

Consumer attitude towards packaged drinking water

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Abstract

The people realized the need for clean drinking water convenient for travel and safe for health. The competition in the packaged drinking water market has gone up with new brands coming up and stiff competition among the existing brands. The demand for packaged drinking water is always on an increase due to its consumption on all types of occasions. The main objectives of the present study are to study the level of awareness among the consumer towards packaged drinking water and to identify the factors influencing the consumer to purchase the packaged drinking water. This study concluded that Consumers determine the growth, prospects and even the existence of a business. Hence manufactures should feel the pulse of consumers. They should plan their production and distribution activities as per the needs and convenience of the consumers.

Keywords: drinking water, manufactures, consumers, whole sellers

Introduction

Water is the nature's free gift to the human being. Next to air, the other important requirement for human life to exist is water. It is available in various forms such as rivers, lakes, streams etc. Seventy percent (70%) of the earth is covered with water. But nearly all is unavailable for human consumption without being processed. The oceans make up for 97%, the polar ice shields hold another 2% and only about 1% is the soft water from underground sources but even from that tiny amount an increasing part is unsafe for human consumption. At the same time, along with the increase in population the need for pure and safe water is increasing. To meet the drinking water requirements of people, many business concerns have started purifying and mineralizing the water and distributing the same. In 1967 itself, 'Bisleri' water was introduced in India. It is an Italian based company in India. It is the first bottled water company in India. At that time 'Bisleri' was a very famous and familiar brand in India. The consumers of packaged drinking water are attracted by the benefits of easy availability, purity and hygiene and only a small segment of consumer have evolved to the level of being loyalists of good brands. But the fact remains that even to this day about 70% of the packaged drinking water consumption in the country is by traveller. The packaged drinking water is now served on trains, airlines and in parties. Besides the companies have introduced bigger pack sizes to cater to variety of needs. The packaged drinking water is available in 200ml, 500 ml, 1 litre and 2 litre bottles and in 20 litre cans. The bottle packaged drinking water market in the country is poised for a quantum leap, not with standing the stricter quality standards to be imposed by the Bureau of Indian standards of manufacturing units. The packaged drinking water market has been growing at the rate of 70% per annum. Now many packaged drinking water brands are available in the country including that of multinational companies like Coca cola, Pepsi, Bisleri and kinley.

Consumer Awareness

Consumer awareness may be defined as a clearly understanding about the need and priority of causes for purchasing and conditions and warranties of purchase. The consumer must be aware regarding his rights and the available legal measures against exploitation. In order to create consumer awareness and safeguarded their interests, the government of India has enacted MRTP act 1968, Essential commodities Act 1955, sale of goods Act 1955 and protection of consumer Act, 1986^[1]. Creation of consumer awareness is a big task in our vast country. Due to some impediments such as illiteracy, lengthy legal procedures etc, the degree of consumer awareness is very low in India. The success of any product is determined primarily by the worth of that product in relation to the competing products. Branding provides the consumer with some guarantee of uniform quality and services as a guide at the time of shopping. Customers can easily identify the branded products and protect themselves from getting inferior quality products. So making choice is easier. Hence in this chapter an attempt has been made to analyze the level of awareness of consumers about packaged drinking water.

Statement of the problem

The Indian packaged drinking water market is very wide and active, though the market share of the packaged drinking water markets varies from location to location. Packaged water has become an essential consumer product in the recent era. The impurities in the natural water caused by pollution leads to variety of health problems. Also, there is a marked increase in the demand of pure drinking water during tours and travels undertaken by the people. The people realized the need for clean drinking water convenient for travel and safe for health. The competition in the packaged drinking water market has gone up with new brands coming up and stiff competition among the existing brands. The demand for

¹Ibid, P.27.

packaged drinking water is always on an increase due to its consumption on all types of occasions. In Gobichettipalayam Taluk of Tamil Nadu, India, where agriculture is the main occupation and the soft water is available throughout the year due to lower Bhavani project in the area, the use of packaged drinking water by people on various occasions such as festivals, marriage etc., has become a common practice. Hence the study has been undertaken to know the answer for the following questions in the area of study:

- What is the level of awareness among the consumers about packaged drinking water?
- What are the factors influencing the consumer to purchase packaged drinking water?

Objectives of the study

The present study has been conducted with the following objectives.

- To study the level of awareness among the consumer towards packaged drinking water.
- To identify the factors influencing the consumer to purchase the packaged drinking water.

Methodology

The present study intends to examine the issues framed in the objectives and hypothesis in the context of packaged drinking water. This study is an empirical research based on survey method. The primary data needed have been collected through the survey method by direct personal interview with 150 sample respondents using a well constructed and pre tested interview schedule.

Sampling Design

In Erode district, Gobichettipalayam taluk have three blocks namely, Gobichettipalayam, Nambiyur and Thookanaickanpalayam. Among the three blocks, Gobichettipalayam block has been purposively selected. In Gobichettipalayam block, Gobichettipalayam town has been purposively selected as the area of study. As the packaged drinking water is being marketed through various sources in Gobichettipalayam. 150 sample respondents have been selected by applying purposive sampling method viz., 50 regular users from Bakeries, 40 regular users from Hotel, 30 regular users from Palamuthirsolai, 20 regular users from departmental stores and 10 regular users from Grocery shop.

Pilot Study and Pre Testing

A pilot study was conducted with a sample of 10 respondents during the month of February, 2017. In the pilot study, the interview schedule was pre-tested and then refined for use on the final study. This helped in improving upon the interview schedule and also gave an indication as to the kind of response that would be fourth coming. With a few deletions and additions a final interview schedule was prepared.

Analysis of data

The data collected were processed in computer. Tables were prepared and analyzed with the statistical tools such as Percentages, Chi-square test, ANOVA, Z- test and Ranking techniques.

Quantification and Measurement of Awareness

A comprehensive interview schedule has been designed to collect the data from 150 sample respondents. A list of 12

statements has been prepared for the purpose. A two point likert scale has been used to measure the level of awareness of users of packaged drinking water. A score of two has been assigned to the respondents who were aware of various brands and one has been assigned to respondents who were not aware of the brands. The maximum score to be assigned by a customer for all the twelve statements would be 24 and minimum score is 12. The respondents who scored below 18 were classified as having low level of awareness and those who scored equal and above 18 were classified as having high level of awareness regarding the packaged drinking water.

Table 1: Distribution of Sample Respondents According To Their Level of Awareness

Level of awareness	Number of Respondents	Average awareness score
High (score ≥ 18)	105(70)	13.27
Low (score < 18)	45 (30)	12.10
Total	150(100)	12.45

Figures in parentheses are percentages.

The table 1 shows that out of 150 respondents, 70 per cent of the sample respondents are having high level of awareness regarding packaged drinking water with the average awareness score of 13.27, where as only 30 percent of the sample respondents are having low level of awareness regarding packaged drinking water.

Relationship Between socio-Economic Characteristics and The irlevel of Awareness

The relationship between the Socio-Economic characteristics and their level of awareness of consumers has been examined. The personal and economic variables, which might influence the level of awareness are Age, Gender, Educational qualification, Occupation, Marital status, Type of family, Number of earning members in the family, and Family income of the sample respondents. It is proposed to test the hypothesis that there is no significant relationship between the socio-economic characteristics and the level of awareness of the sample respondents.

Age and The level of awareness

The sample respondents have been grouped into three categories according to their age group viz., a) up to 30 years, b) 31 to 50 years and c) above 50 years.

Table 2: Distribution of Sample Respondents According To Their Age and the Level of Awareness

Age	Level of Awareness		Total
	High	Low	
Up to 30 years	52(67)	25(33)	77(100)
31-50 years	29(76)	9(24)	38(100)
Above 50 years	24(69)	11(31)	35(100)
Total	105(70)	45(30)	150(100)

Figures in parentheses are percentages. χ^2 value = 0.979

The table 2 shows that 76 percent of the sample respondents belonging to the age group of 31-50 years, 69 percent of the sample respondents belonging to the age group of Above 50 years and 67 percent of the sample respondents belonging to the age group of up to 30 years are having high level of awareness regarding packaged drinking water. To test the relationship between the level of awareness of respondents

and their age group, the chi- square test has been applied. The calculated value of chi-square (0.979) is less than the table value of chi-square (5.991) at 5% level of significance. Therefore, the null hypothesis is accepted. Hence, it is concluded that the level of awareness is not associated with the age groups of sample respondents.

Gender and The level of awareness

The sample respondents are classified into two categories viz., a) Male and b) Female.

Table 3: Distribution of sample respondents according to their Gender and The level of awareness

Gender	Level of Awareness		Total
	High	Low	
Male	45(65)	24(35)	69(100)
Female	60(74)	21(26)	81(100)
Total	105(70)	45(30)	150(100)

Figures in parentheses are percentages. χ^2 value = 1.392

The table 3 reveals that 74 percent of the female sample respondents and 65 percent of the male sample respondents are having high level of awareness regarding packaged drinking water. To test the relationship between the level of awareness of respondents and their gender, the chi- square test has been applied. The calculated value of chi-square (1.392) is less than the table value of chi-square (3.84) at 5% level of significance. Hence, the null hypothesis is accepted. It is concluded that the level of awareness is not associated with the gender.

Educational Qualification and The level of awareness

The sample respondents are classified into three categories on the basis of their educational qualification viz, a) Illiterate b) School level and c) College level.

Table 4: Distribution of sample respondents according to their educational Qualification and The level of awareness

Educational qualification	Level of Awareness		Total
	High	Low	
Illiterate	24 (65)	13(35)	37(100)
School level	50(68)	24(32)	74(100)
College level	31(80)	8(20)	39(100)
Total	105(70)	45(30)	150(100)

Figures in parentheses are percentages. χ^2 value = 2.345

The table 4 reveals that 80 percent of the sample respondents belonging to college level education, 68 percent of the sample respondents belonging to school level education and 65 percent of the sample respondents belonging to illiterate group are having high level of awareness regarding packaged drinking water. To test the relationship between the level of awareness of respondents and their educational qualification, the chi- square test has been applied. The calculated value of chi-square (2.345) is less than the table value of chi-square (5.991) at 5% level of significance. Therefore, the null hypothesis is accepted. It is concluded that the level of awareness is not associated with the educational qualification.

Occupation and the Level of Awareness

The occupation of a person decides the ability to buy any product. Hence, the sample respondents are classified into

four categories on the basis of their occupation viz, a) Agriculture b) Business c) Employee and d) Others.

Table 5: Distribution of sample respondents according to their Occupation and The level of awareness

Occupation	Level of awareness		Total
	High	Low	
Agriculture	27(65)	15(35)	42(100)
Business	14(64)	8(36)	22(100)
Employee	44(75)	15(25)	59(100)
Others	20(74)	7(26)	27(100)
Total	105(70)	45(30)	150(100)

Figures in parentheses are percentages. χ^2 value = 1.879

The table 6 reveals that 75 percent of the sample respondents belonging to employee, 74 percent of the sample respondents belonging to others, 65 percent of the sample respondents belonging to Agriculture and 64 percent of the sample respondents belonging to the business group are having high level of awareness regarding packaged drinking water. To test the relationship between the level of awareness of respondents and their occupation, the chi- square test has been applied. The calculated value of chi-square (1.879) is less than the table value of chi-square (7.81) at 5% level of significance. Hence, the null hypothesis is accepted. It is concluded that the level of awareness is not associated with the occupation of sample respondents.

Family Income and the Level of Awareness

Income is the most important factor enables a person to determine and to take decision regarding purchase of packaged drinking water. When the income of the people increases their needs and wants also increases. Hence for the purpose of analysis the sample respondents have been classified into three categories according to the income of their family per month viz., a) Up to Rs.10, 000 b) Rs.10, 000 to Rs.20, 000 and c) Above Rs.20, 000.

Table 6: Distribution of sample respondents according to their family Income and The level of awareness

Family income	Level of Awareness		Total
	High	Low	
Up to Rs.10,000	54(76)	17(24)	71(100)
Rs.10,000-Rs.20,000	28(64)	16(36)	44(100)
Above Rs.20,000	23(66)	12(34)	35(100)
Total	105(70)	45(30)	150(100)

Figures in parentheses are percentages. χ^2 value = 2.395

The table 7 reveals that 76 percent of the sample respondents belonging to up to Rs.10,000,66 per cent of the sample respondents belonging to above Rs.20,000 and 64 percent of the sample respondents belonging to Rs. 10,000 –Rs.20,000 are having high level of awareness regarding packaged drinking water. To test the relationship between the level of awareness of respondents and their family income, the chi-square test has been applied. The calculated value of chi-square (2.395) is less than the table value of chi-square (5.991) at 5% level of significance. Therefore, the null hypothesis is accepted. It is concluded that the level of awareness is not associated with family income.

Factors influencing the purchase of the packaged drinking water

Various factors like Price, Quality, Quantity, Availability, Reliability, Advertisements, Packaging, Taste, Healthcare, Hygiene, Purity and Brand name have been identified as having influence to certain extent on the purchase of packaged drinking water through the pilot study. For the purpose of analysis Garrett ranking technique has been used. As per this method, respondents have been asked to assign the rank for all factors and the outcome of such ranking have been converted in to score value with the help of the following formula:

$$\text{Garrett Formula: Percent Position} = \frac{100 (R_{ij} - 0.5)}{N_j}$$

Where,

R_{ij} = Rank given for the i^{th} factor by the j^{th} respondents.

N_j = Number of factors ranked by the j^{th} respondents.

By referring to the Garrett table the percent position is converted in to scores. Then the scores of each individual are added and the mean value is calculated for each factor. The factors having highest mean value is considered to be the most important influencing factor. The table 3.1 shows the Garrett ranking analysis of factors influencing the consumers of packaged drinking water.

Table 7: Factors influencing the purchase of packaged drinking water by using garrett ranking technique

	Factors	Scale And Score Value of Ranks													Total
		Rank	1	2	3	4	5	6	7	8	9	10	11	12	
		Scale value X	83	72	66	60	56	52	47	43	39	33	27	16	
1	Price	f	6	4	14	11	4	10	18	12	16	19	25	11	150
		fx	498	288	924	660	224	520	846	516	624	627	675	176	
2	Quality	f	40	16	16	23	19	17	5	1	3	-	-	10	150
		fx	3320	1152	1056	1380	1064	884	235	43	117	-	-	160	
3	Quantity	f	9	17	22	16	28	8	15	8	8	14	3	2	150
		fx	747	1224	1452	960	1568	416	705	344	312	462	81	32	
4	Easy Availability	f	11	23	13	19	11	16	16	22	13	3	2	1	150
		fx	913	1656	858	1140	616	832	752	946	507	99	54	16	
5	Reliability	f	7	13	8	7	15	10	8	19	19	20	11	13	150
		fx	581	936	528	420	840	520	376	817	741	660	297	208	
6	Advertisements	f	11	11	13	9	5	18	23	6	26	15	10	3	150
		fx	913	792	858	540	280	936	1081	258	1014	495	270	48	
7	Packaging	f	18	5	5	15	3	18	26	14	16	17	8	5	150
		fx	1494	360	330	900	168	936	1222	602	624	561	216	80	
8	Taste	f	6	9	13	9	26	10	5	25	9	9	15	14	150
		fx	498	648	858	540	1456	520	235	1075	351	297	405	224	
9	Healthcare	f	3	7	10	15	14	20	10	3	13	22	27	6	150
		fx	249	504	660	900	784	1040	470	129	507	726	729	96	
10	Hygienic	F	29	29	25	12	15	9	11	7	-	-	8	5	150
		fx	2407	2088	1650	720	840	468	517	301	-	-	216	80	
11	Purity	f	-	12	7	6	9	12	6	17	20	21	25	15	150
		fx	-	864	462	360	504	624	282	731	780	693	675	240	
12	Brand name	f	9	5	5	5	4	2	12	13	7	7	16	65	150
		fx	747	360	330	300	224	104	564	559	273	231	432	1040	

Note: x = Scale Value, f = No. of. Respondent, fx = Score Value.

Table 8: Factors influencing the purchase of packaged drinking water by using garrett ranking technique

S.no	Factors	Total score	Mean score	Rank
1.	Price	6578	43.85	X
2.	Quality	9411	62.74	I
3.	Quantity	8303	55.35	IV
4.	Easy Availability	8389	55.93	III
5.	Reliability	6924	46.16	VIII
6.	Advertisement	7485	49.90	VI
7.	Packaging	7493	49.95	V
8.	Taste	7107	47.38	VII
9.	Healthcare	6794	45.29	IX
10.	Hygienic	9287	61.91	II
11.	Purity	6215	41.43	XI
12.	Brand name	5164	34.43	XII

The table 8 shows that the quality is the important factor which is considered for selecting packaged drinking water by the sample respondents with the mean score of 62.74,

followed by the easy availability with the mean score of 55.93, the hygienic factor with the mean score of 61.91, the quantity with the mean score of 55.35, the packaging with the mean score of 49.95, the advertisement with the mean score of 49.90, the factor of taste with the mean score of 47.38, the reliability with the mean score of 46.16, the factor of healthcare with the mean score of 45.29, the factor of price with the mean score of 43.85, the factor of purity with the mean score of 41.43 and the factor of brand name with the mean score of 34.43 respectively.

Hence, it is concluded that the majority of the sample respondents have considered the quality of the packaged drinking water as important factor influencing the purchase of packaged drinking water.

Suggestions

1. Now-a-days people are very much health conscious. It is observed that the consumers feel by the use of packaged drinking water they follow the concept of being hygienic

to lead a safe life. To reap the benefits of profit some private companies sell the ordinary tap water which is not hygienic under reputed brands, which is against the direction of the Bureau of Indian standards. Hence the government authorities should take appropriate steps to monitor these companies and strictly implement the rule for the use of standards relating to packaged drinking water.

2. The need for purified water increases day by day. This makes a habit of supplying such water in banks, offices, at functions and other commercial areas for their customers. Because the consumption of purified water increases every day the manufactures must keep in mind about the quality to be maintained in their product.
3. At the time of exhibitions and festival occasions, the companies should sell a free sample pack of drinking water to attract new customers.
4. The company should create awareness among the rural area people about the hygiene and safety of packaged drinking water. Through this, the sales of packaged drinking water can be increased in the rural area.
5. The government should take necessary steps to prevent the sale of unrecognized brands.
6. The container is playing a vital role in the purchase decision of such product. Hence the producers have to concentrate on convenient handy, easy to consume and economical containers to offer to their consumers.
7. Special container for children can be introduced to attract low age group.

Conclusion

Packaged drinking water occupies a special place in the minds of consumers, as they are health conscious. The entry of multinational companies and the direction of Bureau of Indian Standards have made regional players to go away from packaged drinking water market. To survive in this market the manufactures of packaged drinking water should offer quality product at competitive price. Consumers determine the growth, prospects and even the existence of a business. Hence manufactures should feel the pulse of consumers. They should plan their production and distribution activities as per the needs and convenience of the consumers.

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