



## **A STUDY ON CUSTOMERS' SATISFACTION TOWARDS WATER PURIFIER WITH SPECIAL REFERENCE TO COIMBATORE CITY**

**K. Sowmya**

*Student of III B.Com.(PA), Department of Commerce With Professional Accounting,  
Dr.N.G.P Arts and Science College, Coimbatore*

**Dr. R. Mayilsamy**

*Assistant Professor, Department Of Commerce with Professional Accounting,  
Dr. N.G.P Arts and Science College, Coimbatore*

### **ABSTRACT**

*Water is the most common liquid on earth pure drinking water is necessary for human survival. Water purifier is very much connected to the history of water itself. The main objective of the study is to know the satisfaction level of consumers towards water purifier. The absolute best technology now available for treating water and removing undesirable contaminants is water purifier will remove more contaminants and provide safer, healthier drinking water.*

**KEY WORDS-***Water purifier, Simple percentage analysis, Likert scale analysis, Ranking analysis.*

### **INTRODUCTION**

Water purification or filtering is very much connected to the history of water itself. As the population grew, water becomes highly contaminated which led to the emergence of the need for pure, clean drinking water. Although the evolution of best water purifiers took ages but people did realize the importance of it.

Water is the most common liquid on earth pure drinking water is necessary for human survival. The water supply for drinking water is either ground or surface water. The water from its source contains sediments and other solids. Many different processes are used to obtain the finished product of clean water. There is lack of developed infrastructure due to poor economic situations. To accomplish these objective impurities such as sediments must be remove and bacteria must be killed along other microorganisms.

### **STATEMENT OF THE PROBLEM**

Purified drinking water is essential to every citizen. The government cannot provide this to the entire population of a country. In a democratic country, different procedures of different water purifier machines are entering the market with varied

features. The consumer may not aware of the suitable machines depending on their acceptability. It is pertinent to know how for the consumers use the RO machines and to what extent and whether they are contended with the available machines. Now days, the pollution is in every form and ever increasing with adulteration. In these alarming situation, it is imperative to study the impulse of using water purifier machines.

### **SCOPE OF THE STUDY**

The scope of the study is to know the level of satisfaction of consumer with respect to product and services of different company's water purifier. This study is aiming to know the best marketing strategy. It also aims to know the awareness about different brands of water purifiers in the market. Consumer satisfaction is dynamic, therefore it is necessary to study analysis and monitoring effective decisions can be taken in respect of product, price, models, and design of water purifier machines.

### **OBJECTIVES OF THE STUDY**

- To analyze the awareness about water purifier.



- To find out the factors which are affecting consumer perception regarding water purifier?
- To study the satisfaction level of consumers towards water purifier.
- To analyse the problems faced by consumers in using water purifier

**RESEARCH METHODOLOGY**  
**RESEARCH DESIGN**

The research design refers to the overall strategy that you choose to integrate the different components of the study in a coherent and logical way: Research design is a plan that specifies the source and type of information relevant to the research problem.

It is the strategy specifying which approach will be used for gathering and analyzing the data and thereby, it constitutes the blueprint for the collection, measurement and analysis of data.

**DESCRIPTIVE RESEARCH**

Descriptive research is a study designed to depict the participant in an accurate way. It is typically concerned with determining the frequencies with something occur or determining the degree to which variables is associated.

**LIMITATIONS OF THE STUDY**

- Findings are based on sample survey through questionnaire method.
- The sample size has been restricted to 120 samples due to time constraint.

**REVIEW OF LITERATURE**

Dr. V. Maheswari (2019), the study entitled “A STUDY ON CONSUMER PERCEPTION AND SATISFACTION OF WATER PURIFIER IN KUMBAKONAM TOWN”. The study examined purified drinking water is essential to every citizen. To know the level of satisfaction on water purifier and problem faced by the respondents in using the water purifier. She found that majority 69% of the respondent were satisfied overall performance of the brand. She suggested most of the respondents have pinpainted to reduce wastage of

water in the purification process. She concluded that large section of public are spending a lot of installation of purifier or buy purified water for their survival.

Dr.A.Gunasundari et al (2018), the study entitled “A COMPARATIVE STUDY OF FACTORS AFFECTING CONSUMER PREFERENCE BETWEEN LOCAL AND BRANDED WATER PURIFIERS WITH SPECIAL REFERENCE TO THIRUVARUR”.The study examined on the perception of consumer and consumer awareness towards water purifiers. To analyze the impact of brand preference and find out factors affects consumer purchase decision. They found branded purifier needs less service after installation compare to local ones. They suggested customer service should be given an utmost priority. They concluded with rapidly changing technology consumers perception is frequently changing.

Dr.S.Prakash, Deepak Toppo (2018), the study entitled “SOLAR ENERGY BASED WATER PURIFICATION SYSTEM”. The study examined water purifier which works on solar energy. Moreover RO is a good disinfectant process. They concluded that solar energy is used for the purification of water and micro controller is also prevents the water from overflowing.

**STATISTICAL TOOLS USED**

To analyze and interpret collected data the following statistical tools were used.

- Simple Percentage Method
- Likert Scale Method
- Ranking Analysis

**SIMPLE PERCENTAGE ANALYSIS**

The percentage analysis is mainly to find the distribution of different categories of respondents.As the value expressed in percentage it facilities comparison and standardization. This analysis describes the classification of the respondents filling under each category.

$$\text{PERCENTAGE} = \frac{\text{Number of respondents}}{\text{Total number of respondents}} \times 100$$



**TABLE NO: 1**

**TABLE SHOWING GENDER OF THE RESPONDENTS**

S.NO	GENDER	NO.OF RESPONDENTS	PERCENTAGE ( % )
1	Male	59	49
2	Female	61	51
	TOTAL	120	100

(Source: Primary Data)

**INTERPRETATION**

Table 4.1 shows that (49%) respondents are male and (51%) respondents are female.

- ❖ Majority (51%) respondents are female.

**LIKERT SCALE ANALYSIS**

Likert scales are a common ratings format for surveys. Respondents rank quality from depth to

low or best to worst using five or seven levels. Likert items are used to respondent’s attitudes to a particular question or statement. To analyse the data, it is availability coded as follows.

- 5 = Highly Satisfied
- 4 = Satisfied
- 3 = Neutral
- 2 = Dissatisfied
- 1 = Highly Dissatisfied

$$\text{Likert Scale} = \frac{\sum fx}{\text{Total No. Of. Respondents}}$$

**TABLE NO: 2**

**TABLE SHOWING LEVEL OF SATISFACTION OF THE RESPONDENTS TOWARDS PRICE IN USING WATER PURIFIER**

S.NO	PRICE	NO.OF RESPONDENTS	LIKERT SCALE VALUE (X)	TOTAL (FX)
1	Highly Satisfied	48	5	240
2	Satisfied	54	4	216
3	Neutral	12	3	36
4	Dissatisfied	6	2	12
5	Highly Dissatisfied	0	1	0
	TOTAL	120	15	504

Likert Value =  $\sum (FX) / \text{No. of. Respondents}$   
 = 504 / 120  
 = 4.2

**INTERPRETATION**

Likert scale value is 4.2. So, the customers are Highly Satisfied with Price.

**RANK CORRELATION**

The Karl Pearson’s method is based on the assumptions that population being studied is normal or when the shape of the distribution is not

known, there is need for a measure of correlation i.e. need for correlation that involves no assumption above the parameter of population. It does not matter which way the items are ranked, item number one may be the largest or it be smallest using ranks rather than actual observation gives the coefficient rank correlation.



**TABLE NO: 3**  
**TABLE SHOWING THE PROBLEMS FACED BY THE RESPONDENTS IN USING WATER PURIFIER**

S.NO	PROBLEMS	RANK 1	RANK 2	RANK 3	RANK 4	RANK 5	TOTAL SCORE	FINAL RANK
1	Technical problem	28(5)	42(4)	18(3)	16(2)	16(1)	410	II
2	Cost of changing the installation	26(5)	23(4)	20(3)	31(2)	20(1)	364	III
3	Lack of spares availability	36(5)	14(4)	26(3)	21(2)	23(1)	479	I
4	High flow of waste water	14(5)	18(4)	23(3)	35(2)	30(1)	311	V
5	Taste and Odour	16(5)	24(4)	32(3)	17(2)	31(1)	337	IV

### INTERPRETATION

Table 4.17, it is understood that the sample respondents are given first rank in facing the problem of Lack of spares availability, they are given second rank in facing the problem of Technical problem, they are given third rank in facing the problem of Cost of changing the installation, they are given fourth rank in facing the problem of Taste and Odour, they are given fifth rank in facing the problem of High flow of waste water.

In this study the majority of the respondents are given first rank in facing the problem of Lack of spares availability.

### FINDINGS, SUGGESTIONS AND CONCLUSION

#### FINDINGS

##### SIMPLE PERCENTAGE ANALYSIS

- ❖ Majority (51%) respondents are female.
- ❖ Majority (43%) of the respondents are under the age group below 25 years.
- ❖ Majority (52%) respondents are unmarried
- ❖ Majority (48%) respondents are completed UG degree.
- ❖ Majority (52%) respondents are Private Employees.
- ❖ Majority (60%) respondents are having 4 – 5 members in their family.
- ❖ Majority (58%) respondents are Nuclear family.
- ❖ Majority (45%) respondents are earning monthly income of Rs.20001 –Rs.40000.

- ❖ Majority (33%) respondents are using water purifier with the brand of Aquaguard.
- ❖ Majority (34%) respondents are influenced by Businessmen for buying the water purifier.
- ❖ Majority (38%) respondents are using Municipal water.
- ❖ Majority (63%) respondents are feeling as good in the taste of water by using water purifier.
- ❖ Majority (38%) respondents are agreed with purifying technologies.

#### LIKERT SCALE ANALYSIS

- Likert scale value is 2.47. So, the customers are very good with price.
- Likert scale value is 2.29. So, the customers are good with Design.
- Likert scale value is 2.43. So, the customers are Very Good with Availability of Products.
- Likert scale value is 2.35. So, the customers are Very Good with Quality
- Likert scale value is 2.36. So, the customers are Very Good with Brand Name.
- Likert scale value is 2.33. So, the customers are good with Performance.
- Likert scale value is 4.2. So, the customers are Highly Satisfied with Price.
- Likert scale value is 4.22. So, the customers are Satisfied with Quality.
- Likert scale value is 3.62. So, the customers



- are Satisfied with After Sales Service.
- Likert scale value is 3.69. So, the customers are Neutral with BrandImage.
  - Likert scale value is 3.98. So, the customers are Satisfied with Availability.
  - Likert scale value is 3.98. So, the customers are Satisfied with Design.
  - Likert scale value is 3.76. So, the customers are Satisfied with Performance.
  - Likert scale value is 3.57. So, the customers are Highly Satisfied with Offers and Discounts.
  - Likert scale value is 3.56. So, the customers are Satisfied with Advertisements.
  - Likert scale value is 3.75. So, the customers are Satisfied with Warranty and Guarantee.

### RANK ANALYSIS

- ✓ In this study the respondents are given first rank to the factor of Quality.
- ✓ In this study the majority of the respondents are given first rank in facing the problem of Lack of spares availability.

### SUGGESTIONS

- Warranty and guarantee may be increased
- The latest technologies may be implemented in affordable price
- Low budget water purifier may be developed for urban people

### CONCLUSION

Water treatment is often necessary if surface water supplies and sometimes ground water supplies are to be available for human use. Because the vast majority of the cities use one water distribution system for household industries and hospitals etc., large quantities of water often must be made available to satisfy the highest water purifier usage.

The threat of harmful contaminants in drinking water can no longer be reasonably ignored. The correlation between contaminated drinking water and many significant diseases and health problems is far too strong to discount. There are many home treatment alternatives that can purify drinking water to a greater extent than city treatment plants. Reverse osmosis and distillation, two of these alternatives are moderately successful at removing some contaminants but they are expensive and wasteful. The absolute best technology now available for treating water and removing undesirable contaminants is water purifiers when compared to any other water

treatment alternative will remove more contaminants and provide safer, healthier drinking water.

### REFERENCE

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