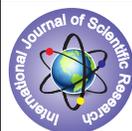


Study on Analysis of User opinion on Washing Machine



Home Science

KEYWORDS : Washing machine, Ergonomics, Brand image, Top load

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ABSTRACT

The washing machine is a commonly used device and an integral part of most households all over the world. Increase in the world's population coupled with rapid economic development has resulted in the increased use of washing machines among households for laundry instead of hand washing. Washing machines are designed to provide clean clothes while retaining the quality of the material. Study conducted on 30 users, on the analysis of user opinion of the washing machine revealed the fact that majority have preferred Samsung and IFB washing machine. Majority of the respondents were satisfied with the washing machines what they were using at present. Washing machines used by majority of the home makers is fully automatic type, because of the increased women employment and work simplification techniques adopted by them. Majority of the respondents purchased washing machine depending on the brand image followed by durability, superior quality and recommendation from others. Majority around 76 percent is of opinion that front load washing machine works best than the top load washing machine. Because of the reasons like good stain removal in front load compared to top load. The survey revealed the facts of ergonomic related issues of washing machine.

INTRODUCTION: Washing machine is the machine used to wash the various types of clothes without applying any physical efforts. The washing machine enables the user to wash clothes automatically without having to supervise its operation. It automatically takes in the amount of water and detergent required and it also automatically sets the timer for washing, rinsing and drying as per the selected mode and the amount of clothes. Depending on the position of loading the clothes in washing, there are two types of washing machines: Top loading and Front loading washing machines. There are also fully automatic washing machines available in the market. In fully automatic washing machine there is only one tub that serves as the washer, rinser as well as the drier. The earliest machines were hand-operated and constructed from wood, while later machines made of metal permitted a fire to burn below the washtub, keeping the water warm throughout the day's washing. But now a days, Depending on the number of clothes or the weight of the clothes, the machine takes in the sufficient amount of water and detergent automatically and sets the timer for wash and drying automatically.

Present survey study reveals the user opinion on different washing machines in different places of Hyderabad.

Methodology:

A survey was conducted in different places of Hyderabad. The device for collection of data consisted of a pre tested questionnaire. Questionnaire was developed to illicit information from the users regarding their opinion on the present washing machine which they were using. It consisted of general information of the user, details about their income, type of family and Occupation, details about the type of washing machine, Brand name of the Washing machine, features included, and the consumer satisfaction along with the ergonomical issues related to washing machine. Data was collected from 30 users from different places of Hyderabad through a pre tested questionnaire.

Their perception with regard to present washing machine colour, type of load, mode of washing machine, material of drum, stain removal, satisfaction and ergonomical issues were collected and

evaluated. Frequency, percentages and overall mean scores was used to find out the user opinion on present washing machine.

Apart from this user opinion on warranty, inbuilt features, after sale services provided, satisfaction, inbuilt features available were collected.

Results

Perception and preferences of respondents with regard to washing machine
 Type of machine
 Features present in the washing machine
 Satisfaction of user with the type of washing machine which they were using at present.
 Materials used for drum
 Frequency of repairs
 Ability of stain removal
 Problems faced by the user
 After sales service provided
 Parts of the body that often get tired while using the washing machine.

Table 1.0

Cost and Mode of Purchasing Washing Machine

Frequency and percentage distribution on cost and mode of purchase of washing machine.

(Values in numerical score) n=30

S.No	Factors	Frequency	Percentage
Cost of washing machine			
1	10,000	-	-
2	15000-20,000	22	75
3	More than 20,000	8	25
Mode of purchase			
4.	Cash	24	80
5.	Instalments	6	20
Brand name of the Washing Machine			
6.	IFB	10	33.5
7.	Samsung	15	50
8.	L.G	5	16.5

As per the information collected on cost of the washing machine 75 percent of the respondents own washing machine with a price range of 15,000-20,000. 25percent of the respondents own washing machines above 20,000. When they were questioned about the mode of payment, 80 percent of the respondents opined that they have purchased washing machine by paying cash, while 20 percent brought the washing machine through instalment basis. When the respondents were posed with the preferred brand, About 50 percent of the respondents were using Samsung washing machine followed by IFB 33.5 percent and L.G with 16.5 percent.

Table 2.0
Type and Mode of Washing Machine.
(Values in Numeric Scores: n=30)

S.No	Factors	Frequency	Percentage
Type of Washing machine			
1	Top load	12	40
2	Front load	18	60
Mode of washing machine			
3	Semi automatic	-	-
4	Fully automatic	30	100
Capacity of Washing Machine			
5	5kg	7	23
6	6kg	-	-
7	More than 6 kgs	23	77

Data in the table2.0 depicts that, around 60 percent of the respondents use front load washing machine, followed by top load by 40 percent respondents. Regarding the mode of washing machine, Washing machines used by majority of the respondents is fully automatic type. Around 77 percent of the washing machines have a capacity of more than 6 kgs, followed by 23 percent with 5 kgs capacity

Table 3.0
Reason for purchase of Particular Brand
(Values in Numeric Scores: n=30)

S.No	Factors	Frequency	Percentage
Basis of purchase of new washing machine			
1	Superior Quality/Tech-nology	10	3
2	Price/Value for Money	-	-
3	Durability	15	50
4	Brand Image	30	100
5	Financial	-	-
6	Recommended by others	5	16
7	CelebrityEndorsement	-	-

It was evident from the above table that majority of the respondents purchased washing machine depending on the brand image followed by durability, superior quality and recommendation from others. Most of the respondents came to know about the particular brand of washing machine through broad casting media. Majority around 85 percent of the respondents rated the role of celebrity endorsement in sale of washing machines as neutral. Most of the respondents came to know about the particular brand of washing machine through broad casting media

Table 4.0
Time preferred by customers for purchasing washing machine
(Values in Numeric Scores: n=30)

S.No	Factors	Fre-quency	Percentage
Preferred Time to purchase of washing machine			
1	Promotional schemes are open	28	94
2	Irrespective of promo-tional schemes	2	06

As shown in the above table, Most of the customer's prefer to buy washing machines when promotional schemes are open, while only few prefer to buy washing machines irrespective of promotional scheme.

Years of warranty provided:

Most of the washing machines were provided with 5 years of warranty, followed by 16 percent washing machines were provided with more than 5 years warranty, only 14 percent washing machines were provided with only 2 years warranty.

Inbuilt features in washing machines:

Most of the washing machines used by the respondents has in-built features like, end of the cycle signal and touch screen, Auto detergent dispenser. Most of the options available in the washing machines used by the respondents were in built in to machines like setting of time, no of spins, no of rinses, can set water level and setting for hot water etc. Most of the washing machines used by the respondents has all the options available in the machine like options for jeans, quick wash, sweaters, blankets, fuzzy etc

Frequency of using washing machine:

Most of the respondents use washing machine alternative days, followed by daily and only very few respondents use washing machine once in a week.

Table 5.0
Material used for drum and machine in the washing machine
(Values in Numeric Scores: n=30)

S.No	Factors	Frequency	Percentage
Material used for drum			
1	Plastic	21	70
2	Porcelain enamel	-	-
3	Stainless steel	9	30
Material used for Machine			
1.	Plastic	30	100
2.	Stainless steel	-	-
3.	Plastic	30	100

The above table clearly shows the material used for drum and machine, Majority of the washing machines used by the respondents has plastic drum, followed by stainless steel drum by only 30 percent washing machines. Almost all the washing machines used by the respondents were made of plastic material.

Machine Repairs:

Most of the respondents faced problems with the machine only after the continuous used of washing machine for 3 years.

Table 6.0

Type of detergent used, stain removal and prewashing (Values in Numeric Scores: n=30)

S.No	Factors	Frequency	Percentage
Removal of Stain			
1	Fully removes the stain	14	46
2	Partially removes the stain	12	40
3	No stain removal	4	14

Majority of the respondents use other detergent powders rather than that suggested by the washing machine brands, only 5 percent use detergents that are suggested by the washing machine companies.

Not all the machines remove the stains completely, only 46 percent opined that there is full stain removal in their machines. Majority around 60 percent washing machine does not require any prewash before going for laundry in the machine, while around 40 percent do prewashing of clothes before putting them in to machine.

Kind of problems faced with the machine:

Around 30 percent said that a vibrations and sounds are noticed from the washing machine, around 60 percent of the respondent opined about very poor stain removal.

After Sale Service:

Very quick and good response is provided by 60 percent dealers, while late service is provided by 40 percent of the dealers of different companies.

Top load/Front load:

Majority around 76 percent is of opinion that front load washing machine works best than the top load washing machine.

Ergonomics:

Most of the respondents feel no tiredness while working with the machine, while only 16 percent is of the opinion that they experience partial tiredness in operating machine.

96 percent respondents experience no neck and shoulder pain while around 3 percent opined that they feel partial pain at neck and shoulder region while operating machine.

Only 3 percent of the respondents feel partially tired with upper arms while operating machine, while around 96 percent experienced no pain while using the machine. Almost all the respondents did not experience any type of back pain while operating machine

No tiredness was experienced on knees by all the respondents.

None of the respondents feel tired while pushing the door open button. 100 percent respondents do not feel tired while opening and closing the door.

Majority of the respondents opined that were not feeling tired while checking inside the drum, while only 3 percent is of opinion that they feel partially tired while checking inside the drum of machine.

All most all the respondents feel no tired while inserting hand inside the drum.

Majority of the respondents opined that there is no pain while taking the laundry out of the machine, while only 3 percent is of opinion that they feel partially tired while taking the laundry out

from the machine. All the respondents were very happy with the machine what they are using at present

Suggestions to others regarding washing machine

Around 60 percent of the respondents said that they would recommend the same brand of washing machine to colleagues and relatives which they are using at present, while around 40 percent said that they would not recommend the same brand as they were not happy with the present brand what they were using.

Conclusion:

Washing machines are designed to provide clean clothes while retaining the quality of the material.

Data was collected from 30 respondents through a pretested questionnaire. Their perception with regard to the washing machine including cost, colour, capacity, stain removal, years of warranty, detergent used type of machine, which they were using at present including brands type of load etc. Apart from this the opinion on an ideal washing machine and their preferences such as its colour, design, load, type, mode and the most suitable type according to the home makers was collected and evaluated. The data collected was consolidated.

As per the information collected it was found that, few home makers were not happy with the present washing machine which they were using. Around sixty percent of the respondent opined about very poor stain removal. Might be because of the reason that they were not using the detergent, that was recommended by the washing machine companies.

Regarding the Ergonomical aspects, Ninety six percent experienced no pain while using the machine.

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