impact of promotion and buying behaviour on soft drinks among youth.

For testing this, we have considered responses for the following two datasets:

- Gender (Q3) and What factor (Promotion) motivates you the most to purchase soft drinks? (Q15)

Coding of responses is as follows:
Others 1, Place 2, Product 3, Price 4, Promotion 5
Male 1 and Female 2
Statistical tests applied and their results are given subsequently.

Data obtained for (Gender) and (Promotion)

| Description / Statistics | Gender | Promotion |
| :--- | :---: | :---: |
| n (Count) | 292 | 292 |
| Mean (Average) | 1.60 | 3.25 |
| Median | 2.00 | 3.00 |
| Standard <br> (Variance) | 0.49 | 0.95 |
| Standard Error | 0.03 | 0.06 |
| F-Test - Variance |  |  |
| Condition is True <br> Accept alternative <br> hypothesis | Gender variance < |  |
| T-Test |  |  |

Inference: The alternative hypothesis H2 stands accepted.

## Hypothesis 3 Testing

Null Hypothesis
H03: The frequency of consumption of soft drink cannot be decided among the youth.

Alternative Hypothesis
H3: The frequency of consumption of soft drink is more among the youth.

For testing this, we have considered responses for the following two datasets:

- Age Group (Q2) and How frequently do you consume as soft drink? (Q9)

Coding of responses is as follows:
Age Group: 16-25 2, 26-30 1
Frequency of drinking soft drink: Never 1, Monthly 2, Weekly 3 and Daily 4

Statistical tests applied and their results are given subsequently.

Data obtained for Age Group (Q2) and Frequency (Q9)

| Description / Statistics | Age Group | Frequency |
| :---: | :---: | :---: |
| n (Count) | 292 | 292 |
| Mean (Average) | 1.70 | 2.23 |
| Median | 2.00 | 2.00 |
| Standard <br> (Variance) Deviation | 0.46 | 0.64 |
| Standard Error | 0.03 | 0.04 |
| F-Test - Variance |  |  |
| Condition is True Accept alternative hypothesis | Age Group variance < Frequency variance |  |
| p-value: | 0.000\% |  |
| T-Test |  |  |
| Condition is True Accept alternative hypothesis | Age Group average < Frequency average |  |
| p-value: | 0.000\% |  |
| Mann-Whitney Test |  |  |
| Condition is not True Reject alternative hypothesis | Age Group median < Frequency median |  |
| p-value: | 0.000\% |  |

Inference: The alternative hypothesis H3 stands accepted.

## Hypothesis 4 Testing

Null Hypothesis
H04: There is no significant relationship between the drinkers and non drinkers of soft drink and their health consciousness among youth.

Alternative Hypothesis
H4: There is significant relationship between the drinkers and non drinkers of soft drink and their health consciousness among youth.

For testing this, we have considered responses for the following two datasets:

- Do you drink soft drinks?(Q4) and How health conscious are you?(Q12)

Coding of responses is as follows:
Do you drink soft drinks?: Yes 2 No 1
Health Consciousness: Not at all 1, Somewhat 2, Very 3 and Extremely 4

Statistical tests applied and their results are given subsequently.

Data obtained for Drinking or Not Drinking the Soft Drink (D or ND) and Health Consciousness (HC)

| Description / Statistics | D or ND | HC |
| :---: | :---: | :---: |
| n (Count) | 292 | 292 |
| Mean (Average) | 1.88 | 2.42 |
| Median | 2.00 | 2.00 |
| Standard (Variance) $\quad$ Deviation | 0.32 | 0.88 |
| Standard Error | 0.02 | 0.05 |
| F-Test - Variance |  |  |
| Condition is True Accept alternative hypothesis | D or ND variance $<\mathrm{HC}$variance |  |
| p-value: | 0.000\% |  |
| T-Test |  |  |
| Condition is True Accept alternative hypothesis | D or ND average $<\mathrm{HC}$ average |  |
| p-value: | 0.000\% |  |
| Mann-Whitney Test |  |  |
| Condition is not True Reject alternative hypothesis | D or ND median < HC |  |
| p-value: | 0.000\% |  |

Inference: The alternative hypothesis H4 stands accepted.

