



AN EMPIRICAL STUDY ON FACTORS AFFECTING PURCHASE INTENTION OF ELECTRIC COOKING APPLIANCES IN INDIA

Mr Aditya Dixit¹, Mrs Aditi Verma², Mrs Aditi Kumari³

(School Of Management, NIET, Greater Noida, India)
(MBA, NIET/AKTU, INDIA)

ABSTRACT :

Electric cooking equipment account for a sizable share of the industrial composition in developing nations. Electric cooking has been increasingly important in the post-independence era, particularly in India, due to its ability to provide money and employment while addressing issues of inequality. Their development is hindered by a few fundamental obstacles, such as the inability to obtain financing, a shortage of technical expertise and trained labour, and poor infrastructure in suburban and rural regions, even with a complex policy framework. This study was able to evaluate the importance of electric cooking to Indians in addition to ranking the precedence of the aforementioned issues. This study also helps to close the gap in the empirical literature about the effectiveness of government measures in removing obstacles to obtaining traditional bank financing, particularly for young micro units and first-generation entrepreneurs. This study used a combination of quantitative and qualitative research methods to answer these questions; survey questionnaires and interviews served as the main research instruments. Generally speaking, a large number of the study's findings and outcomes support the widely held beliefs. The study's recommendations are anticipated to have a major financial influence on the issues with electric cooking. It is also hoped that these recommendations would aid in the quickest cooking process possible, saving time and energy. It is simple to use and safe.

Keywords: Developing countries, Electric, Industries, Qualitative, etc.

INTRODUCTION:

The Bureau of Energy Efficiency (BEE) initiated the "go electric" campaign in February of last year with the goal of raising awareness of the advantages of electric cooking in India. Additionally, it has been suggested that the government of India's promotion of LPG should have included an electric induction cook burner as well, as the costs and fuel requirements for both are nearly same. For cooking using electricity, a variety of technological solutions are available, including solar-powered cooktops, electric pressure cookers, and induction cooktops. Electric cooking choices have a higher fuel efficiency than LPG stoves. White goods, sometimes known as kitchen appliances, are the kinds of home appliances that raise people's standard of living. A kitchen appliance is typically characterised as a device that performs a standard household duty, such as cooking, preserving food, or transforming its shape. These appliances are distinct from clearing machines since they typically use electricity or natural gas or propane to cook or preserve food. Small items like computers and televisions won't be discussed in this investigation. The freezer, toaster, rice cooker, induction cooker, microwave, dishwasher, blender, mixer, and water purifier are examples of common kitchen appliances. Major kitchen appliance brands currently available in Thailand's market include Chinese, Japanese, and Korean brands (Hitachi, Sharp, Toshiba, Panasonic, Samsung, LG, and so on), as well as Western brands (Whirlpool, GE, Siemens, and so on). Customers have a lot of options because the appliance market in India is rather steady and brand rivalry is growing.

Objective of the study

- The main objective of the study is to analyze the determinants as demographic perceived behavior control.
- To understand the attitude of Indian consumers toward electronic cooking
- To explore preference for electronic cooking for male and female
- To identify major determinants of electronic cooking
- To establish correlation among variables for determining electronic cooking preferences

LITERATURE REVIEW REVIEW

Variability in the household use of cooking fuels. The importance of dishes cooked non cooking and uses seasonality in understanding fuel stacking in rural and urban slum communities in six north Indian states Literature review provided the related factors information which other studies had been found in their study. Although there are no researcher studies the purchase intention of electric cooking appliances in Thailand before, there still have some studies can provide the relative view point or research model to support this research.

JOHANNES & URPEAINEN (2020)

Examining the willingness to pay for exclusive use of LPG for cooking among rural households in India.

-SUNIL MANI and ABHISHEK JAIN (2021)

Electricity access, source and reliability at primary health center in India and effect on service provision evidence from two nationwide surveys

SASHMITA PATNAIK (2019)

Smart meter data enabled transition to energy efficient cooling

SHALU AGGARWAL (2020)

RESEARCH METHODOLOGY

Research design is the plan strategy structure of investigation envisaged as to obtain answer to the research problem and to control the variance. The research design can be the following types: Exploratory: It is conducted to have a better understanding of a situation. It is not designed to come up with the final answer or decision. With the help of exploratory research, researchers expect to develop hypotheses about the situation. Descriptive: It is used to achieve a wide variety of research objectives. The descriptive data become more useful for solving problems when the process is guided by one or more specific research problems. It requires a clear specifications of what, who, where, when, why and how of the research problem.

In this research we have taken primary methodology

Research for data collection used: an online structures questionnaire was used a total number of 24 questions was circulated through social media after taking their due consent. The test was not time bounded however each responded to approximately an average of 10-15 min to fill the questions. The response was collected out of 24 questionnaire distributed in 110 people

Research design: descriptive research is conducted

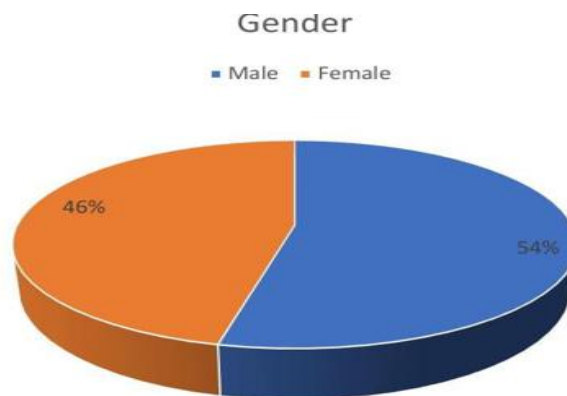
Sample size: 110

Source of data: primary

Statistical tool use: excel, correlation and regression

Sampling techniques: convenience

DATA ANALYSIS



- From this graph we analyze-
- 46% are female prefer electric cooking over non electric
- 54% are male who prefer electric cooking over non –electric cooking

TABLE 1: **Age**

	Frequency	Percent	Valid Percent	Cumulative Percent
18-25	101	91.8	91.8	91.8
26-30	2	1.8	1.8	93.6
30-35	5	4.5	4.5	98.2
35-45	2	1.8	1.8	100.0
Total	110	100.0	100.0	

AGE GROUP

The age group with the highest percentage to prefer electric cooking appliances are from age 18-25

The age group with the lowest percentage to prefer electric cooking

Appliances are from age 26-30 and 35-45

TABLE 2: **MS**

	Frequency	Percent	Valid Percent	Cumulative Percent
SINGLE	101	91.8	91.8	91.8
MARRIED	9	8.2	8.2	100.0
Total	110	100.0	100.0	

MARRIED AND SINGLE

Single prefer more electric cooking appliances as compared to married

TABLE 3: **Education**

	Frequency	Percent	Valid Percent	Cumulative Percent
1	8	7.3	7.3	7.3
2	69	62.7	62.7	70.0
Valid 3	31	28.2	28.2	98.2
4	2	1.8	1.8	100.0
Total	110	100.0	100.0	

EDUCATION

From the last table we can conclude that graduate prefer more electric cooking appliances as compared to the other education level because when we talk about undergraduate their percentage to prefer electric cooking appliances is 7.3% and when we talk about post graduate their percentage to prefer electric cooking appliances is 28.2 and other preferable percentage is 1.8 and graduate percentage to prefer electric cooking appliances is 62.7 with the highest preference among all

TABLE 4: **Coefficients^a**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.238	.172		1.390	.167
AT	-.139	.092	.136	1.509	.134
Con	-.134	.079	-.124	-1.701	.092
BI	.035	.072	.032	.480	.632
FV	.864	.112	.840	7.747	.000
SV	.037	.093	.037	.396	.693

a. Dependent Variable: PI

COFFICIENT

Among all the variables only functional value affecting the purchase intention of electric cooking appliances in India and other factors are not affecting the purchase intention of electric cooking appliances in India as functional value significance is .000

Table 5:

Correlations						
	AT	Con	BI	FV	SV	PI
AT	1					
Con	.813**	1				
BI	.792**	.677**	1			
FV	.840**	.805**	.745**	1		
SV	.811**	.743**	.690**	.903**	1	
PI	.796**	.712**	.708**	.912**	.836**	1

Correlation

BI- brand image
 FV – functional value
 SV – social value
 PI – purchase intention AT- attitude
 Con – convenience

Table 6:

Income				
	Frequency	Percent	Valid Percent	Cumulative Percent
1	94	85.5	85.5	85.5
2	9	8.2	8.2	93.6
Valid 3	3	2.7	2.7	96.4
5	4	3.6	3.6	100.0
Total	110	100.0	100.0	

INCOME

Consumer whose income level 0-5 have maximum preference to adopt electric cooking appliances when compared to other consumer income level that is 5-10
 Their percentage to prefer electric cooking appliances is 8.2%
 Consumer whose income level 10-15 have minimum percentage to prefer electric cooking appliances is 2.7% and from 15-20 income level preferable percentage is 3.6

Table 7:

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.917 ^a	.840	.833	.46525

a. Predictors: (Constant), SV, BI, Con, AT, FV

Table 8:

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	118.373	5	23.675	109.374	.000 ^b
	Residual	22.511	104	.216		
	Total	140.885	109			

a. Dependent Variable: PI
 b. Predictors: (Constant), SV, BI, Con, AT, FV

Table 3 shows that overall model is significant since the volume is (.000) which less than set criteria of (.05)

CONCLUSION

We know about the electronic cooking by this project. Electronic cookers are safe appliances to use instead of gas stove, easy to cook, time saver
 They are affordable to buy, final decision is up to you and your household’s personal need, furthermore with the collected data of the research we also get to know that 46% of female and 54% of male audience prefer electrical cooking appliances which helps us to understand the preference on the basis of gender.
 More graduate is involved in buying intention for electric cooking
 More male is interested in buying electric cooking appliances because they find that easy to use and convenient.
 Income also affect the purchase intention of consumer for electric appliances.
 So the electric cooking appliances are much more preferable then gas based cooking appliances in India.

REFERENCES-

1. <https://eudl.eu/pdf/10.4108/eai.7-10-2021.2316222>
2. <https://www.mordorintelligence.com/industry-reports/electric-cookers-market>
3. <https://clubandresortchef.com/what-are-the-advantages-and-disadvantages-of-electric-appliances-in-a-club-kitchen/>
4. <https://www.powerfoundation.org.in/uncategorized/electric-cooking-full-steam-ahead/>
5. Acemoglu, D. & Restrepo, P, Automation, and Work. NBER Working Paper No. 24196 (National Bureau of Economic Research, 2018). 32
6. Bolukbasi, T., Chang, K.-W., Zou, J., Saligrama, V. & Kalai, A. Man is to computer programmer as woman is to homemaker? Debiasing word embeddings. *Adv. Neural Inf. Process. Syst.* 29, 4349–4357 (2016).
7. . Courtland, R. Bias detectives: the researchers striving to make algorithms fair. *Nature* 558, 357–360 (2018).
8. UN General Assembly (UNGA). A/RES/70/1 Transforming our world: the 2030 Agenda for electronic cooking. Resolut 25, 1– 35 (2015).
9. Fuso Nerine, F. et al. Mapping synergies and tradeoffs between energy and the electronic cooking Goals. *Nat. Energy* 3, 10–15 <https://doi.org/10.1038/s41560-017-0036-5> (2017). 34
10. Fuso Nerini, F. et al. Connecting climate action with other electronic cooking Goals. *Nat. Sustain.* 1, 674–680 (2019). <https://doi.org/10.1038/s41893-019-0334-y>.
11. Fuso Nerini, F. et al. Use SDGs to guide climate action. *Nature* 557, <https://doi.org/10.1038/d41586-018-05007-1> (2018).
12. United Nations Economic and Social Council. Electronic cooking (United Nations Economic and Social Council, 2019).
13. United Nations Human Rights. Electronic cooking Goals Related Human Rights (United Nations Human Rights, 2016).
14. electronic cooking Goals Report 2017.
15. electronic cooking goals report 2019
16. electric cooking goals report 2022. 35
17. ” Global electronic cooking Report – 2016 edition
18. UN Reports on Social Development
19. World Summit for Social Development 1995
20. Geneva 2000(53rd world health Assembly)
21. Social media & news
22. UN News, UN DESA Voice, DISD Newsletter, ECOSOC News, UNSDN News ,
23. Facebook , Twitter , YouTube,