

ASSESSMENT OF SATISFACTION LEVEL OF HOUSEWIVES WITH THE DESIGN OF THE PRODUCT IN HOUSEHOLD APPLIANCES

KUMKUM PANDEY¹ & ADITI VATS²

¹Research Scholar, Department of Family Resource Management, College of Home Science,
G.B.Pant University of Agriculture and Technology, Pantnagar, Uttarakhand, India

²Associate Professor, Department of Family Resource Management, College of Home Science,
G.B.Pant University of Agriculture and Technology, Pantnagar, Uttarakhand, India

ABSTRACT

Product design is one of the most important non-price factors which determine the success of a product. The role of it changes throughout the life-cycle of a product. In the initial product development stage, the role of design is to create a marketable product from an innovation. As the product life cycle matures, more competitors enter the market and the chief role of design is in product differentiation; through quality, appearance, performance, ease of use, reliability, reparability and so on. Product design in household appliances is generally affects the cost of production through the choice and use of materials and how the product is assembled. In this concern the present study was planned to assess the satisfaction level of housewives regarding existing household appliances its functioning and aesthetic appeal. In this study descriptive research design was planned and personal interview method was adopted to collect the information with the help of self developed restructured, pretested and precoded interview schedule.. The data was collected from 30 randomly selected housewives from Pantnagar campus itself and the data was analyzed with the help of percentage and frequency. Therefore a great need of product design in the field of household appliances is arises in terms of its maintenance, handling and functioning.

KEYWORDS: Product, Design, Household Appliances, Efficiency, Productivity

INTRODUCTION

Product and process technology is rapidly evolving. Competition is becoming more and more globally based. Customers are emphasizing improved quality and reliability, but reduced defense spending requires an emphasis on value and affordability. This dynamic and challenging environment requires the implementation of new technologies for product design and development. It is as the activity in which ideas and needs are given physical form initially as solution concepts and then as a specific configuration or arrangement of elements, materials and components” (Walsh et al. 1992). It can be also defined as the idea generation, concept development, testing and manufacturing or implementation of a physical object or service. Product design conceptualizes and evaluates ideas, making them tangible through products in a more systematic approach.

It often misunderstood as a concept. It is commonly seen, even by managers of companies, as a process of making products look aesthetically pleasing or stylish.

Most product designers understood product design to mean much more than this product design is a multidisciplinary process which usually involves market and technological research, concept design, prototype development, final product development and testing as well as post product refinement.

Product design does not usually imply the utilization of new technologies to create novel products. Typically it entails the refinement or upgrading of existing designs, to improve functionality, performance or appeal. New technologies may be used in existing establish product. It is also involved in household appliances because housewives performed various household activities (cooking food, peeling fruits and vegetables, cleaning rooms, washing clothes and kitchen utensils etc.) with the help of appliances such as refrigerator, washing machine, oven, mixer, grinder, kettle, grater, griller, toaster etc. These appliances must be in proper design and shape and also good in aesthetic qualities, which does not cause any problem to housewives and improve their efficiency.

MATERIALS AND METHODS

In order to reach at the aim of present study a detailed plan of work and sequential procedure was followed. In this study descriptive research design was planned to assess the satisfaction level of housewives regarding household appliances, its functioning and aesthetic appeal in terms of product design. For this interview method was adopted to collect the information by self developed restructured, pretested and precoded interview schedule. The data was collected from 30 randomly selected housewives from Pantnagar itself and the data was analyzed with the help of percentage and frequency.

Therefore it is conceptualized that variable such as age, education, income, occupation of the selected respondent were taken as independent variable which have direct effect on respondent variable such as knowledge of the respondent about product design.

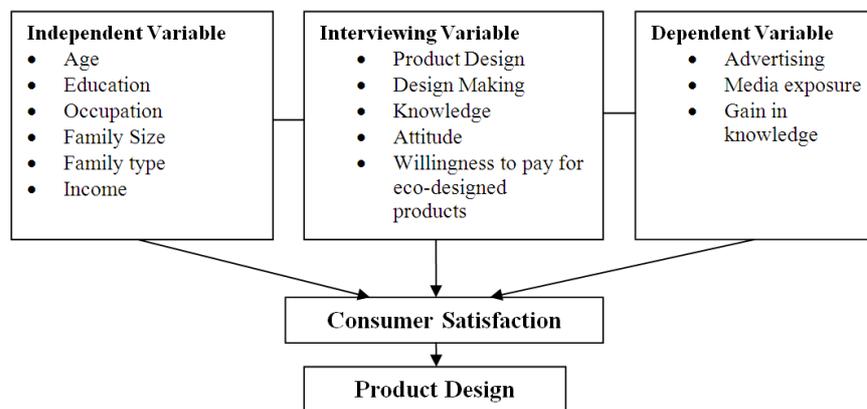


Figure 1

Interview method was adopted to collect the information. Hence restructured and pretested and precoded interview schedule was constructed as a tool for the collection of the data. The respondents were questioned regarding knowledge about household product design, its shape, size, colour etc. The data was collected from 30 randomly selected housewives from Pantnagar itself and the data was analyzed with the help of percentage and frequency.

RESULTS AND DISCUSSIONS

The findings of present study are presented under following sections –

- Satisfaction with the existing household appliances.
- Satisfaction with the functioning of the equipment with respect to household appliances and its esthetic qualities.
- Satisfaction with the aesthetic appeal of the equipment with respect to household appliances.

Satisfaction with the Existing Household Appliances

Responses for satisfaction with existing household appliances and good design gave following information: Data revealed about 87 percent respondents were satisfied with the existing refrigerator where as 13.33 percent were not. In case of washing machine 40 percent housewives were satisfied and 60 percent were not. Only 16.66 percent respondents were satisfied with oven and maximum i.e. 83.33 percent were not satisfied and nearly 24 percent of the respondents were satisfied with the existing vaccume cleaner and the maximum i.e. 76.66 percent respondents were dissatisfied (major appliances).

Table 1: Satisfaction with the Existing Household Appliances (N-30)

Satisfaction With Existing Household Appliances -	Yes		No	
	Frequency	Percentage (%)	Frequency	Percentage(%)
Major Appliances				
i) Refrigerator	26	86.66	4	13.33
ii) Washing machine	12	40	18	60
iii) Oven	5	16.6	25	83.33
iv) Vaccume cleaner	7	23.3	23	76.66
Minor Appliances				
i) Toaster	22	73.33	8	26.22
ii) Mixer grinder	20	66.66	10	33.3
iii) Griller	7	23.33	23	76.66
iv) Kettle	25	83.33	5	16.66
v) Grater	23	23.33	7	23.33

Thereby nearly 74 percent respondents were satisfied with toaster and 26.66 percent were dissatisfied with this. Approx 67 percent respondents were satisfied with mixer grinder and 33.33 percent were not. Nearly 24 percent respondents were satisfied with griller and rests were dissatisfied, 83.33 percent acceptances were for kettle with a 23.33 percent acceptance for grater (minor appliances).

Satisfaction with the Functioning of the Equipment with Respect to Household Appliances

Data in this showed that more than 86 percent were satisfied with refrigerator, 13.33 percent were not, 40 percent satisfied with washing machine and 60 percent were dissatisfied, 16.66 percent with oven and 83.33 percent were not and 73.33 percent were satisfied with vaccume cleaner and 26.66 percent were dissatisfied as per the functioning of the equipment in major appliances.

Table 2: Satisfaction with the Functioning of the Equipment with Respect to Household Appliances. (N-30)

Household Appliances	Satisfaction		Dis - Satisfaction	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Major Appliances				
i) Refrigerator	26	86.66	4	13.33
ii) Washing machine	12	40	18	60
iii) Oven	5	16.66	25	83.33
iv) Vaccume cleaner	22	73.33	8	26.66
Minor Appliances				
i) Toaster	25	83.33	5	16.66
ii) Mixer grinder	21	70	9	30
iii) Griller	24	80	6	20
iv) Kettle	27	90	3	10
v) Grater	25	83.33	5	16

In minor appliances 83.33 percent satisfaction was seen in terms of functioning of the equipment for toaster and 16.66 percent were dissatisfied, 70 percent satisfied with mixer and 30 percent not satisfied, 80 percent satisfied with griller and 20 percent respondents were not, 90 percent respondents were satisfied with kettle and 10 percent were not. In terms of grater 83.33 percentage respondents were satisfied and rest of the respondents i.e. 16 percent housewives were dissatisfied.

Satisfaction with the Aesthetic Appeal of the Equipment with Respect to Household Appliances

When asked about satisfaction level with respect to esthetic appeal approximately 87 percent were satisfied with refrigerator, 13.33 percent were not, 73.33 percent satisfied with washing machine and 26.66 percent were dissatisfied, 53.33 percent satisfied with oven and 46.66 percent were not satisfied. Nearly 67 percent were satisfied with vaccume cleaner and 33.33 percent were dissatisfied as per the aesthetic appeal of the equipment in major appliances.

Table 3: Satisfaction with the Aesthetic Appeal of the Equipment with Respect to Household Appliances. (N-30)

Household Appliances	Satisfaction		Dis-Satisfaction	
	Frequency	Percentage (%)	Frequency	Percentage (%)
Major Appliances				
i) Refrigerator	24	86.66	4	13.33
ii) Washing machine	22	73.3	8	26.6
iii) Oven	16	53.3	14	46.6
iv) Vaccume cleaner	20	66	10	33.33
Minor Appliances				
i) Toaster	23	76.66	7	23.33
ii) Mixer grinder	17	36.3	13	46.6
iii) Griller	18	60	12	40
iv) Kettle	13	43.33	17	56.66
v) Grater	22	73.3	8	26.66

In minor appliances 76.66 percent satisfaction was seen in terms of aesthetic appeal of the equipment for toaster and 23.33 percent were dissatisfied, 36.66 percent satisfied with mixer and 46.66 percent not satisfied, 60 percent respondents were satisfied with griller and 40 percent were not. In terms of kettle 43.33 percent housewives were satisfied and 56.66 percent were dissatisfied. Nearly 84 percentage respondents were satisfied with grater and rest of the respondents i.e. 26.66 percent housewives were dissatisfied.

In a study of housewives of Pantnagar, Uttarakhand **Pandey, K. and Vats, A. (2012)** reported that more than 60 percent of the housewives look forward for the maintenance and change of household equipments usually specially about the size, shape, colour, efficiency and design of both major and minor appliances.

CONCLUSIONS

In conclusion it was found that 87 percent respondents were satisfied with the existing refrigerator, 40 percent with washing machine. Nearly 74 percent respondents were satisfied with toater and approx 67 percent with mixer grinder and 33.33 percent were not. Nearly 24 percent respondents were satisfied with griller. Most of the respondents were not satisfied with the functioning and aesthetic appeal og the household appliances Therefore the need arises to make change in the design, functioning and aesthetic appeal of the household appliances so that women's can perform their job comfortably and effectively with more job satisfaction level. Product designer must be concerned with these problems and taking care of these while manufacturing of household appliances, in this way their sales revenue can be increased and it will surely enhance repeat purchasing behavior of the consumer.

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