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RESULTS & DISCUSSION

FINDINGS

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AN EXPLORATORY STUDY ON FACTORS INFLUENCING BRAND PREFERENCE OF CONSUMERS TOWARDS REFRIGERATOR IN BALASORE TOWN, ODISHA

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ABSTRACT

The present study examines the key determining factors that influence the buying behavior of consumers towards the refrigerator product. This study has been conducted in Balasore town, Odisha. A structured questionnaire was administered to collect information related to buying behavior of consumers of refrigerator of the said locality. Finally, 450 respondents were included from cross section of population using the said product. The data thus collected were analyzed by appropriate statistical tools. The result shows that the factors influencing buying behavior of consumers have considerable impact on the brand preference with regard to refrigerator. Keeping in view the outcome of the study, few important suggestions were offered for the mutual benefit of the marketers and consumers.

KEYWORDS

brand, consumer buying behavior, demographic variables, refrigerator.

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INTRODUCTION

onsumer behavior is a decision making process of a person when he/she is engaged in evaluating, acquiring, using or disposing goods/services. The decision making is primarily dependent on two important aspects i.e. the consumers expected amounts of satisfaction and the resources available to him/her for spending at any point of time. In other words, consumer behavior can be defined as the sum total of how individuals and groups recognize and determine their needs and "how can or how often" they purchase and use goods and services to meet those needs". Consumer behavior is the study of when, why, how, and where people do or do not buy product. It mingles elements from psychology, sociology, social anthropology and economics. It also tries to understand the buyer decision making process, both individually and in groups. Apart from this, it studies characteristics of individual consumers such as demographic and psychographic behavioral variables in an attempt to understand people's needs. The study of consumer behavior also assumes more relevance because it assesses influential factors affecting the consumers from groups such as family, friends, reference groups, and society in general.

STATEMENT OF THE PROBLEM

Basically, the consumer behavior is the study on how individuals make decisions to spend their available resources in consumption related items. Now-a-days, consumer behavior research focuses on not only goods and services that consumers buy but also evaluate those goods after its use. Sometimes, the buyer may decide not to buy the same model again and may try to buy other brands. Thus, changing consumer behavior becomes a major challenge to the manufacturers and it affects their production and marketing decision. Hence, manufacturers and marketers should study the consumer behavior on a regular basis, so that they can make necessary changes to the products as per the requirements of the consumers. Keeping in view the above issues, Balasore town is selected by the researchers as the study area. Balasore town is one of the important towns of northern part of Odisha in which there is a greater scope for marketing of household consumer durables. Thus, an attempt has been made by the researchers to study the factors influencing buying behavior of consumers with reference to brand preference of refrigerators in the said locality.

REVIEW OF LITERATURE

The literature review is an integral part of the research work. Review of past studies reveal the works done by individual researchers and institutions and facilitates to create the base for further research. Various studies related to consumer behavior, particularly in urban markets have been carried out by different scholars on different aspects at national and international level. It is observed from the review of literature that the adoption of latest marketing strategies in marketing of consumer durables is of recent phenomenon. In this connection, research work conducted by the distinguished scholars in this area include George and Terry (1982), Ford, et al. (1998), Mahavi and Felix (2000), Losarwar (2002), Verma and Kappor (2003), Harish (2007), Nabi, et al. (2010), Lalitha and Kumar (2011), Nandamuri and Gowthami (2012) and others. These studies mainly focused on the buying behavioral aspects of consumers towards consumer durable products. Similarly, the well-known scholars namely Ranganathan and Shanthi (1995), Barrry (1992), Selvaraj and Mahendra (2003), Sridhar (2007), Kapoor and Kulshreshta (2009), Bashar, et al. (2011), Thakur and Hunda (2012) and others carried out the study on buying behavior of consumers towards selected consumer durable products and offer important suggestions for effective marketing of such consumer durables. These studies exposed the fact that factors influencing the consumer behavior have positive impact on the choice and use of durable products. Keeping in view the above presented issues, the present research paper made an attempt to study the factors affecting the buying behavior of consumers towards brand preference on refrigerator in Balasore town, Odisha.

OBJECTIVES OF THE STUDY

The following objectives are framed for the present research work:

- 1. To study the demographic profile of the consumer respondents in Balasore town.
- 2. To identify the factors affecting the buying behavior of consumer respondents with regard to brand preference on refrigerator in the said locality.
- 3. To offer suggestions based on the findings of the study for the benefit of consumers and marketers.

SCOPE OF THE STUDY

The present study takes into account the factors influencing consumer behavior on durable product i.e. refrigerator. The study is mainly concerned with urban consumers residing at Balasore town. Hence, the scope of the study is limited to Balasore town and one consumer durable product.

HYPOTHESIS FOR THE STUDY

Keeping in mind the objectives set for the study, the following hypothesis is framed to test in due course of analysis.

- 1. Ho There is no significant association between the respondents' age group and the preference of refrigerator brand.
- 2. Ho There is no significant association between the respondents' educational qualification and the preference of refrigerator brand.
- 3. H₀There is no significant association between the respondents' income and the preference of refrigerator brand.

RESEARCH DESIGN

The research design adopted for the present research work is narrated below:

The research study has used a structured questionnaire for the purpose of collecting primary data from the consumer respondents. The secondary data were collected from books, journals, periodicals etc. For collection of primary data, purposive random sampling method was followed. The reliability of the data set was tested by using Cronbach's Alpha whose test value was found to be 0.736 and considered highly reliable. The researchers have collected responses from 450 consumer respondents. Finally, the collected data were analyzed and interpreted by using the statistical tools such as Percentage, Scaling Technique (Measurement of attributes), Chi-square test etc.

ANALYSIS AND INTERPRETATION OF DATA

The demographic variables namely, gender, age, education, occupation, and annual income are taken into account to study the status of the respondent consumers participated in the survey.

1. DESCRIPTIVE ANALYSIS

The demographic variables namely, gender, age, education, occupation, and annual income are taken into account to study the status of the consumer respondents participated in the survey.

TABLE 1: DEMOGRAPHIC VARIABLES OF CONSUMER RESPONDENTS (N=450)

Variables	No. of consumers	Percentage
Gender		
Male	270	60.00
Female	180	40.00
Age (in years)		
20 to 30	181	40.22
31 to 45	140	31.11
46 to 60	104	23.11
Above 60	25	5.56
Qualification		
Literate	10	2.22
10 th pass	24	5.33
12 th pass	23	5.12
Graduate	136	30.22
Post-graduate	224	49.78
Others	33	7.33
Occupation		
Agriculture	20	4.44
Government service	158	35.11
Private service	95	21.11
Business	112	24.89
Others	65	14.45
Annual income (Rs. in lac)		
2 or less	128	28.45
2 to 4	148	32.89
4 to 6	110	24.44
6 to 8	49	10.89
Above 8	15	3.33

Source: Data collected and compiled from survey

Table 1 shows the distribution of sample respondents by their demographic variables. From the above table, it is evident that the total number of respondents is 450 and maximum respondents are male constituting 60%. The share of female respondents is 40%. It implies that the sample is unequally distributed gender wise with dominance of male respondents. It is further revealed that the maximum respondents i.e. 181 are in the age group of 20-30 years constituting 40.22%. It is followed by age group of 31-45 years with 31.11%. It is observed that among 450 respondents, 224 i.e. 49.78% belong to the category of post-graduates. At the same time 30.22% respondents are Graduates. It can be said that majority of the sample respondents are from post-graduate or graduate category. From the above table, it is further observed that 35.11% consumer respondents are from government service followed by 24.89% in business category. From this, it can be noted that government service holders are the maximum participants in the total sample. The table also reveals that there are 148 i.e. 32.89% consumer respondents in the annual income group between Rs. 200001 and Rs. 400000. Respondents earning below Rs. 200000 income are 128 in number i.e. 28.45%. It can be stated that majority of the consumer respondents are in the annual income group of Rs. 200001-Rs. 400000.

2. INFERENTIAL ANALYSIS

The consumer behavior towards purchase of refrigerator has been discussed below taking into account selected key variables influencing the buying behavior of consumer respondents.

Choice of Brands

TABLE 2: DISTRIBUTION OF CONSUMERS BASED ON REFRIGERATOR BRAND

Brand name	No. of consumers	Percentage
Panasonic	41	9.11
Samsung	106	23.56
LG	65	14.44
Kelvinator	7	1.56
Godrej	125	27.78
Videocon	15	3.33
Whirlpool	60	13.33
Electrolux	7	1.56
Voltas	14	3.11
Lloyds	3	0.67
Heir	3	0.67
Others	4	0.88
Total	450	100

Source: Data collected and compiled from survey

The table-2 presents the distribution of respondents by their refrigerator brands. The table reveals that refrigerator with brand name Godrej has maximum number of consumers constituting 27.78% followed by Samsung and LG brands with 106 (23.56 %) and 65 (14.44 %) consumer respondents respectively. Lloyds and Heir brands have equal number of consumers i.e. 3 (0.67%). Panasonic has 41 numbers of consumers constituting 9.11%. The percentage of refrigerator with brand name Kelvinator and Electrolux is 1.56 each. Videocon and Whirlpool brands have 15 consumers or 3.33% and 60 consumers or 13.33% respectively. From the above analysis it is observed that, Godrej and Samsung are found to be the most preferred brands by the consumer respondents

ii. Use of model

TABLE 3: DISTRIBUTION OF CONSUMERS BASED ON TYPE OF USAGE OF REFRIGERATOR BRAND

Type/model	No. of consumers	Percentage
Double Door	170	37.78
Single Door	250	55.56
Triple Door	15	3.33
Special Type	7	1.56
Others	8	1.77
Total	450	100

Source: Data collected and compiled from survey

The above table-3 presents the distribution of refrigerator models the customers are using. Maximum number of customers use single door refrigerator (55.56%). 170 consumers are using double door which accounts for 37.78%. Whereas 15 numbers of consumers are using triple door refrigerator. It is evident from the table that single door refrigerator is the most preferred one among the consumer respondents.

iii. Period of use

TABLE 4: DISTRIBUTION OF CONSUMERS BASED ON PERIOD OF USING REFRIGERATOR BRAND

Period of use	No. of consumers	Percentage
More than 5 Years	260	57.78
3-5 Years	100	22.22
1-3 years	4263	14.00
Up to One Year	27	6.00
Total	450	100

Source: Data collected and compiled from survey

The table-4 depicts the period of use of refrigerators by consumer respondents. A close look into the table reveals that 260 customers i.e. 57.78% which is highest among all categories say that they use refrigerators for more than 5 years. The second highest percentage is 22.22 i.e. 100 customers use refrigerators for a period ranging 3-5 years. Similarly, 14% consumer respondents use the refrigerator for a period of 1-3 years. However, 6.00% consumers are using the refrigerator for a period of less than one year. Thus, it can be inferred from the above table that majority of the consumer respondents use the refrigerator for long period i.e. more than 5 years.

iv. Change of Brand

TABLE 5: DISTRIBUTION OF CONSUMERS BASED ON CHANGE OF BRAND OF REFRIGERATOR

l	Change of brand	No. of consumers	Percentage
I	Yes	350	77.78
	No	100	22.22
	Total	450	100

Source: Data collected and compiled from survey

The above table-5 shows the distribution of respondents on change of brands of refrigerator. It is marked from the table that 77.78% of consumer respondents change their brands and 22.22% consumer respondents do not change their brands of refrigerator. It can be inferred here that majority of the consumer respondents go on changing the refrigerator may be due to getting new brands with more features.

v. Medium of Purchase

TABLE 6: DISTRIBUTION OF CONSUMERS BASED ON MEDIUM OF PURCHASE OF REFRIGERATOR BRAND

Medium of purchase	No of consumers	Percentage
Cash	350	77.78
Installment	45	10.00
Credit	55	112.22
Total	450	100

Source: Data collected and compiled from survey

The table-6 presents the purchase pattern of refrigerator. Maximum consumers purchase refrigerators on cash basis i.e. 77.78%. There is low percent i.e. 10% consumer respondents purchase it on installment basis. While 12.22% consumer respondents prefer to purchase on credit basis. It can be concluded that majority of the consumer respondents prefer to purchase the refrigerator by paying cash.

vi. Sources of Information

TABLE 7: DISTRIBUTION OF CONSUMERS BASED ON SOURCE OF INFORMATION ON REFRIGERATOR BRAND

Source	No. of consumers	Percentage
Television advertisement	230	51.11
Ad in the newspaper	40	8.89
Radio Advertisement	35	7.28
Magazine	32	7.11
Neighbors	53	11.78
Friends	45	10.00
Colleagues	7	1.55
Others	8	1.78
Total	450	100

Source: Data collected and compiled from survey

The table-7 presents the distribution of source of information for selection of brands of refrigerator. Maximum consumer respondents get information through television advertisement on refrigerator brands (51.11%). It is distantly followed by neighbors whose contribution is 11.78%. The least sought after source of information collection on refrigerator by the respondents is from their colleagues (1.55%). Thus, it can be concluded that majority of the consumer respondents get the information on refrigerator brands through television advertisement.

vii. Final Decision Maker for Selecting Brand

TABLE 8: DISTRIBUTION OF CONSUMERS BASED ON FINAL DECISION MAKER FOR SELECTION OF BRAND

Decision maker	No. of consumers	Percentage
Friends	60	13.33
Relative	35	7.78
Senior family members	165	36.67
Self	175	38.89
Others	15	3.33
Total	450	100

Source: Data collected and compiled from survey

It is seen from the table-8 that most of the consumer respondents take self-decision for selecting and purchasing refrigerator brand i.e.38.89%. The second highest is 36.67% where customer respondents prefer senior family members to take final decision on the purchase of refrigerator. From the above analysis, it is very much clear that majority of the consumer respondents take the final decision to purchase the refrigerator product either themselves or take the advice of senior family members.

viii. Preferred Place of Purchase

TABLE 9: DISTRIBUTION OF CONSUMERS BASED ON PREFERRED PLACE TO PURCHASE REFRIGERATOR BRAND

Purchase place	No. of consumers	Percentage
Known retailer	155	34.45
Multi Brand retailer	70	15.56
Company show room	150	33.33
Nearby retailer	60	13.33
other place	15	3.33
Total	450	100

Source: Data collected and compiled from survey

From the table-9, it is clear that a sizeable number of consumer respondents numbering to 155 i.e. 34.45% prefer to purchase refrigerator from known retailers. It is closely followed by company show room with 33.33% consumer respondents. The least preferred place of purchase for refrigerator by the consumer respondents is from other places. Thus, it can be inferred that majority of the consumer respondents prefer to purchase the refrigerator product either from known retailer or from company's own show room.

ix. Level of Satisfaction of Consumer Respondents

TABLE 10: SATISFACTION LEVEL OF CONSUMER RESPONDENTS TOWARDS REFRIGERATOR BRAND

Response	Frequency	Percentage
Highly satisfied	40	8.89
Satisfied	230	51.11
Neutral	150	33.33
Dissatisfied	20	4.44
Highly dissatisfied	10	2.23
Total	450	100

Source: Data collected and compiled from survey

The table-10 shows maximum i.e. 51.11% consumer respondents are satisfied with their refrigerator performance. Further, 33.33% respondents remain neutral on the issue of product performance. However, 6.67% consumer respondents feel either dissatisfied or highly dissatisfied on the performance of the refrigerator. **TESTING OF HYPOTHESES**

 $1. \hspace{0.5cm} \hbox{$H_0$ There is no significant association between the respondents age group and the preference of refrigerator brand.} \\$

TABLE 11: CHI-SQUARE TEST: AGE Vs. REFRIGERATOR BRAND

Sl. No	Particular	Chi-square (calculated value)	D. F	Chi-square tabulated value(5% level of significance)	Inference
1	Age and Refrigerator	0.216	33	47.39	Accepted

The table-11 brings out the association between the age of respondents and preference for refrigerator brands. From the table, it is observed that the Pearson chi-square value is 0.216 which is less than 47.39. Now, it is felt necessary to test "is there any significant association between the respondents' age and preference for refrigerator brands"? Since the calculated value is less than the critical value at 5% level of significance, the null hypothesis may be accepted. It means that there is no significant association between the respondents' age and preference of refrigerator brand.

2. Ho There is no significant association between the respondent's educational qualification and the preference of refrigerator brand.

TABLE 12: CHI-SQUARE TEST: EDUCATION Vs. REFRIGERATOR BRAND

Sl. No	Particular	Chi-square (calculated value)	D. F	Chi-square tabulated value (5% level of significance)	Inference
1	Education and Refrigerator	0.19	55	73.31	Accepted

The table-12 visualizes association between the educational qualification of respondents and preference for refrigerator brands. From the table, it is observed that the Pearson chi-square value is 0.19 which is less than the tabulated value of 73.31. Through this, we want to test "is there any significant association between the respondents' educational qualification and preference for refrigerator brands"? Since the calculated value is less than the critical value at 5% level of significance, the null hypothesis may be accepted. It means that there is no significant association between the respondents' educational qualification and preference of refrigerator brand.

3. H_0 There is no significant association between the respondent's income and the preference of refrigerator brand

TABLE 13: CHI-SQUARE TEST: ANNUAL INCOME Vs. REFRIGERATOR BRAND

Sl. No	Particular	Chi-squarecalculated value	D. F	Chi-square tabulated value(5% level of significance)	Inference	
1	Annual Income and Refrigerator	0.94	44	60.48	Accepted	

The table-13 shows the chi-square test value with reference to the association between the income of respondents and preference for refrigerator brands. From the table, it is observed that the Pearson chi-square value is 0.94 which is less than the tabulated value of 60.48. Through this, we want to test "is there any significant association between the respondent's income and preference for refrigerator brands"? Since the calculated value is less than the critical value at 5% level of significance, the null hypothesis may be accepted. It means that there is no significant association between the respondents' income and preference of refrigerator brands.

FINDINGS OF THE STUDY

The major findings of the descriptive and inferential analysis of the study are presented below:

DESCRIPTIVE ANALYSIS

The demographic profile of the consumer respondents reveals that out of the total respondents 60% are male and the remaining 40% are female respondents participated in the survey. There are 181 respondents (40.22%) whose age group is in between 20 and 30 years. Similarly, the maximum respondents' educational qualification is post- graduate i.e.224 (49.78%). It is observed that government service holders constituting 35.11% are the maximum respondents in the total sample. Further, more than 60% respondents belong to the income category of Rs. 200000 – Rs. 400000 or below Rs. 2, 00,000.

INFERENTIAL ANALYSIS

With regards to purchase behavior of consumer respondents towards refrigerator 27.78% respondents choose Godrej brand followed by Samsung brand with 23.56%. Maximum consumer respondents use single door model of refrigerator whose number is 250 (56.56%). The consumer respondents numbering 260 (57.78%) use the product for more than 5 years. On the issue of change of refrigerator set, 350 respondents (77.78%) have changed the brand. Similarly, on the issue of medium of purchase of refrigerator, 77.78% respondents stated that they purchased the product by paying cash. With regard to the sources of information about the product, 230 respondents stated that they come to know the product from television advertisement. On the question of the final decision to purchase the refrigerator product, 175 respondents i.e. 38.89% took the decision by themselves Apart from these, the consumer respondents constituting around 67.78% prefer to purchase the product from known retailers and company's show rooms. On the issue of level of satisfaction, 60% consumer respondents feel either satisfied or highly satisfied on the performance of refrigerator used by them.

CONCLUSION

The study reveals that consumer respondents are very much concerned with the brand. They also change the brand when new brands with additional features are available in the market. Majority of the consumer respondents depend on television advertisement for getting information on the product. Similarly, they are relying on the known retailers for selecting the product. The final decision to purchase the product in maximum cases lies on the consumer respondents. With regard to the level of satisfaction of consumer respondents on the refrigerator, the majority of the respondents express their satisfaction on the performance of the refrigerator used by them. It is further noticed from the analysis that the factors influencing the buying behavior differs from consumer to consumer. However, there is a significant association between factors affecting buying behavior of consumers and their preference of brand.

SUGGESTIONS

- Marketers should design and develop consumer profile to understand the characteristics of target market. Since the demand for consumer durable products
 is growing day by day, the manufacturers should focus on the potential markets. They can formulate appropriate marketing strategy on the basis of demographic factors.
- 2. It is revealed from the study that the consumers are giving less importance to other leading brands/ products. The marketers should try to position their brands through innovative marketing strategies in order gain more market share.
- 3. It is noticed from the study that consumers are consulting the retailers before purchasing the product and retailers are playing an important role as advisors for brand selection. Hence, the manufacturers should associate the retailers in all promotional activities. This will prove to be more beneficial because from manufacturing to consumption, the retail outlet is the key linkage.
- 4. The product attributes and brand knowledge play a key role in determining the behavior of consumers. Therefore, it is suggested that the companies producing durable products should advertise the products by giving more emphasis on product attributes.
- 5. It is revealed from the study that brand plays an important role in the psyche of consumers; brand building is more important in marketing of consumer durables. Hence, companies should remember that "Brand is Supreme" and accordingly, build the brand equity for their products.

LIMITATIONS OF THE STUDY

The present research work has been carried out on the basis of data collected from the consumer respondents. The views expressed by the respondents may be biased one. Hence, the conclusion drawn on such information is one of the limitations of the study. The selection of Balasore town is another limitation of the study from the limited area (coverage) point of view. The statistical tools and techniques used in the study do have their own limitations. Besides this, the resource and time factors are the other constraints for carrying out the present study. In view of the aforesaid limitations, the end users are advised to make use of the findings and suggestions of the study thoughtfully.

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