

Factors Affecting Consumer Purchase Decision: A Selective Study of Beverage Industry

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Major Research Project Report
On
Factors Affecting Consumer Purchase Decision:
A Selective Study of Beverage Industry

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**UNIVERSITY SCHOOL OF MANAGEMENT &
ENTREPRENEURSHIP**

Delhi Technological University

MAY 2020

CERTIFICATE

This is to certify that, Akash Agarwal (2K18/MBA/716) and Lakshita Jain (2K18/MBA/734) students of MBA (General) have successfully completed the project entitled, **“Factors Affecting Consumer Purchase Decision: A Selective Study of Beverage Industry”** under the guidance of our mentor Dr. Jagvinder Singh, Assistant Professor, USME, DTU in the year 2020 in partial fulfillment of end semester examination conducted at the University School of Management and Entrepreneurship, New Delhi 110095.

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DECLARATION

We hereby declare that research project submission represents our own ideas & words, where other's ideas/words have been included, are adequately cited and referenced. Also, we have adhered to principles of academic honesty & integrity in our submission. Also, it is certified that project is original & not submitted earlier elsewhere.

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EXECUTIVE SUMMARY

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This study is done to find out the factors affecting a consumer's preference which lead the consumer to establish a buying decision for different beverage products that are available in the present industry of beverages. Primary data here has been gathered with the help of e-questionnaire & secondary data was through the literature review. Descriptive Research method is used in this study. Also, a sample-size of 126 respondent is taken by doing the calculation using sample size calculation by proportion. Random sampling is done. Various factors are identified by grouping the attributes with high correlation using factor analysis. These factors affect the consumer's purchasing decision at the beverage industry. These are six factor identified namely Price, Quality, Health Consciousness, Look & Feel, Temperature, Taste which are then used as Ind variables in regression analysis so that the impact of these factors at the dependent variable i.e. the consumer's purchasing decision. Further, this study will enable the companies to better understand the customer's requirements and preference for choosing a beverage. This helps the companies to identify the areas related to their product on which they should focus more and find possible solutions to guarantee continued existence in the competitive environment of the Beverages Industry.

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CHAPTER 1: INTRODUCTION

1.1. About the Industry: Beverage

The beverage industry of India is made up of an array of product beverages ranging from real and flavored juices, aerated and masala drinks, milk-based drinks like Buttermilk and milkshakes, energy drinks, sugar syrups, etc. In today's era of fast-moving world & growth, beverage industry is not so far, instead witnessing rapid growth in revenues. Also, by creating various horizons for beverage industry to work upon by creating & increasing new challenges, technology and opportunities. In current situations, where the consumer demand and choices are so dynamic and changing, requires new ways to attract, absorb and then the retention of consumers. Meanwhile, also focusing on new customers for the target segment. Beverage industry market has abundant players and they offer large number of products resulting in an oligopolistic market structure leading to competition. In this intense competition, it is very important for the companies to identify the areas related to their product on which they should focus more and find possible solutions to guarantee continued existence in the competitive environment of the beverage industry.

Beverage Industry is one of the most competitive markets in the world. It is the soft drink market which is spending crores of rupees on its advertisements and other promotional activities. It is a sector which has shown a steady growth over a century throughout the world. In our country, The Beverage Industries are booming, comprising of a wide range of companies and their products consisting of popular international, national and regional brands. Beverages in India, can broadly be divided into aerated and non-aerated/carbonated beverage on the basis of their ingredients. Aerated beverage contains a sweetener(sugar), water & flavoring agent for flavor and also color. The sweetener is usually sugar or a sugar substitute sucrose syrup or a fructose syrup. Sometimes these sugar substitutes are used in diet drinks. For example, we have Pepsi, Miranda, Nimbooz, Coca-Cola, mountain-dew, Sprite, Thumsup, Limca, Appy fizz, etc. Non-aerated beverages can be juices from real sources, no preservatives juices & artificial flavoring juices. Moreover, beverages can be classified more into juices & nectar. Nectar is made using fruits and vegetables keeping the juice content varying from 25-99 % and usually

has added sugar in it. Juices on the other hand contains natural fruits and vegetables. Juices are usually set/ juiced by automatically squeezing the fruits & fresh vegetables into the big machines. Juices do not contain added sugar but some contain. For example, juices of brand like Dabur Real orange, mango, mix, Tropicana, etc. also vegetable juices.

Other than the soft drink market of the beverage industry, there exists milk-based beverages. There is a broad variety of milk-based beverages available in the market. These include Milkshakes, Buttermilk, Lassi, Flavored milk etc.

1.2. Key Players & their products in Beverage Industry

PepsiCo-

PepsiCo beverages range is dynamic and always improving with the changing needs of the consumers and today it includes a wide range of products.

- Diet-Zero Sugar
- Mountain Dew various drinks
- Aquafina Pet bottled waters
- Gatorade & Propel fitness water
- Tropicana real juices
- Probiotic drinks-Kevita
- sparkling beverages-izze
- Ready to drink tea-Pure Leaf & Lipton
- Starbucks-coffees



Figure 1.1

Mother dairy

Being a leader in the dairy products market, Mother Dairy has the following variety of beverages:

- Buttermilk (Tadka & Plain)
- Flavored Lassi
- Milkshakes



Figure 1.2

Amul

Amul is a competitor of mother dairy, as it is also in the dairy products market. Some of the major products in the amul's beverage range are as follows:

- Amul Memory Milk
- Kool Cafe and Kool Coco
- Amul Smoothies
- Amul Lassi
- Amul Buttermilk
- Amul Flavored Milk



Figure 1.3

Coca- Cola

They with a large variety of products, are the leader of the beverages industry by providing products in the category of soft drinks to juices and much more. Below are some of the products provided by Coca-Cola Company.

- Minute Made
- Pulpy Orange
- Nimbooz
- Maaza

- Coca- Cola
- Monster
- Fanta
- Sprite



Figure 1.4

1.3. Research Objective

Research is done to carve out the important factors affecting a consumer's preference which lead the consumer to make a purchase decision for various products existing in this highly active Beverages Industry.

- To determine the factors influencing consumer purchase decision while selecting a Beverage product
- To find the attributes that attract the customer in choosing one beverage product over other
- To identify the factors that a beverage company can focus more on so as to improve product.

1.4. Hypothesis

To know the effects of various attributes of the beverage on the consumer purchase decision, the following null and alternative hypothesis have been framed:

Here H_0 is null hypothesis and H_1 is alternative hypothesis.

- H_0 = No significant impact of attributes on consumer purchasing decision of beverage.
- H_1 = There is a sign. impact of attributes of beverage on the consumer purchase decision.

CHAPTER 2: LITERATURE REVIEW

Product Attributes

Product attributes are the features which describe creation & affect a consumer purchase choice. They can be either ²⁵ be tangible features, that is physical present in nature & intangible, that is not physical present in nature.

- Tangible attributes comprise of physical presence of product features such as packaging, weight, colour, aroma, sensitivity, material composition and also quantity etc.

For instance, when we go to buy beverage, we usually study tangible attributes such as the ingredients, packaging, colour and also look and feel.

- Intangible attributes comprise of characteristics like the overall quality (availability, serviceability, reliability etc.), the cost associated and also the quality standards.

For Eg, when we are looking to buy a new motorcycle, we may contemplate intangible attributes like the quality of motorcycle, price of motorcycle and safety test scores given.

Consumer Preferences

Choices taken for selection of options which are most important value among other options by a customer which satisfies his desires and/or needs. Preferences are choices that are available to the consumer, out of which some are valued and some can be neutral. Usually, preference tend to become day by day and is always changing. It is gathered by the behavior of consumer in searching a product, purchasing a product, usage experience, and then finally by disposing the product.

Consumer preferences are followed to be subjective term i.e. it depends from person to person tastes. Consumers tend to rank these utilities or tastes according to their will and decide. Also, the choices or preferences are totally independent of the income and the price. Likes or dislikes for a product directly depends on the individual preference but not on their purchasing power, and it is common that people can have different choices or preferences on different sets of goods defines by commodity bundles. Level of satisfaction

by consuming different sets of bundles are actually consumer preference. The customer's ultimate aim is choosing the bundle of goods, which is providing greatest level in satisfaction. Also, consumers are constrained in their choices towards a particular product. Choices are defined by customer's income, and the amount that he/she is ready to pay for it. Hence, Consumer value is quantified in relative values among goods & hence reflecting the consumer's choices or preferences.

Consumer Purchase Decision

Buyer buy result can be viewed as a procedure wherein the customers assess elective items based on different properties available and then finally pick an item to purchase. Item properties assume a crucial job in showcasing from the point of view of both the advertiser just as consumer. It has been distinguished as a chance to separate the advertiser's image from its rivals. Consumers value the attributes of a product as they use these attributes for evaluating alternatives of a product, and choose a product according to their preference.

Satnam Ubeja in 2014 conducted a perceptual research and identified the factors that widely influenced complex consumer's choice or preferences for aerated or carbonated beverage & non-aerated beverages in the city of Madhya Pradesh of India. According to this investigate, Ubeja said he saw a checked move in the shopper decisions or inclination from the aerated beverage drink to non-aerated beverage drink refreshment, wellbeing choices. Henceforth, to benefit the beverages industry products change (in positive) the awareness level for their product beverages in the specified targeted market of the soft drink(beverages) group. For this examination, Ubeja specialist applied approach of Factor-investigation & found imp factor that impacted consumer choices/preferences, from the questionnaire circulated, then, also further analyzed through SPSS and applied Annova on the dataset. After factor analysis, researcher identified some independent variables such as the Price of beverage, Flavor associated, Social occasions / Time, and finally Packaging of beverage, etc. The research concluded that the, consumer choices or preference are gender agnostic. Additionally, it finished up with most significant factor for deciding the buy choice to be flavor and refreshment of beverages. Additionally, emphasis was on choosing shoppers dependent on the decision of inclination by choosing

an important method to set up and realize diverse customer sections and market technique utilized in situating the item and furthermore making brand awareness.

In our study, we have considered taste as a factor, to avoid complexity. Taste as a whole will take level of sweetness, flavor, texture & Aroma.

Banu mathy and Hema Meena

In this research of consumer's brand preference wrt beverage industry in soft drink of India, concluded that after the globalization, most consumer-like international brands. For example, Pepsi, Coca-Cola. Also, consumer prefer certain brands or say a particular beverage, primarily of the reason of overall taste & also refreshing ability.

Researcher Chiaa HsienChu

In 2000, he composed a study on discovering elements of advertising communication qualities, which review of purchasing conduct of buying. The investigation was performed at various stages. In the first place, at stage I, specialist applied the ancestor procedure and the outcome approach, to discover significant contrasts between various kinds of purchasing. I.e. Reminder impulse buying & pure impulse buying. Purchasing items/benefits on inspiration, purchasing objectives and choice assessment delineated that drive purchasing varies from unadulterated motivation purchasing.

Second, at stage II, with intrigue of characteristics of client and the item related, deals advancement technique influences update motivation purchasing.

Researcher Gluckmann

In 1986, published a research. He found factors, that influence consumption of beverages and fondness for a beverage. Self-governing factor were recognized to be fame, brand name, price or cost associated with beverage and quality of beverage. Packaging material & overall look and feel (appearance) was also important factors to look upon.

Given current condition, factors mentioned by the researchers holds importance for this research. In the current market, Packaging of both aerated beverages & non-aerated beverages are different largely. Aerated or carbonated beverages are packed inside glass bottles (considering small quantity and fragile) and also in PET (Polyethylene

terephthalate). In non-aerated category we have Juices of all category, milk shakes & dairy based/ milk-based beverages are stuffed in tetra packs in various sizes and vibrant or lively in color. Hence, overall look and feel and brand packaging becomes a crucial factor in deciding of a particular drink. In light of these discoveries we consolidated the following, that are brand, look and feel & packaging as a factor in our investigation.

CHAPTER 3: RESEARCH METHODOLOGY

Study	Descriptive
Sampling	Random Sampling
Sample Size	126
Tools Used for Analysis	SPSS (Statistical Package for Social Sciences) & Ms-Excel 2016

Table 3.1

3.1. Data Sources

To design structured questionnaire of the factors affecting consumer purchase decision in beverage industry, the factors are taken from extensive study of consumer preference literature viz. journals of marketing. Primary data was composed from a sample of 126 respondents.

3.2. Research Design

It regularly incorporates how information was gathered, what tools are utilised, how the instruments are utilised.

Descriptive research accurately describe a population or a situation. It is used to give answer to questions like what, when, where, when and how, but is incapable in answering the question why. We have used descriptive research.

The descriptive research can be done by two ways:

- Survey Method: - It is a method through which individual units are studied. A questionnaire is made which is floated to the respondents.
- Observation Method: - The behavior of the respondent is observed by the researcher.

We used survey method in this project.

3.3. Sampling

Sampling is a process which is used to determine the number of responses to be collected for a research (based on the sampling method & Study).

Sampling method

We have used Random Sampling in this research. It is a technique wherein each sample has an equivalent chance or likelihood of being picked. The total population can be represented in an unbiased manner by selecting a sample using random sampling.

3.4. Sample Size Determination

Calculation of Sample size for proportions

- Level of precision = $D = \pm 0.05$
- ConfidenceLevel = 95%
- Z alpha value related with confidence level = 1.96
- $\Pi = 0.91$ (Calculation of Π shown in Annexure 1)

$$\begin{aligned}\text{Sample Size} &= \left[\frac{\pi * (1-\pi) * Z^2}{D^2} \right] \\ &= [(0.91) (0.09) (3.8416)] / 0.0025 \\ &= 125.8 \sim 126\end{aligned}$$

Hence, Sample Size calculated is 126.

3.5. Data Collection

Quantitative approach was followed. The primary data for this research has been gathered using a structured questionnaire (Refer to Annexure 3). This questionnaire covered various questions to extract consumer insights on different factors that make consumer choose one beverage over other. An online google form for the questionnaire was circulated to collect responses.

The questionnaire covered questions to list out various factors which lead a consumer choose a beverage product. 24 Likert scale questions covering various attributes of a beverage were asked from the respondent. Apart from these other Likert questions were asked out of which some were used for dependent variable while applying regression and other questions helped in getting some insights about the consumer's buying behavior. Some questions related to awareness about the products, their advertisement channels etc. were also asked.

CHAPTER 4: DATA ANALYSIS, FINDINGS & RESULT

We have used Pie Charts and Graphs from excel for interpretation of data. We have also used SPSS in order to apply factor analysis and regression on the data to get more insights on the main factors which affect the decision of the consumer when he buys a beverage and to find the importance of each factor on the decision of the consumer.

4.1. Pie Charts & Graphs

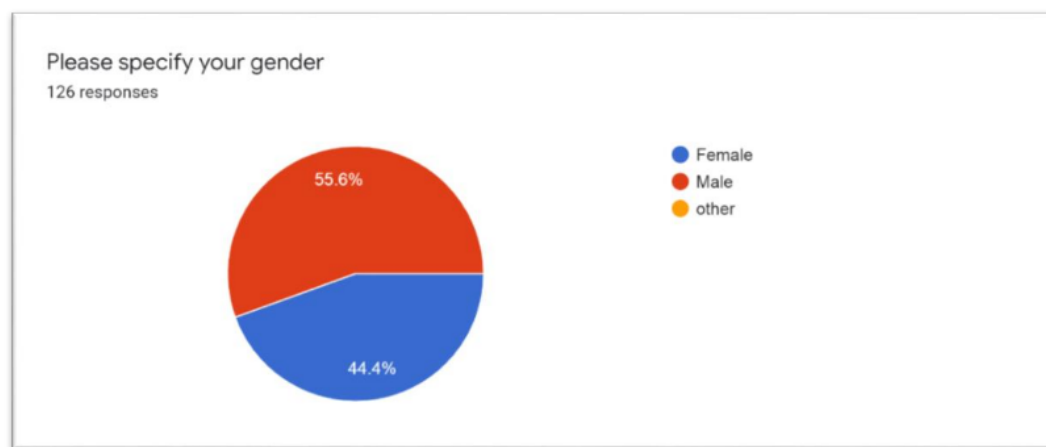


Figure 4.1

70 (55.6%) were males and 56 (44.4%) were females.

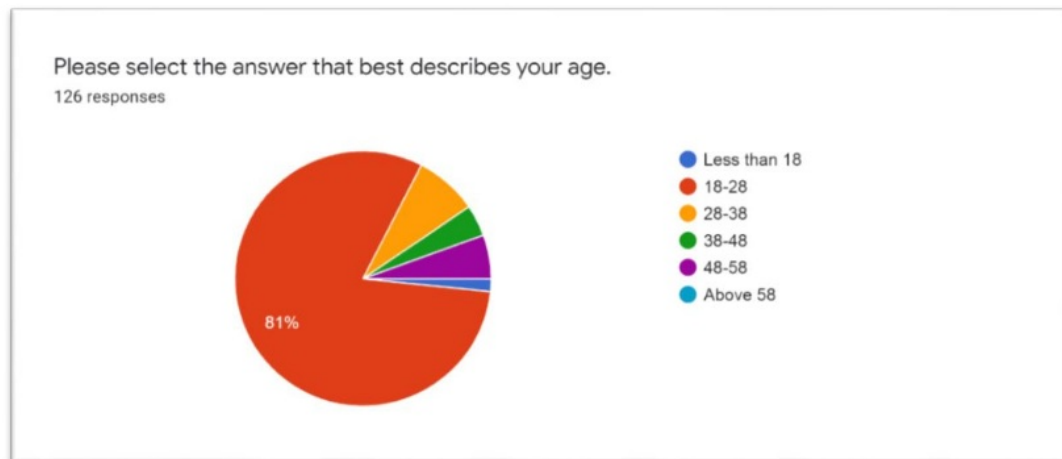


Figure 4.2

The age group distribution is as follows: 2 (1.6%) belong to age group less than 18, 102 (81%) belonged to the age group 18-28, 10 (7.9%) belong to age group 28-38, 7 (5.6%) were from the range 48-58.

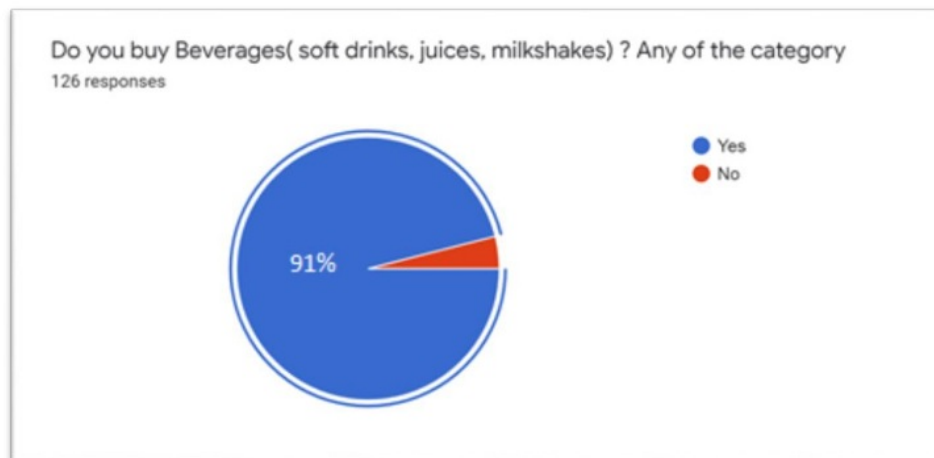


Figure 4.3

114 (91%) buy beverages, and 12 (9%) do not buy beverages.

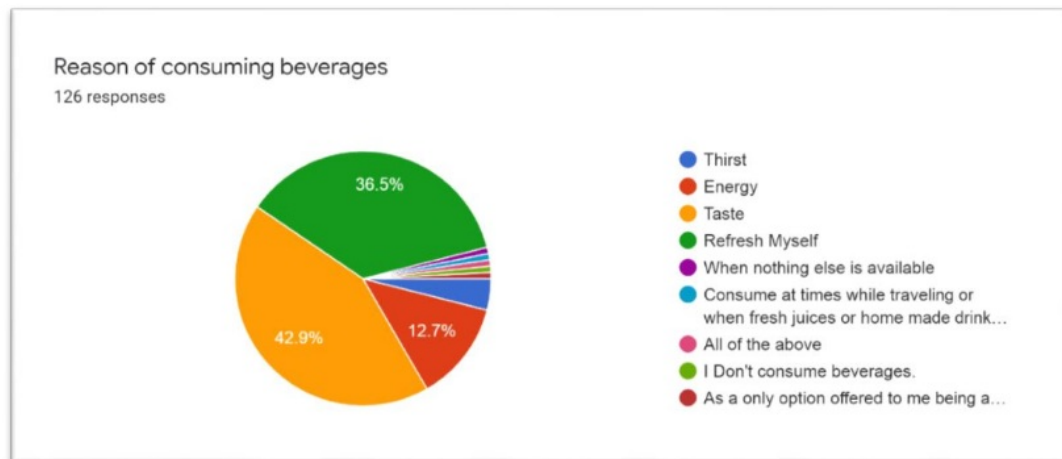


Figure 4.4

The main reasons of consuming beverages came out to be Taste as said by 54 (42.9%) and to Refresh with 46 (36.5%). Other than this 16 (12.7%) claimed the reason of consuming beverage as to gain energy. Other reasons like thirst 5 (4%) and when nothing else is available 5 (3.9%) also came into picture.

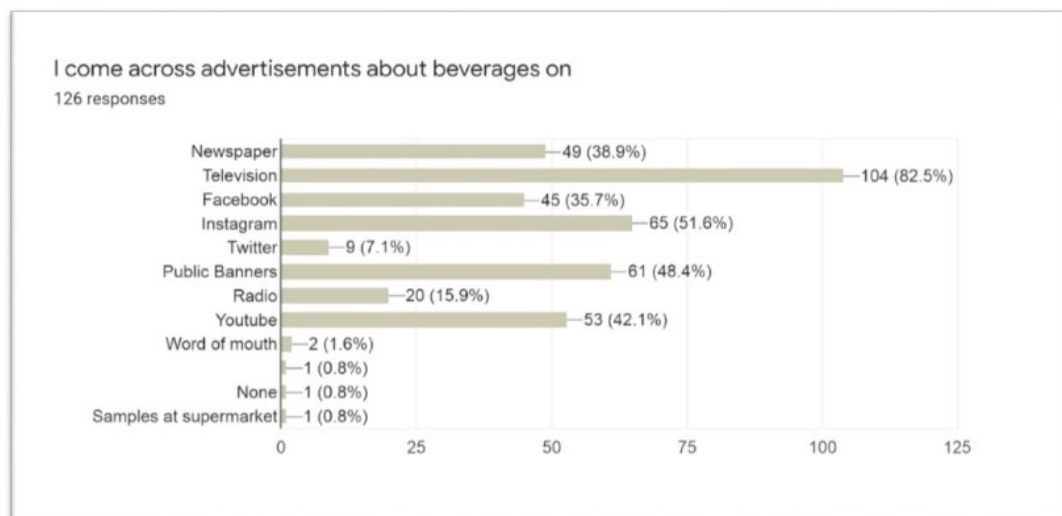


Figure 4.5

104 (82.5%) come across advertisements about beverages on Television. Social media platforms namely Instagram (51.6% i.e. 65) and Facebook (35.7% i.e. 45) are platforms where a lot of people come across beverage ads. While twitter is lagging behind with just 9 (7.1%). YouTube is great in delivering ads with 53 (42.1%) people coming across ads through it. While newspaper and public banners account for 38.9% and 48.4% respectively.

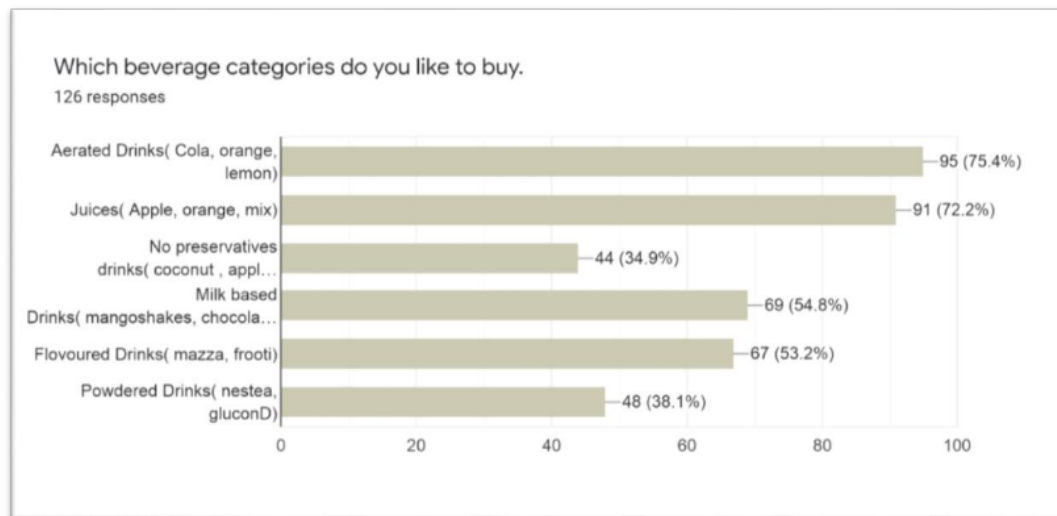


Figure 4.6

95 (75.4%) and 91 (72.2%) people of like to buy aerated drinks and juices respectively. While 69 (54.8%) and 67 (53.2%) people like to buy milk-based drinks and flavored drinks respectively. Only 48 (38.1%) of the sample like to buy powdered drinks and 44 (34.9%) like to buy no preservatives drink.

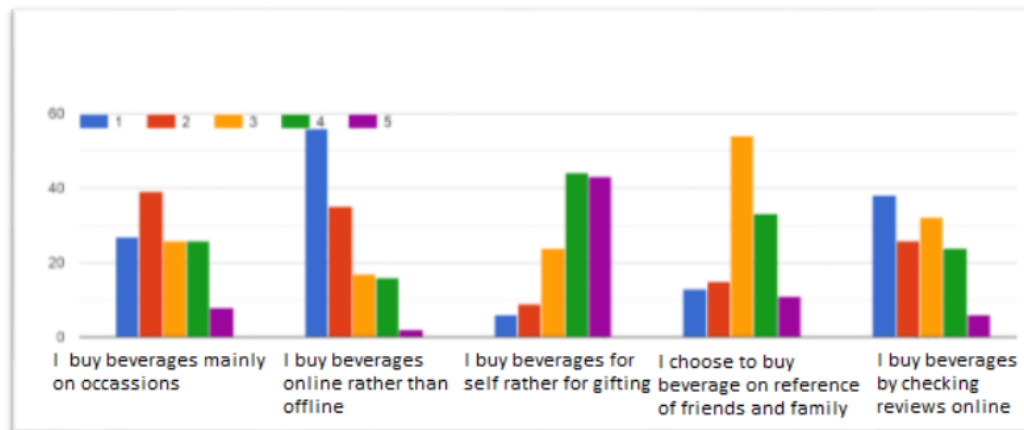


Figure 4.7

The above graph shows that people generally buy beverages on a day to day basis without any special occasion and also buy beverage offline rather than buying it online. They generally buy beverages for self-consumption rather than for gifting purposes. There is no special research i.e. consumers do not generally check review online before deciding which beverage to buy.

4.2. Factor Analysis

It is a data reduction technique in which large number of attributes are reduced into some factors. This reduction is done by identifying some root (underlying) factors by making a group of various attributes on the basis of the correlation between them. Eg. Here Shape, Colour, Packaging Material and Aroma of the beverage can be identified as a part of a single factor or dimension namely Look & Feel.

Steps for factor analysis

- Make a list of all the attributes which the consumers might consider while he is buying a product. Here the product is beverage so we have considered various attributes like taste, shape, aroma, size, price, calorie count etc.
- Collect responses using quantitative data collection techniques like surveys

Feed the collected data in a statistical program, here we have used SPSS to apply factor analysis and come up with fewer factors from a large number of attributes enlisted earlier.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.740
Bartlett's Test of Sphericity	Approx. Chi-Square	991.870
	Df	276
	Sig.	.000

Table 4.1

Kaiser Meyer Olkin (K.M.O.) Test measures how reasonable the collected data is for Factor-Analysis. It shows appropriateness of factor analysis. Here estimation of K.M.O. is .740 which is more than 0.5 demonstrating that the information is suitable for Factor Analysis.

For ¹² Bartlett's test for Sphericity the null hypothesis is that the correlation matrix is identity matrix. This test compares correlation matrix of data to the identity matrix. Here Chi-square value is 991.870 at degree of freedom 276. It is significant at .05, therefore rejecting the null hypothesis. As there is Correlation between all the attributes taken, it is necessary to apply factor analysis.

Communalities

	Initial	Extra ction
Ingredients	1.000	.676
Packaging material	1.000	.685
Shape	1.000	.721
Colour	1.000	.769
Brand name	1.000	.689
Size of bottle	1.000	.682
Customized beverage	1.000	.420
Pulp based	1.000	.469
Aroma	1.000	.628
Locally hand made	1.000	.576
Milk over water based	1.000	.708
Masala flavored over sweet	1.000	.639
High refreshing ability	1.000	.506
Sugar free	1.000	.580

Energy drinks	1.000	.708
Calorie count	1.000	.722
Health over taste	1.000	.661
No preservatives	1.000	.454
Compare prices	1.000	.759
Price versus quantity	1.000	.698
Price and switching	1.000	.640
Quality standards	1.000	.667
Temperature	1.000	.668
Cold over hot	1.000	.588

Extraction. Method: PrincipalComponent Analysis.

Table 4.2

Communality measures correlation of one variable with other variables. The higher the value of communality, the well it is. If the value of communality for a variable is low i.e between 0.0 - 0.4, then it will be tough for that variable to load on a factor significantly. Here communality of all the variables is greater than 0.4.

Total Variance Explained

Component	Initial Eigenvalues			3 Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.889	24.538	24.538	5.889	24.538	24.538	3.100	12.916	12.916
2	3.308	13.781	38.319	3.308	13.781	38.319	2.933	12.221	25.137
3	1.747	7.278	45.597	1.747	7.278	45.597	2.726	11.356	36.493
4	1.694	7.058	52.655	1.694	7.058	52.655	2.701	11.253	47.746
5	1.496	6.235	58.890	1.496	6.235	58.890	2.214	9.226	56.972
6	1.182	4.925	63.816	1.182	4.925	63.816	1.642	6.844	63.816
7	.986	4.106	67.922						
8	.853	3.554	71.476						
9	.797	3.322	74.798						

10	.738	3.077	77.875						
11	.644	2.683	80.558						
12	.627	2.612	83.170						
13	.587	2.447	85.617						
14	.484	2.016	87.633						
15	.480	2.001	89.634						
16	.401	1.672	91.306						
17	.377	1.571	92.877						
18	.326	1.357	94.234						
19	.313	1.306	95.541						
20	.285	1.189	96.730						
21	.239	.995	97.725						
22	.211	.877	98.603						

23	.200	.833	99.436						
24	.135	.564	100.000						

Extraction. Method: PrincipalComponent Analysis.

Table 4.3.

Eigenvalues can be stated as the measure of how much of the variance of the observed variables a factor explains. We have selected eigen value method in order to count the total number of factors. Here 6 components have eigen value greater than 1, so there are mainly six factors that affect the purchase decision of a consumer while he choose to buy a beverage.

The column of Cumulative variance percentage, as the name suggests shows the total percentage of variance which accounts the sum of present as well as all preceding factors. Here, The value in the sixth row is 63.816 which states that 63.816% of total variance is accounted together by the first six factors.

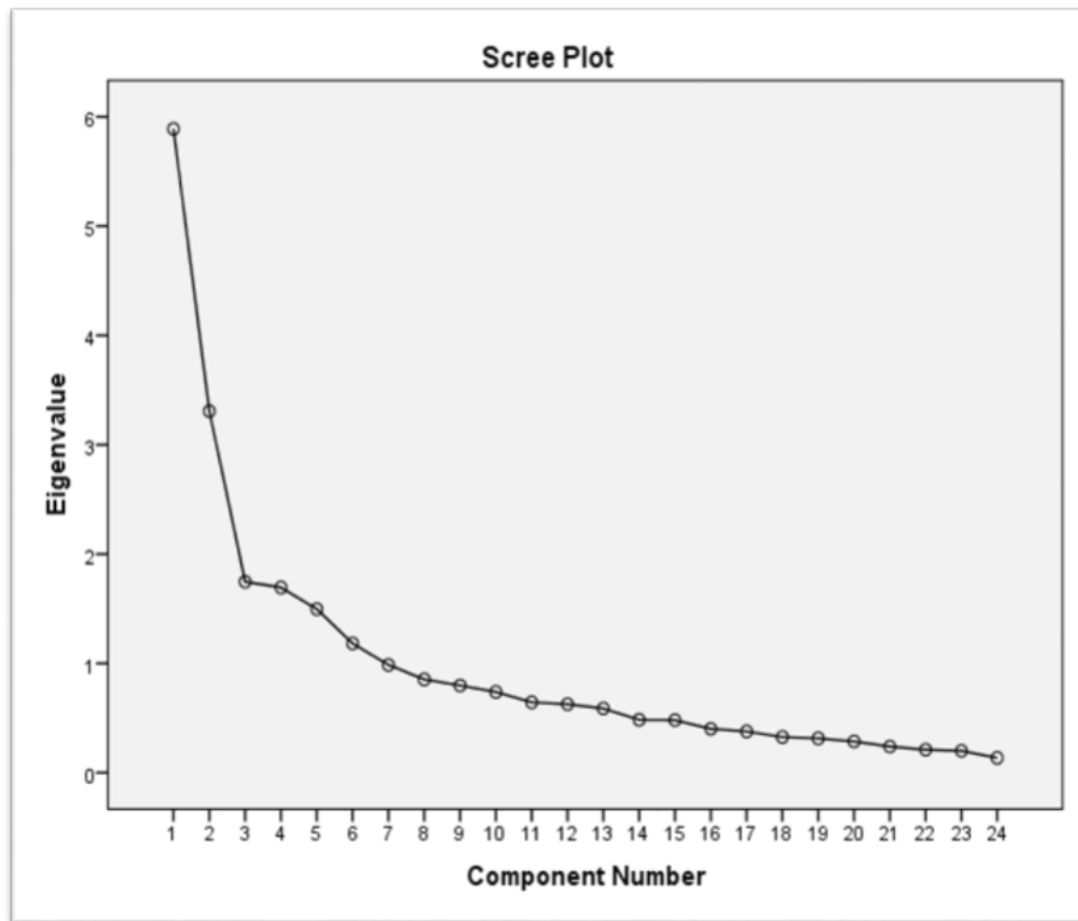


Figure 4.8

Scree plot is a line graph of the principal component's or variable's eigenvalues. The scree plot helps in determining the exact number of factors to be kept for further analysis. Here the scree plot determine the number of factors to be six for further analysis.

Rotated Component Matrix^a

	Component					
	1	2	3	4	5	6
Ingredients	.529	.145	-.030	.410	.423	-.165
Packaging material	.136	.076	.365	.708	.162	.000
Shape	.188	.219	-.014	.780	.051	.160
Color	-.024	.051	.024	.867	.020	.115
Brand name	.058	.412	.310	.234	.601	.060
Size of bottle	.057	-.035	.382	.594	.150	.396
Customized beverage	.307	.370	.028	.266	.075	.335
Pulp based	.375	.107	.123	-.021	.335	.435
Aroma	-.013	-.069	.483	.294	.159	.527
Locally hand made	-.078	.148	.112	.055	.564	.463
Milk over water based	.198	-.007	-.053	.122	.129	.796
Masala flavored over sweet	.069	.047	-.138	.047	.093	.776
High refreshing ability	.120	.345	.577	.091	.143	.104
Sugar free	.657	.039	-.129	.092	.237	.257
Energy drinks	.772	.055	.215	-.185	-.158	.066
Calorie count	.819	-.149	-.082	.150	-.022	-.005
Health over taste	.681	.010	-.124	.186	.333	-.190
No preservatives	.467	.021	.180	.181	.390	.132
Compare prices	.079	.857	.102	-.030	.053	-.062
Price versus quantity	-.097	.752	.294	.115	.102	-.114
Price and switching	-.059	.757	-.064	.182	.013	.160
Quality standards	.159	.124	.517	.012	.599	-.015
Temperature	-.046	-.127	.752	.147	-.231	-.100
Cold over hot	-.179	.321	.646	-.129	.119	-.071

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.^a

Table 4.4

By analyzing the table 4.4, the factors are named and interpreted. The attributes with factor loading greater than 0.4 are considered and other are rejected. Here, the factor loading of the attribute customization is less than 0.4 in every column, so it is not significantly loaded and hence rejected. The more elaborated factor loading is shown in Annexure 2.

The identified six factors can be named as follows:

- Health Consciousness
- Price
- Temperature
- Look and feel
- Brand & Quality
- Taste

Health Consciousness

The rising concerns of health complications and obesity have increased the consumer's health consciousness over the past few years. This factor tries to throw a light on the focus of consumers on calorie count, ingredients, sugar content, preservatives and energy delivered by a beverage. It also tries cover a situation of a trade-off between health and taste for consumers while buying a beverage.

Price

This factor includes the price value of money for a beverage by the consumer. It covers the comparison of prices done by consumers while buying beverages. It also talks about the Price versus Quantity considered by consumer and the switching of consumers while the price increases.

Temperature

While a consumer buys a beverage, temperature of the beverage has an impact on the decision of the consumer when he chooses from a variety of beverages which have

different temperatures. The factor measures the preference of hot and cold beverages, and the refreshing ability associated with them.

Look & Feel

This factor includes all the attributes of a beverage that a human see and feel. It starts from the packaging material of the beverage to the shape of the bottle, color and aroma of the beverage. Packaging of both aerated beverages & non-aerated beverages are different largely. Aerated or carbonated beverages are packed inside glass bottles (considering small quantity and fragile) and also in PET (Polyethylene terephthalate). In non-aerated category we have juices of all category, milk shakes, lassi, buttermilk and all the other milk based beverages have packaging of tetra packs which comes in different sizes and colors. Hence, overall look and feel and brand packaging becomes a crucial factor in deciding of a particular beverage. The aroma and color impact the beverage choices. Hence, overall look and feel becomes a deciding factor in selection of beverage.

Brand & Quality

This factor includes all the quality standards and specification when looking for a beverage. Consumer have scored a high value in this factor as they are quality conscious. This factor also throws a light on people's preference while choosing from an option of buying branded beverages and locally handmade beverages.

Taste

The sixth factor is taste. Fig shows that 42.9% of sample chose taste as the reason of consuming a beverage. Taste is a major factor which drives the consumer's purchase decision. Every consumer has a different preference of flavors, some like masala flavored beverages, some like sweet beverages, the taste preference also varies on the main constituents of the beverage, like milk based and water-based beverages. Some like pulpy beverages, while some like filtered juices with no pulp. This factor aims on measuring these.

4.3. Regression Analysis

Main objective of applying regression analysis is to find impact of every independent variable on dependent variable. Here we have taken factors Price, Health Consciousness, Quality, Taste, Temperature, Look & Feel which are identified above using factor analysis as the independent variables. The consumer's purchase decision is considered as a dependent variable.

A regression equation is formed by using the result obtained after applying regression in SPSS. This equation describes and measures the influence of each identified independent variables i.e. predictors on dependent var.

Equation of Regression line can be explained as:

$$y = \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \dots \beta_n x_n + k$$

Where,

y = Dependent variable

x_1, x_2, x_3, x_n = Independent variables

k = Intercept (constant)

$\beta_1, \beta_2, \beta_3, \beta_4$ = Coefficients

n = Number of variables

Here x_1 = Price, x_2 = Health Consciousness, x_3 = Quality, x_4 = Taste, x_5 = Temperature,

x_6 = Look & Feel

y = consumer purchase decision

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.689 ^a	.568	.546	.5060

a. Predictors: (Constant), Price, HealthCons, Quality, Taste, Temp, LookFeel

Table 4.5

The six predictors namely Price, Health Consciousness, Quality, Taste, Temperature and Look & Feel in the model revealed the ability to predict Purchase decision. Adjusted R^2

value is 0.546 which denotes that 54.60% of the observed variability in purchase decision is explained through independent variables mentioned above. The value of R square (R^2) i.e 56.8% shows that there are some other variables which were not included in the study and could have an influence on purchase decision.

ANOVA^a

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	25.602	6	6.401	38.909	.018 ^a
Residual	48.529	120	.166		
Total	74.131	126			

a. Predictors: (Constant), Price, HealthCons, Quality, Taste, Temp, LookFeel

b. Dependent Variable: ConsPurchase

Table 4.6

In anova table, the regression model is appropriate as it is significant at .05 with F value as 38.909. So, we can use this model for our analysis.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	1.099	.207		5.331	.000
	Price	.144	0.37	.207	3.914	.014
	HealthCons	.218	.041	.274	5.376	.018
	Quality	.117	.028	.152	3.095	.018
	Taste	.187	.034	.231	4.120	.032
	Temp	.104	0.20	.132	2.959	.010
	LookFeel	.202	0.42	.250	4.894	.027

a. Dependent Variable: ConsPurchase

Table 4.7

The regression equation formed is

$$Y = 1.099 + .144 (x_1) + 0.218 (x_2) + .117 (x_3) + .187 (x_4) + .104 (x_5) + .202 (x_6)$$

It can be seen that consumers give most importance to health, followed by Look & Feel, Taste, Price, Quality, and Temperature.

4.4. Result

When consumers buy any product, they take into consideration various attributes of the product. Here the product considered is beverage. We came up with 24 attributes of beverage to find the various factors which affect the consumer's purchase decision in beverage industry. To do so factor analysis was applied to reduce the attribute into some factors by grouping them on the basis of correlation between them. The factors obtained were namely Price, Health Consciousness, Quality, Temperature, Taste, Look & Feel. To further find the impact of each of these independent factors on the consumer purchase decision, which was considered as the dependent variable, Regression analysis was applied, which lead us to the conclusion that consumers give most importance to health, followed by Look & Feel, Taste, Price, Quality, and Temperature while buying a beverage.

MANAGERIAL IMPLICATIONS

- The rising concerns of health complications and obesity have increased the consumer's health consciousness. The companies should focus more on innovating products which are healthy.
- The companies should give most importance to health, followed by Look & Feel, Taste, Price, Quality, and Temperature while creating a beverage product.
- The aroma, color, packaging influences the consumer purchase decision, so the company should focus on improving these.
- The beverage company should advertise their products more on television, facebook and instagram rather than on twitter, radio and other advertisement channels.
- The beverage companies should focus more on the availability of their product on offline stores rather than online stores, because it is found that consumers prefer to buy beverages more from offline stores.
- The beverage companies should focus less on creating gift packs, as consumers generally buy beverages for self rather than for gifting purposes.

LIMITATIONS

- The data on which we have applied our analysis is not large enough.
- The attributes which have been considered can have more innovation and can also be more varied for a beverage product.
- When it comes to real life problems and projects of the companies, the research becomes more vast and complicated than the research done in this study. As we have used online questionnaire (google forms) for the collection of data, biasness and errors can occur in case of complex questions.
- While purchasing a beverage, sometimes the customers gives more importance to the emotional factor, rather than evaluating various beverages on rational terms. It is hard to capture the emotional factor.
- There is less interaction between the researcher and the respondent leading to error.
- There might be some error in data due to the respondent's deficiency of awareness and knowledge about the beverage, poor memory or Incapability to point out what is the main motive behind buying a particular beverage out of so many options available.
- The inability and inefficiency of the researcher to form a question in a manner that every respondent understand the question in the same manner.

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ANNEXURES

Annexure 1

- Taking a sample of 12 people, the data found is:

p (i.e. People buying beverages) = 11

q (i.e. People not buying beverages) = 1

- Calculating π

$$\Pi = (11/12) * 100$$

$$\Pi = 91\%$$

$$\Pi = 0.91$$

$$\text{And, } 1 - \Pi = 0.09$$

- Variance = $n * (\pi) * (1 - \pi)$

$$\text{Here } n=1, \pi = 0.91, 1 - \pi = 0.09$$

$$\text{Variance} = 0.0819$$

Annexure 2

Factor-Labels & components	Rotated Factor Loading
<u>Health-Consciousness</u>	
Ingredients	.529
Sugar Free	.657
Energy Drink	.772
Calorie Count	.819
Health Over Taste	.681
No Preservatives	.467
<u>Price</u>	
Compare Prices	.857
Price versus Quantity	.752
Price and switch	.757
<u>Temperature</u>	
Cold over hot	.646
Temp	.752
Refreshing ability	.577
<u>Look and feel</u>	
Packaging Material	.708
Shape	.780
Colour	.867
Size of bottle	.594
<u>Quality</u>	
Quality Standards	.599
Brand Name	.601
Local Hand Made	.564

<u>Taste</u>	
Pulp	.435
Milk based versus water based	.796
Masala versus sweet	.776

Annexure 3

Questionnaire:

- Name
- Specify your gender
 - Male
 - Female
 - other
- Select the answer that best describes your age
 - Less than 18
 - 18-28
 - 28-38
 - 38-48
 - 48-58
 - Above 58
- Do you buy Beverages(soft drinks, juices, milkshakes)? Any of the category
 - Yes
 - No
- Do you Consume any of the above category?
 - Yes
 - No
- Reason of consuming beverages
 - Thirst
 - Energy
 - Taste
 - Refresh myself
- I come across advertisements about beverages on
 - Newspaper
 - Television
 - Facebook
 - Instagram
 - Twitter
 - Public banners

- Radio
- YouTube
- Which beverage categories do you like to buy?
 - Aerated Drinks (Cola, orange, lemon)
 - Juices (Apple, orange, mix)
 - No preservatives drinks (coconut, apple, etc.)
 - Milk based Drinks (mangoshakes, chocolate shakes)
 - Flavored Drinks (mazza, frooti)
 - Powdered Drinks (nesteaa, gluconD)
- Which of the following you have bought in the last 6 months?
 - Pepsico- Pepsi, Mirinda, Dew
 - Coca-Cola- Coca Cola, Fanta, Sprite, Pulpy Orange, Nimbooz
 - Amul- flavored Milk, Chach, Lassi
 - Mother Dairy- Flavored Milk, Chach, Lassi
 - Dabur- Real Juices, GluconD
 - Nestle- Nestea

21

Read the statements carefully: - Please mark the level of agreement or disagreement with following statements by selecting your choice.

Likert scale questions rating from 1-5.



20

Where, [1]= “StronglyDisagree”, [2]=ModeratelyDisagree, [3]= Neutral, [4]= ModeratelyAgree & [5]= “StronglyAgree”

- While purchasing a beverage I look for ingredients.
- Packaging material of beverage affect my purchase decision
- Shape of the container of beverage affect my purchase decision
- Colour of beverage affect my purchase decision
- Brand name of beverage affect my purchase decision
- Size of the bottle of beverage affect my purchase decision

- While buying a beverage, I get more attracted towards customized beverage
- I prefer pulp-based beverages.
- Aroma of beverage affect my choice of buying a beverage
- I prefer locally handmade beverage (Freshly made juices, milkshakes and lemonade over packed beverage
- I prefer milk beverages over water-based beverages
- I prefer masala flavored beverages over sweet ones
- I prefer beverages with higher refreshing ability
- I buy beverages by measuring the quality standards
- I always look for sugar free beverages
- I prefer energy drinks
- I always look at the calorie count while purchasing a beverage
- I will buy a healthier beverage even if it is less tasty
- I prefer beverages with no preservatives
- Temperature of the beverage affect my decision of choosing a beverage
- I generally prefer cold beverages over hot beverages
- I compare prices of different beverages while buying
- I consider the price versus quantity of the beverage while buying
- If the price of a beverage increases, I think of switching to some other beverage
- I buy beverages mainly on occasions
- I buy beverages online rather than offline
- I generally buy beverages for self rather than for gifting purpose
- I choose to buy a beverage on reference given by friends and family (Word of mouth)
- I buy beverage by checking reviews online
- I select which beverage to buy from many other alternatives available
- I consider various attributes before buying a beverage

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