A study on Consumer Attitude towards Households durables with special reference to water purifier in Coimbatore

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Abstract:

Water is a fundamental human need. Each person on Earth requires at least 20 to 50 liters of clean, safe water a day for drinking, cooking, and simply keeping themselves clean. Cooking with and drinking purified water helps to ensure a family's peace of mind by knowing there is no foreign matter in their water. In this respect, the present study is focused on the above said aspect. The data subjected to analysis and the findings of the study reveals that the maximum of the respondents face the problems of electricity charges while using the water purifier and maximum of the respondents are influenced by quality of the water purifier while selecting the brand. Keywords: Water purifier, consumer attitude, consumer satisfaction.

"Man has been searching for an elixir of life to confer him immortality. But the elixir of life is water. It is the basis of all life. So water is real elixir of life"

Dr.C.V.Raman

Keywords:

Introduction

Water purification is a process of removing undesirable chemicals, materials and biological contaminants from raw water. The goal is to produce water fit for a specific purpose. Most water is purified for human consumption (Drinking water) but water purification may also be designed for a variety of other purposes, including meeting the requirements of medical, pharmacology, chemical and industrial applications. In general the methods used include physical process, such as filtration and sedimentation, biological process such as slows and filter or activated sludge, chemical processes such as flocculation and chlorination and the use of electromagnetic radiation such as ultra violet light.

The purification process of water may reduce the concentration of particulars matter including suspended particles, parasites, bacteria, algae viruses, fungi, and a range of dissolved and particulate material derived from the surfaces that water may have made contact with after falling as rain.

Clean drinking water – Just Pennies a Glass.

Statement of the Problem

Marketing of products involve a systematic evaluation and analysis of market, to know the existing market conditions and other related conditions, which are relevant to the products. This is more applied both for durable and non-durable consumer goods. Taking the production case of durable goods marketing involves studying different factors that influence the buyers in view of the fact that they will be selective in their preference due to cost and utility factors. In the sense, where it involves heavy investments and the product in meant for long-term use. In this content whether purifier being a durable commodity is being purchased by the consumers not only for long-term use but also with specific purpose of protecting health from water problems. This being the case, the consumers will have different criteria for selection and purchase of water purifier for their use. These are important factors, which could be considered by consumers such as price, quality, design, capacity level, etc. out of these factors, some may be highly influential depending upon the purpose and preference of consumers. These may be other related factors that might influence the consumers to go for particular brand of water purifier. Hence, a study of this kind will be of more use and may be relevant in the present consumer's environment.

Objectives:

- To Study the customers awareness about house hold products
- To study the customer satisfaction towards buying and using the water purifier.
- To study the problems faced by the customers in using water purifier.
- To offer suggestions on the basis of results of the study

Methodology

The study in intended to analyze the Marketing of household's durables goods -A study on Consumer Attitude towards House hold durables special reference to water purifier. The methodology includes area of the study, sources of data, sample size and statistical tools used and other related aspects.

Areas of the Study

The area of the study refers to Coimbatore city.

Sources of Data

The study uses only Primary data. For the purpose of data a detailed questionnaire has been prepared and collected from the consumers. Adequate case has been exercised to collect unbiased data from the respondents.

Sample Design

For purpose of this study 250 questionnaires were collected from the customers. Simple random sampling method is administered in this study.

Tools for Analysis

- 1. Chi Square Analysis
- 2. Average score Analysis
- 3. Average Rank Analysis

Limitation of the Study

- 1. The study has been restricted to Coimbatore town.
- 2. The study has been conducted with only 250 Respondents.

REVIEW OF LITERATURE

Nilima Das made a study on the topic "A Study on Factors Affecting Consumer Purchase Decision of Water Purifier", This study is conducted in an urban area named Bhubaneswar, capital city of Odisha and revealed that consumer behavior in India is always unexpected and dynamic. The study concludes that behavior of consumers is affected by various factor's like price of product, technology, health and safety, brand name, marketing activities as well as their own characteristics.

Vinay K.B made a study on the title "Design of a Water storage and Purification system for Rural India". He revealed that at present purifiers help to deliver pure water which is 100 percent free from impurities, but in rural areas lack of knowledge, affordability and usability issues have impacted the effective usage of purifiers. The study made an attempt to resolve the issues of purifier through product design so that an efficient and affordable purifier is developed for use by the rural people.

Veerendra Kumar in his article entitled "Solar Water Purifier for Indian Villages" identified that the solar distillation proves to be both economical and eco-friendly technique particularly in rural areas. Many active distillation systems have been developed to overcome the problem of lower distillate output in passive solar stills. The study concludes that solar still is a useful device that can be used for the distilling of brackish water for the drinking purposes.

(i) CHI – SQUARE ANALYSIS

The Chi – Square analysis is used to test the independence of two attributes. In applying the Chi-Square test, the factors in the study are classified in two groups.

The first group consists of personal factors namely.

- Sex of the respondents
- Marital Status of the respondents
- Age group of the respondents
- Educational level of the respondents
- Occupational status of the respondents
- Family monthly income of the respondents
- Family size of the respondents

The second groups consists of study factors namely

- Awareness of water purifier
- Reasons for recommendation
- Types of problem

Personal factors and sources of awareness about water purifier

HYPOTHESIS:

The personal factors of the respondents have no significant influence on the source of awareness about water purifier.

The table 1 describes the personal factor, chi-square values, table values and their significance on the source of awareness about water purifier.

Table: 1 Chi – Square Values – Personal Factors and Source of Awareness

Personal Factors	Chi – Square Value	Table Value	Significant / Non Significant
1. Gender	47.1	7.815	Significant
2. Marital Status	7.67	7.815	Non Significant
3. Age Group	21.64	16.919	Significant
4. Educational Level	23.3	16.91	Significant
5. Occupational Status	35.0	21.0	Significant

6. Size of the family	13.1	16.9	Non Significant
7. Family Income	5.41	16.9	Non Significant

Note: Significant = Chi square ≥ table value

It is found from the table 26 that the hypothesis is rejected (significant) in 4 cases, and in other cases hypothesis is accepted.

It is concluded that Gender, Age Group, Educational Level, Occupational Status of respondents have significant influence on the sources of awareness about water purifier.

Personal factors and better brand about water purifier

HYPOTHESIS:

The personal factors of the respondents have no significant influence on the Opinion about better brand of the water purifier.

The table 2 describes the Personal Factor, Chi-square Values, Table Values and their influence on the Brand of the Water Purifier.

Table: 2 Chi – Square Values – Personal Factors and Brand of Water Purifier.

Personal Factors	Chi – S <mark>quare</mark> Value	Table Value	Significant / Non Significant
1. Gender	4.56	9.48	Non Significant
2. Martial Status	7.52	9.4	Non Significant
3. Age Group	18	21.0	Non Significant
4. Educational Level	40.79	21.0	Non Significant
5. Occupational Status	52.302	26.2	Non Significant
6. Size of the family	17.7	21.0	Non Significant
7. Family Income	19.9	21.0	Non Significant

Note: Significant = Chi square ≥ table value

It is found from the table 28, that the hypothesis is rejected (significant) in 2 cases, and in other cases hypothesis accepted.

It is concluded that educational level and occupational status of the respondents have significant influence on the brand of water purifier.

Personal factors and Problems faced by using water purifier.

HYPOTHESIS:

The personal factors of the respondents have no influence on the problem which is faced by using water purifier.

The table 3 describes the Personal Factor, Chi-square Values, Table Values and their influence on the problem which is faced by using water purifier.

Table: 3 Chi – Square Values – Personal Factors and Problem of water purifier.

Personal Factors	Chi – Square Value	Table Value	Significant / Non Significant
1. Gender	4.59	9.4	Non Significant
2. Martial Status	2.23	9.4	Non Significant
3. Age Group	1.61	21.0	Non Significant
4. Educational Level	4.91	21.0	Non Significant
5. Occupational Status	5.55	26.2	Non Significant
6. Size of the family	3.36	21.0	Non Significant
7. Family Income	4.18	21.0	Non Significant

Note: Significant = Chi square ≥ table value

It is found from the table 30, that all hypothesis accepted (Non Significant).

It is concluded that no personal factor have significant influence on the problem.

AVERAGE RANK ANALYSIS

Average rank analysis is performed to identify the priority of the respondents on the various issues. In this section the results of the average rank analysis are presented in order to identify the priority of the respondents on the various issues relating to water purifier. Based on the consolidated opinion of the respondents the average rank is calculated and the final rank is affixed using the criteria "lesser the average rank is the more priority".

The various issues considered are

- I. The items usually prefer to buy
- II. The reasons for buying

The results are presented with the suitable tables and relevant interpretation.

I. The items usually prefer to purchase water purifier

The following are the items preferred by the respondents to purchase water purifier.

- ✓ Price
- ✓ Quality
- ✓ Colour
- ✓ Appearance
- ✓ Power saving

Each of the personal factors are compared with the items usually prefer to purchase waterpurifier and average rank and final rank are calculated and presented in different table.

Gender and Items usually preferred to purchase water purifier

Table 4 describes gender wise average rank and final rank of the respondents on the various items usually preferred to purchase water purifier.

TABLE - 4: GENDER AND THE ITEMS USUALLY PREFER TO PURCHASE WATERPURIFIER

	-	Male		Female		
S.No.	Opinion factors	Average	Final	Average	Final	
		Score	Rank	Score	Rank	
a.	Price	2.45	1	2.62	2	
b.	Quality	2.60	2	2.70	3	
c.	Colour	4.10	5	4.13	5	
d.	Appearance	3.34	4	3.08	4	
e.	Power saving	2.70	3	2.39	1	

It is clear from the above table – shows that those male respondents have give 1st for price, 2nd ranked for quality and so on. The female respondents have 1st for power saving 2nd ranked for price and so on, as the factors influenced to buy the water purifier.

It is concluded that the male respondents have given top priority to price and female respondents prefer power saving is the influencing factor to buy the water purifier.

TABLE -5: MARITAL STATUS AND THE ITEMS USUALLY PREFER TO PURCHASE WATER **PURIFIER**

		Married		Unmarried		
S.No.	Opinion factors		Final		Final	
		Average Score	Rank	Average Score	Rank	
a.	Price	2.55	1	2.62	2	
b.	Quality	2.62	3	2.63	3	
c.	Colour	4.10	3	3.52	5	
d.	Appearance	3.27	4	3.20	4	
e.	Power saving	2.61	2	2.50	1	

It is clear from the above table that married respondents have give 1st for price, 2nd rank power saving and so on. The unmarried respondents have given 1st for power saving, 2nd ranked for price as the factors influenced to buy the water purifier.

It is concluded that the married respondents have given top priority to price and unmarried respondents prefer power saving is the influencing factor to buy the water purifier.

TABLE - 6: FAMILY SIZE THE ITEMS USUALLY PREFER TO PURCHASE WATERPURIFIER

Opinion		Up to 2		3		4		Above 4	
S.No.	factors	Average	Final	Average	Final	Average	Final	Average	Final
	ractors	Score	Rank	Score	Rank	Score	Rank	Score	Rank
a.	Price	2.27	2	2.62	2	2.41	1	2.73	1
b.	Quality	2.22	1	2.72	3	2.51	3	2.84	2
c.	Colour	3.92	5	4.01	5	4.39	5	3.57	5
d.	Appearance	3.02	4	3.11	4	3.36	4	2.84	2
	Power								
e.	saving	2.35	3	2.44	1	2.43	2	2.86	4

It is clear from the above table that the family size 4 and above members has given 1st rank for price and 2nd rank for quality and power saving and so on. The 3 members family has given for 1st rank for power saving and 2nd rank for price and so on. The family sizes up to 2 members have given 1st rank for quality and 2nd rank for price and so on.

It is concluded that the respondents 4 and above members in their family prefer price and other category of respondents prefer quality or power saving as the influencing factor for the purchase of water purifier.

TABLE - 7: OCCUPATIONAL STATUS AND THE ITEMS USUALLY PREFER TO PURCHASE WATERPURIFIER

Opinion		Agricul	lture	Busin	ess	ess Employed		Professional		others	
S.No.	factors	Average Score	Final Rank	Average Score	Final Rank	Average Score	Final Rank	Average Score	Final Rank	Average Score	Final Rank
a.	Price	2.93	3	2.53		2.57	2	2.56	2	2.80	2
b.	Quality	1.93	1	2.53	4 1	2.73	3	2.58	3	2.80	2
c.	Colour	3.18	5	4.14	5	4.47	5	3.94	5	3.94	5
d.	Apperance	2.94	4	3.25	4	3.29	4	1.87	1	3.27	4
e.	Power saving	2.68	2	2.57	3	2.52	1	2.66	4	2.65	1

It is found from the above table that those agriculture respondents have give for the 1st rank for quality, 2nd ranked for power saving, 3rd ranked for rank for price and so on. The business respondents have given for 1st rank for quality, price and 3rd rank for power saving and 2nd ranked for price and so on. And the rest of the respondents have given 1st rank for appearance 2nd rank for price and so on.

It is concluded that the respondents having agriculture and business prefer quality and other category of respondents prefer power saving as the influencing factor for the purchase of water purifier.

AVERAGE SCORE ANALYSIS

TABLE - 8: GENDER AND LEVEL OF SATISFACTION

Study	a	b	c	d	e	f	g
Factor							
Sex							

Male	2.68	3.13	3.03	3.28	3.36	3.27	3.21
Female	2.89	3.05	2.88	3.18	3.30	3.14	3.12

It is found from the above table that the Male respondents are given high opinion for all the study factors such as opinion about after sales service, opinion about warrantee period etc.

It is concluded from the table that the male respondents have high level of opinion regarding the factors of this study.

TABLE - 9: FAMILY SIZE AND LEVEL OF SATISFACTION

Study Factor Family Size	a	b	CR	d	e	f	g
Up to 2	2.93	2.8	2.6	2.85	2.7	2.78	2.8
3	2.88	2.97	2.8	3.05	3.12	3.06	3.05
4	2.35	3.05	3.09	3.37	3.59	3.32	3.27
Above 4	3.13	3.15	2.68	3.02	3.13	3.0	2.94

It is understood from the above table the family size three and four having respondents are having high level of satisfaction about After Sales service Guarantee/Warrantee period and availability of spares. Above four members family respondents have given high level satisfaction towards price, quality and after sales service.

It is concluded from the above table that the respondents whose family size four have given high opinion for the majority of the factors namely opinion about after sales service, Guarantee/Warrantee period. Availability of spares, power consumption of the water purifier.

h d Study g Factor Educational level No formal 2.93 2.84 2.60 2.90 2.72 2.81 2.85 Education School 2.92 2.80 2.60 2.85 2.70 2.78 2.81 Level 2.45 3.31 2.95 College 2.60 3.10 3.34 3.55 Level 2.91 **Professional** 3.01 2.82 3.10 3.17 3.11 3.11 Level

TABLE - 10: EDUCATIONAL LEVEL AND LEVEL OF SATISFACTION

It is found from the above table majority of college level respondents have given high opinion about After sales service, Availability of spares, Guarantee/Warrantee period. The professional level respondents have high opinion about After sales service Guarantee/Warrantee period and other group having moderate opinion about study factors.

It is concluded from the above table that the respondents have college level are having high opinion for the majority of the factors namely opinion about after sales service, about Guarantee/Warrantee period, availability of spaces of the water purifier.

CONCLUSION:

In today's world of rapidly changing technology consumer's preference are frequently changing. The various competitors in this market are adopting new marketing strategies to retain their market share. The reason why families choose to use water purifiers is that they can effectively eliminate bacteria and other nasty pollutants that taint water. For many people, the biggest obstacle to getting in the recommended dose of water day in and day out boils down to an issue of taste. Not all tap water was created equal, and in some communities, the poor taste and overall bad quality of water can be an impediment to proper hydration. With water purifiers, can feel confident that water is of the highest quality and features the same great taste expect from bottled water, but in a much more environmentally-conscious way. Purified water provides cleaner water for household needs. Cooking with and drinking purified water helps ensure a family's peace of mind by knowing there is no foreign matter in their water.

REFERENCE:

1. Nilma Das, A Study on Factors Affecting Consumer Purchase Decision of Water Purifier, Indian Journal of Marketing, 3(2013).

- 2. Vinay K.B., Design of a Water Storage and Purification System for Rural India, Indian Journal of Marketing, 12, 73-82 (2013)
- 3. Veerendra Kumar, Solar Water Purifier For Indian Villages, International Journal of Engineering Research and Technology, 2, 1758-1763 (2013).

