

## **RELATIONSHIP BETWEEN OCCUPATIONAL STATUS OF WOMEN AND THE LABOUR SAVING TECHNOLOGY**

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### **ABSTRACT**

*The study outlined in this paper is intended to explore whether there is an association between working status of women and the use of household appliances .It is to analyze how increasing trend of electronic appliances have changed their way of doing work. As the number of working women growing by leaps and bound, yet little attention has been paid in examining its implications on their buying behavior pattern. This paper addresses this issue by focusing on role of marketing strategies in influencing their purchasing behaviour. An attempt has also been made to see the role of household appliances in reducing gender inequality. A descriptive research was undertaken using QUESTIONNAIRE as a method for data collection .Data of 150 working and non- working women of 20-50 years age group was analyzed. Further analysis was made with the help of software Nvivo 11, that enhanced the findings. The study revealed that majority of the women whether working or not is of the view that use of these appliances saves time. However, the ownership of household appliances is also influenced by many important factors such as price of the product, age, marital status and income level of women.*

**Keywords:** Household appliances, labour saving, occupational status, buying behavior.

### **INTRODUCTION**

When we look at the interaction between technology and society, we think only about Digital India, extension of metros, shifting from labour to capital intensive manufacturing, 3G to 4 G etc. These grand visions have blinded us to an important and rather peculiar technological revolution which has been going on right under our noses: the technological revolution in the home. This revolution has transformed the conduct of our daily lives, but in somewhat unexpected ways. As the number of working women growing by leaps and bound, yet little attention has been paid to examining its implications for shopping behavior patterns and marketing strategies of household appliances. . The study outlined in this paper is intended to explore this issue, and in particular whether the wife's employment status is likely to provide a basis for segmenting markets for labour saving technology. An attempt has also been made to find out the cultural and socio-economic impact of development, increasing trend of electronic appliances in the household chores and the impact of mechanized change on their lives.

### **LITERATURE REVIEW**

- Time and home appliances are substitute of each other as mentioned by Greenwood (2005). However Christine and Mary have argued that technology has reduced the physical effort of housework but not the time involved.
- According to Fidelia DAKE (2015), increased household asset ownership is associated with Obesity promoting dietary behavior especially in women of urban area. It makes human existence mechanical. The implication is that created enormous stress and pressure causing disequilibrium between working and family life.
- There is an economic effect on household economy with the purchasing of these new techno appliances. The price of the product, consumption of electricity, cost of repairing and income of family are structural determinants that influence the female workforce participation.
- The changing pattern of lifestyle has led to higher demand for portable food ,automatic machines, Vaccum cleaner, dryer, dishwasher etc resulting in showcasing the economic status only.
- K srinivasan states that the consumer relationship with instant food and other everyday goods have changed dramatically not only in way they are purchased but also in way they are consumed. Moreover, add to the revenue generation -the portable food sold at convenient locations benefitting impulse retail channels, kiosk and fast food outlet.



**FINDINGS AND DISCUSSION BASED ON PRIMARY DATA**

**1. Ques asked : Are you working? How much time do you generally spend on household work ?**

**Crosstabulation**

Count

		How much time do you generally spend on household work ?				Total
		less than 2 hours	between 2-4 hours	between 5-7 hours	more than 7 hours	
Are you working?	YES	18	24	15	9	66
	NO	21	14	17	33	85
Total		39	38	32	42	151

Table -1 Relationship between the working status of women and time spent on household work.

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	14.541 <sup>a</sup>	3	.002
Likelihood Ratio	15.201	3	.002
Linear-by-Linear Association	7.035	1	.008
N of Valid Cases	151		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.99.

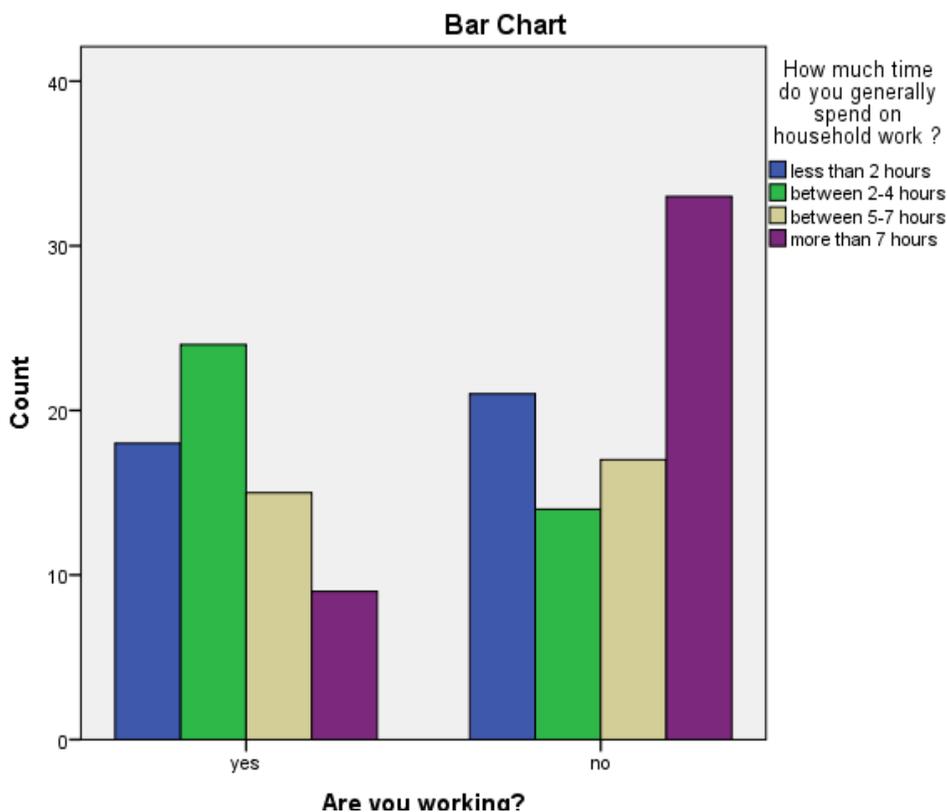


Table -2 chi square test result of 2 categorical variables..

According to the result, since the p-value is less than our chosen significance level  $\alpha=0.05$ , we accept the null hypothesis. Rather there is enough evidence to suggest an association between working status and time spent on home chores.

2. Ques asked-Rank each factor from 1 to 5 ,1 stands for least important and 5 most important.

Correlation Matrix

	Price of appliance	Warranty	Durability	Reliability	Offers and discounts	Product design]
Price of appliance	1.000	.523	.488	.484	.548	.337
Warranty	.523	1.000	.648	.669	.576	N 620
Durability	.488	.648	1.000	.724	.423	.593
Reliability	.484	.669	.724	1.000	.473	.575
Offers and discounts	.548	.576	.423	.473	1.000	.545
Product design	.337	.620	.593	.575	.545	1.000

Table -3 correlation matrix of factor considered while shopping new product.

Factor analysis is appropriate when the variables are correlated to each other .In this case the variables are highly correlated as highlighted in the table above.

To determine the suitability of factor analysis we uses KMO test, the higher the KMO value the more appropriate is the factor analysis generally it should be greater than 0.6. In this case result is (0.848>0.6).

According to Bartlett’s test we reject the null hypothesis and apply the factor analysis if the value of calculated chi squre is large as here the value is 304.122 so rejecting the null hypothesis i.e variables are uncorrelated

KMO and Bartlett’s Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.848
Approx. Chi-Square	304.122
Bartlett's Test of Sphericity	df
	15
	Sig.
	.000

.Table -4 KMO and Bartlett test result

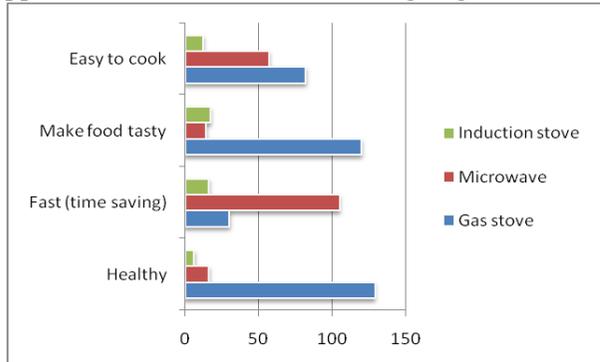
Component Matrix<sup>a</sup>

	Component
	1
[Price of appliance]	.698
[Warranty]	.859
[Durability]	.825
[Reliability]	.837
[Offers and discounts]	.741
[Product design]	.777

Table -5 Extraction Method: Principal Component Analysis.

As per the factor analysis ,warranty is the leading factor followed by reliability and durability while purchasing household appliances.Hence the marketer should focus more on the warranty,performance and product life span of appliances as customers value them more.

3.Ques asked-which kitchen appliance would be used according to given factors.



It is evident from the graph that women still prefer gas stove over other means of cooking on given parameters such as easy to cook (54%), healthy(85%), taste of food(80%). However after considering time taken to cook food, women prefer microwaves(70%). Though the modern technology has evolved women still prefer conventional method of cooking

**4 Ques asked : Are you working? \* Are you comfortable using a fully automatic washing machine? Crosstabulation**

		Are you comfortable using a fully automatic washing machine?			Total
		Haven't tried yet	No ,I am not	Yes , I am	
Are you working?	YES	7	18	41	66
	NO	13	43	29	85
Total		20	61	70	151

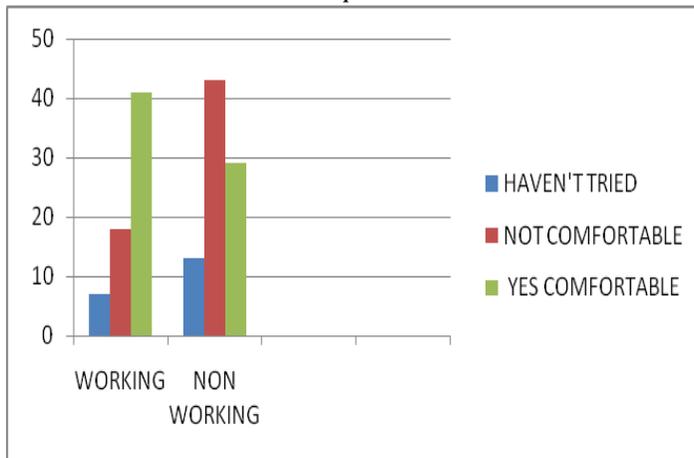
Table -5 Relationship between working status and comfortability .

**Chi-Square Tests**

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	11.901 <sup>a</sup>	2	.003
Likelihood Ratio	12.052	2	.002
N of Valid Cases	151		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 8.74.

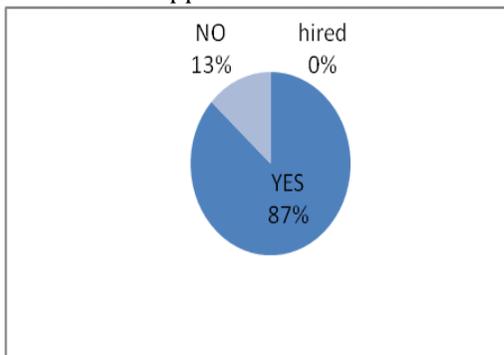
Table-6 chi square test result



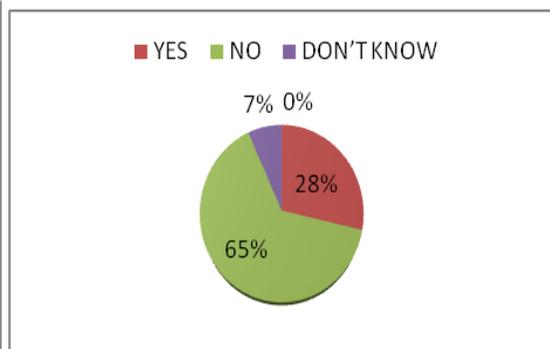
It can be concluded that working women are more comfortable using fully automatic machine than non working women.

**5 Ques asked : Do the home appliances reduced the dependence on domestic help?**

In the chart 87% of respondent have hired servants suprisingly out of them 65% women are of the opinion that the use of home appliances have not reduced their dependence on domestic help.



Have you hired a servant



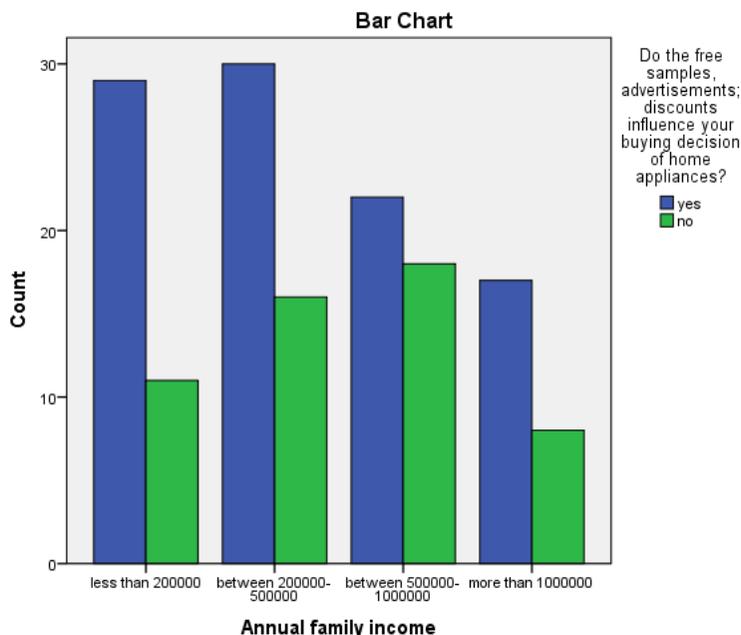
Do appliances reduced dependence on servants

**6. Do the influence of free samples and discounts on consumer depends upon their family income**

**Crosstabulation**

Count		Do the free samples, advertisements; discounts influence your buying decision of home appliances?		Total
		Yes	No	
Annual family income	less than 2 lakh	29	11	40
	between 2 lakh to 5 lakh	30	16	46
	between 5 lakh to 10 lakh	22	18	40
	more than 10 lakh	17	8	25
Total		98	53	151

Table -7 Relationship between annual family income and sale promotional activities



**Correlations**

Question asked		Do the free samples, advertisements; discounts influence	Annual family income
Do the free samples, advertisements; discounts influence your buying decision of home appliances?	Pearson Correlation	1	.073
	Sig. (2-tailed)		.375
	N	151	151
Annual family income	Pearson Correlation	.073	1
	Sig. (2-tailed)	.375	
	N	151	151

Table-8 correlation matrix

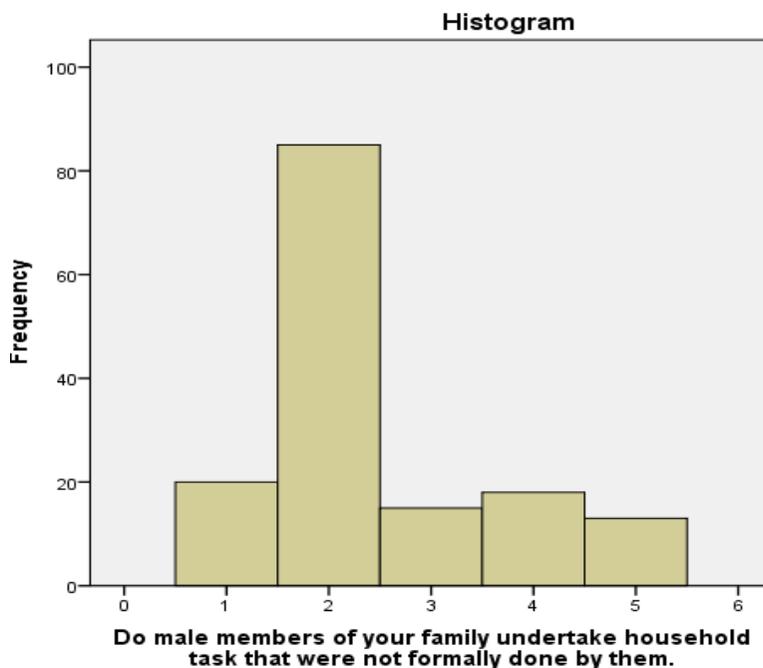
According to the data collected , yes there is a correlation between the influence of free samples and discounts on consumer and their family income .

**7. QUES ASKED : Do male members of your family undertake household task that were not formally done by them.**

**Frequency table**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Highly agree	20	11.8	13.2	13.2
	Agree	85	50.3	56.3	69.5
	Neutral	15	8.9	9.9	79.5
	Disagree	18	10.7	11.9	91.4
	Strongly disagree	13	7.7	8.6	100.0
	Total	151	89.3	100.0	
Missing	System	18	10.7		
Total		169	100.0		

Table -9 Frequency table



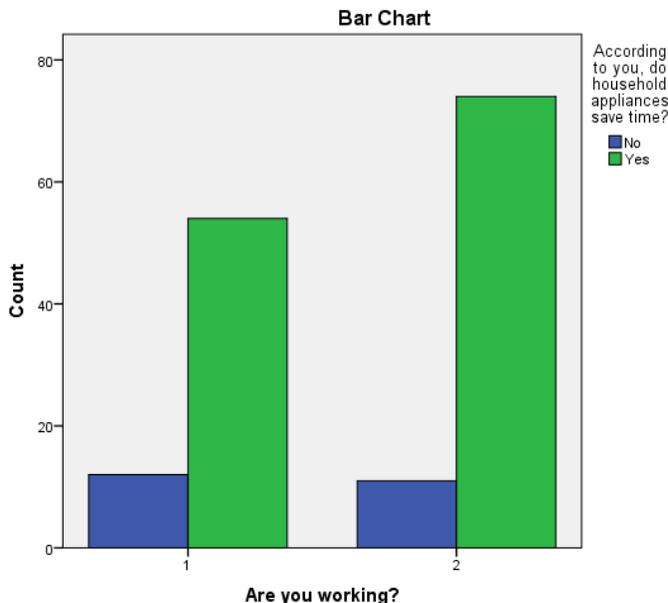
The new role of women has forced husbands to participate in home making activities and has changed their traditional role as bread earner to that of partner in home making activities. And that it led to gender equity .Nearly 70 %of women agree that their family male members undertake household work.

**8. Are you working? \* According to you, do household appliances save time?**

**Crosstabulation**

Count		According to you, do household appliances save time?		Total
		No	Yes	
Are you working?	yes	12	54	66
	no	11	74	85
Total		23	128	151

Table -10 Relationship between occupational status and time saved by appliances.



Both working and non working women are of view that home appliances save time.

**CONCLUSION OF THE STUDY**

- Household technology is the engine of liberalization. It is women with some education and little or no domestic help that benefitted the most from the household revolution Not only the working status of women that has led to inventions of automatic home appliances but these inventions also in turn enables women to take up jobs .Hence,it’s a Two way road.
- Housework went from being hard physical labor to being lighter but time consuming with more time spent in activities such as shopping for different types of food products, search on different sites for domestic appliances.
- Working women plays a vital role in diffusion of the house hold technology.
- As male members of the society are becoming comfortable in using household appliances this brings a shift from stereotyping to gender equality.

**REFERENCES**

1. J. Asian Dev. Stud, Vol. 2, Issue 3, (September 2013) ISSN 2304-375X ,Changing Role of Women Due to Technology at Household Level.
2. Emanuela Cardia Universite de Montreal and CIREQ. Current version July 2008,Household Technology: Was it the Engine ofLiberation .
3. Greenwood, Jeremy, Ananth Seshadri and Mehmet Yorukoglu (2005). “Engines of Liberation,”Review of Economic Studies, 72 (1): 109–133.
4. Rosie Cox Geography Compass 7/12 (2013): 821–831, 10.1111/gec3.12089 Department of Geography, Environment and Development Studies, Birkbeck, University of London House/Work: Home as a Space of Work and Consumption
5. Vanek, Joann (1973). Keeping Busy: Time Spent in Housework, United States, 1920–1970, Ph.D. thesis, The University of Michigan.
6. Michael Bittman Article in British Journal of Sociology 55(3):401-23 · October 2004, 28.38University of New England (Australia) Appliances and their Impact: The Ownership of Domestic Technology and Time Spent on Household Work
7. Aggarwal, A.N. (1988). Economics of Development. New Delhi: Vikas Publishing House(Pvt.) Ltd.

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**Appendix****Questionnaire****RELATIONSHIP BETWEEN OCCUPATIONAL STRUCTURE OF WOMEN AND LABOUR SAVING TECHNOLOGY**

*Thank you for agreeing to take part in this important survey evaluating household appliances role in women life. It is an attempt to find out the socio-economic impact of increasing trend of electronic appliances in the household chores and the impact of mechanized change on women lives. It will only take 4-5 minutes to complete. Be assured that all answers you provide will be kept in strict confidentiality.*

1 What is your marital status?

- Married
- Unmarried

2. Which type of place do you live in?

- Rural
- Urban
- suburban

3. How many members are there in your family?

- 1
- 2
- 3
- More than 3

4 Are you working?

- Yes
- No

If yes what is your approximate work duration?

- Full time
- Part time
- Self employed

5 How much time do you generally spend on household work?

- Less than 2 hours
- Between 2-4 hours
- Between 5-7 hours
- More than 7 hours

6 Select the rating from one of the five rating points.

a. I like doing household work.

1      2      3      4      5

Strongly agree                        Strongly disagree

7 Which of the following home appliances you use?

- Washing machine
- Microwave
- Food processor
- Mope
- Dishwasher
- Deep freezer
- Vacuum cleaner
- Hair dryer
- Induction stove
- Others, please specify \_\_\_\_\_

8 In general, who makes the purchasing decision for household appliances in your home?

- Myself
- Partner
- Parents
- Joint decision
- Others

9 How often do you buy a home appliance?

- In a month
- In a quarter

- In 6 months
- In 1 year
- In 2 years
- More than 2 years

10 How would you categorize the home appliances?

- Necessity good
- Luxury good
- Comfort good
- Any other

11 Please select the best statement that describes your buying behavior.

- Research in store, buy in store
- Research online, buy online
- Research in store, buy online
- Research online, buy in store

12 Rank each factor given below that you consider while shopping for a new household appliance. 1 means "least important" and 5 means "most important".

Factor	1	2	3	4	5
Price of appliance					
Durability					
Warranty					
Reliability					
Offers and discounts					
Product design					

13 Do you watch demo videos before using the home appliances?

- Yes
- No

14 Do the free samples, advertisements; discounts influence your buying decision of home appliances?

- Yes
- No

15 Have you hired any maid or servant?

- Yes
- No

If yes, do you think home appliances have reduced your dependence on them?

- Yes
- No
- don't know

16 Do male members of your family undertake household task that were not formally done by them.

1      2      3      4      5

Highly agree      ○      ○      ○      ○      Highly Disagree

17 Are you comfortable using a fully automatic washing machine?

- Yes , I am
- No ,I am not
- Haven't tried yet

18 Choose the best statement that describes the use of a fully automatic machine.

- Labour saving
- Time saving
- Both of the above
- None of the above

19 Given the option to choose, which kitchen appliance you would prefer according to the given factors?

	Gas stove	Microwave	Induction stove
Easy to cook			
Healthy			
Fast(time saving)			
Make food tasty			

20 Choose the major drawback of using home appliances for you -

- Increased electricity cost
- Short product life span
- Repair cost
- Increase time
- Any other, \_\_\_\_\_

21 Tick the right options-

With the use of labor saving technology, reduction in work load leads to

- A. reduction in physical efforts
- B. overweight
- C. obesity
- D. stress

22 Do you think excessive use of home appliances adversely affect the environment?

1      2      3      4      5

Strongly agree      ○      ○      ○      ○      ○      strongly disagree

23 According to you, do household appliances save time?

Fig. 1. Yes

Fig. 2. No

**Name-**

**Age-**

**Annual income-** less than 2,00,000

Between 2,00,000-5,00,000

Between 5,00,000-10,00,000

More than 10,00,000

**E-mail id -**