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DEMOGRAPHICFACTORS AFFECTING PURCHASING PATTERN OF PAPAD AMONG WORKING AND NON-WORKING WOMEN IN NAGPUR CITY

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ABSTRACT

Food consumption pattern in India is rapidly changing from unprocessed, unbranded low quality food products to the processed, packaged products. About 200 working and 200 non-working women were selected by convenience sampling method from Nagpur City, Maharashtra, India. The data on purchasing pattern of *papad* was collected using interview cum questionnaire method. The results of the study showed that the average age of working women was 39.39 $\pm$ 6.15 years and non-working women was 38.36 $\pm$ 5.7 years. The average monthly income of working and non-working women was Rs.38,125 $\pm$ 19,550 and Rs. 40,625 $\pm$ 20,825 respectively. *Moong papad* was found to be the most consumed *papad* (59.5% in working and 62.5.5% non-working) in both working and non-working women.*Moong papad* from Lijjat was the most consumed *papad* followed by Suruchi and Haldiram in non-working women as compared to working women. A significant association was observed between the Age(p=0.028) and educational status (p=0.000) and purchasing of moong *papad*.The purchasing of *udad papad* was significantly associated (p=0.000) with educational status of non-working women.

Keywords: Papad, Purchasing, Working Women, Non-working Women

INTRODUCTION

Papad is very familiar product to all of us. *Papad* has unique importance in Indian hospitality. *Papad* is prepared from flour of pulses and there are many varieties of *papad*. Single type of pulse or a combination of different pulses to match the regional preferences are used. It is either fried in edible oil or is roasted before serving. It is generally consumed along with the main course (Saraswat and Jain, 2014). *Papad* is a dehydrated product prepared from *dhals* or rice. A firm but pliable dough is made from the flours of *dhals* or rice

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with addition of suitable seasoning. It is shaped into balls, rolled out thin, dried and toasted over open fire so as to give a light, crisp product. *Mung* flour *papads* are most popular and wheat flour, chickpea flour, and pea flour are used to supplement *mung* flour *papads* (Garg and Dahiya, 2003).

H_0: There is no significant association between purchasing of *papad*and socio-economic factors among working and non-working women.

OBJECTIVES

- To study the socio-economic conditions of working and non-working women in Nagpur city.
- To assess the consumption of branded and non-branded*papads* of working and non-working women in Nagpur city.
- To assess the purchasing pattern *papads*among working and non-working women in Nagpur city.

METHODOLOGY

The present study was undertaken to understand the purchasing pattern of *papads* among working and not-working women in Nagpur city. About 200 working and non-working women each were selected by convenience sampling method. The working women were selected from schools, colleges, hospitals and different institutions. The non-working women were selected from kitty parties, temples, gardens etc. The questionnaire cum interview method was used to elicit information. A structured questionnaire was developed to assess the socio-economic conditions and purchasing pattern of *papad*. The information on purchasing pattern of different varieties of *papads* was collected and discussed. The consumption of different varieties of *papads* viz.,*moong*, *udad*, rice, *sabudana* as well as potato and sago *papad* were studied. Since the users of rice, sabudana as well as potato and sago *papad* were very few hence for the further statistical analysis, only two products were selected viz., *moong papad, udad papad.* Data was tabulated and was analyzed statistically using

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SPSS version 20. Mean, Standard Deviation and Chi square test were computed and the Confidence Interval was set to 95%.

RESULTS AND DISCUSSION

The results of the study are discussed below.

Demographic profile

The demographic profile of working and non working women under study are discussed below (Table 1).

Table 1 shows distribution of working and non-working women according to their demographic profile. The average age of working women was 39.39 ± 6.15 years and that of non-working women was 38.36 ± 5.7 years. The majority of working women (33%) were post graduate with additional qualifications whereas majority of non-working women were either only graduate (34%) or post-graduate (34.5%). The working women were significantly (x^2=53.45, p=.000) more qualified than that of non-working women. About 50.5% working and 58% non-working women were from joint families. Also, majority of both working (65%) and non-working (52.5%) women had 1 to 4 members in their families and a significant association (x^2 =7.48, p=.024) was observed between the working status of women and their family size. The number of earning members were significantly more (x^2 =12.42, p=000) in working women's family (73%) as compared to that of non-working (58.5%) women. The average monthly income of working women was Rs. 38,125±19,550 and non-working women was Rs. 40,625+20,825. The average income spent on food by Working women was Rs. 8465.5 ±5181.08 and non-working women was Rs.8625±4716.25. The average monthly income spent on processed food for working and non-working women was Rs 1093.5±1126.94 and Rs 1029±972.60 respectively.

The purchasing pattern of *papad* by the working and non-working women is presented in Table 2.

It reveales from Table 2 that consumption of *moong papad* was most popular among both working (59.5%) and non-working (62.5%) category. The next popular *papad* was *udad papad* for both working (45%) and non-working (49.5%) women and was followed by rice *papad* (working 1.5%, non-working 4%), *sabudana papad* (working 1.5%, non-working 2.5%) and potato and sago *papad* (working 0.5%, non-working 2%). An insignificant association was observed between the working and non-working women with respect to consumption of *moong papad* (x^2=0.378, p=0.539), *udad papad*(x^2=1.240, p=0.266), rice *papad*(x^2=.2.337, p=0.126), *sabudana papad*(x^2=0.510, p=0.475), potato and sago *papad*(x^2=1.823, p=0.177).

Saraswat and Jain (2014), analyzed the income effect on consumers' buying preferences for the *papad*. The study revealed significant differences in price, quality, taste and hygienic manufacturing perception that influence buying preference of *papad* for different income groups of consumers. When it comes to fulfill the demand of family members then irrespective of income group respondents gave due consideration to the demand of their family members for buying variety of *papad*.

Brand-wise consumption of *papad*

Market of *papad* is steadily growing and there are national brands like *Lijjat* and *MTR* along with some local brands are also available. Black gram dhal *papad* is the most commonly available *papad* in the local market (Kamat *et.al*, 2009). Parpia (2008) observed that *Lijjat papad* is the largest selling brand in Indian as well as foreign market.The brand-wise consumption of *papad* among working and non-working women is presented in Table 3

Table 3 demonstrates that the consumption of non-branded Rice *papad* was more in non-working women as compared to working women. Consumption of rice *papad* was closely followed by *Moong papad* , *Udad papad, Sabudana papad* and Potato and

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sago *papad* in non-working women as compared to working women.

Among branded *papads, Moong* was the most consumed *papad* from Lijjat, Suruchi and Haldiram in non-working women as compared to working women whereas *Udad papad* was the next most consumed *papad* from Lijjat, Suruchi and Haldiram in working women as compared to non-working women. Only working women consumed *Sabudana* and Potato *papad* from Nilons maybe because lack of time to prepare these products at home. An insignificant association was observed between working and non-working women and purchasing of different brands of *Moong papad* (p=0.870), *Udad papad* (p=0.412), *Sabudana papad* (p=0.317), *Rice papad* (p=0.126) and *Potao and sago papad* (p=0.170).

According to Saraswat and Jain (2014), higher income group of respondents were more likely to agree that branded *Papads* are manufactured in more hygienic environment than the local *Papad.*

Consumption of *Moong Papad*

The demand of *papad* is increasing day-by-day due to urbanization and improvement in the standards of living of the masses especially in the towns/cities. There is a good potential for good quality products at competitive prices in the Indian market. Consumer preference is one of the most important aspects to influence their buying preference for *papad* (Saraswat and Jain, 2014). The consumption pattern of *moong papad* by the working and non-working women is presented in Table 4.

Table 4 shows that the purchasing of *moong papad* was found to be highest in working women for 30-35 and 36-40 years of age groups (16.5%) and in non-working women for 36-40 years of age group (24%). A significant association (p=0.028) was observed between the age group of women and purchasing pattern of *moong papad* in the family.

According to qualification, the usage of *moong papad* was found more in non-working

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graduate (24.5%) and graduate with additional qualification as well as post graduate (13.5%) in working women category. The purchasing of *moong papad* was significantly associated (p=0.000) with educational status of women.

It was further observed that the purchasing of *moong papad* was highest in families with one to four members in both categories (37% working and 36.5% non-working women). With the increase in number of family members, a decrease in purchasing of *moong papad* was observed. However, no significant association (p=0.138) was observed between the number of family members and purchasing pattern of *moong papad*. According to Saraswat and Jain (2014), irrespective of the income group, choice of family members affected the buying behavior of *papads*.

While analyzing the data based on earning members in a family, it was found that most of the consumers were from the families having one to two earning members in both working (49%) and non-working (52%) women. Further it was found that with the increase in number of earning members in a family, the purchasing of *moong papad* decreased. however, an insignificant association (p=0.823) was observed between the number of earning members and purchasing of *moong papad*.

The maximum purchasing of *moong papad* based on income groups was found to be in Rs.>50,000 for both working (23.5%) and non-working women (28.5%). An insignificant association (p=0.626) was observed between the monthly income and consumption of *moong papad.*

Consumption of *Udad Papad*

Papad is one of the Indian traditional food items that can be prepared in advance and served as and when needed. *Papad* is a thin crispy wafer like dish, that goes well with meals and snacks. *Papads* are staple in every Indian's home and are served as an appetizer or accompaniment. Traditionally *papad* is prepared using blackgram flour, rice flour or lentil flour with salt and peanut oil. These ingredients are made into a-tight dough and formed into a thin, circular shape. As the dough is prepared, the *papad* can be seasoned with a variety of ingredients such as chilies, cumin, garlic, black pepper or other spices. Furthermore, *papads* are also made up of potato, sago, rice, jackfruit, bamboo, tapioca, *etc* (Kamat and Yenagi, 2008).The purchasing pattern of *udad papad* by the working and non-working women is presented in Table 5.

Table 5 reveals that the purchasing of *udad papad* was highest in both working (13.5%) and non-working women (12.5%) in 36-40 years of age groups. An insignificant association (p=0.324) was observed between the age group of women and purchasing pattern of *udad papad* in the family.

According to qualification, the usage of *udad papad* was found more in non-working graduate (15%) and post graduate with additional qualification (18.5%) in working women category. The purchasing of *udad papad* was significantly associated (p=0.000) with educational status of women.

It was further observed that the purchasing of *udad papad* was highest in families with one to four members in both categories (21.1% working and 27% non-working women). With the increase in number of family members, a decrease in purchasing of *udad papad* was observed. However, no significant association (p=0.643) was observed between the number of family members and purchasing pattern of *udad papad*.

While analyzing the data based on earning members in a family, it was found that most of the consumers were from the families having one to two earning members in both working (36%) and non-working (35.5%) women. It was also found that as the number of earning members in a family increased, the purchasing of *udad papad* decreased. But no association (p=0.084) was observed between the number of earning members and purchasing of *udad papad*.

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The maximum purchasing of *udad papad* based on income groups was found to be in Rs.>50,000 for both working (15.5%) and non-working women (16.5%). An insignificant association (p=0.544) was observed between the monthly income and consumption of *udad papad.* Saraswat and Jain (2014), stated that price, quality, taste and perception of hygienic manufacturing influences buying preference of *papad* for different income groups of consumers.

CONCLUSION

Increase in the number of working women, ready availability of processed food as compared to earlier times, tremendous improvement in food production and packing technology and more competition due to presence of quite a few international players are some of the key factors that gave processed foods more acceptance in the society and thereby giving impetus to the processed food market in India. It can be concluded from the present study that the consumption of *papad* is wide-spread across both working and non-working women. However, the consumption *papad*differs according to educational status of women, family income andage. Brand plays an important role in the buyer's preference.

Table 1: Demographic Profile of working and nonworking women

Demographic Parameters	Category	Number of Consumers		
		Working N= 200	Non-working N =200	Total
Age(Years)	30-35	63(31.5)	71(35.5)	134
	36 - 40	59(29.5)	70(35.0)	129
	41 - 45	39(19.5)	30(15.0)	69
	46 - 50	39(19.5)	29(14.5)	68
Mean Age M $\pm$ SD	39.39 $\pm$ 6.1		38.36 $\pm$ 5.7	
Qualification	Undergraduate	14(7.0)	5(2.5)	19
	Graduate	28(14.0)	68(34.0)	96
	Graduate+	54(27.0)	33(16.5)	87
	Post Graduate	38(19.0)	69(34.5)	107

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	Post Graduate+	66(33.0)	25(12.5)	91
Family Type	Nuclear	99(49.5)	84(42.0)	183
	Joint	101(50.5)	116(58.0)	217
Family Size	1- 4 members	130(65.0)	105(52.5)	235
	5 -10 members	69(34.5)	91(45.5)	160
	Above 10 members	1(0.5)	4(2.0)	5
Earning Members	1 member	17(8.5)	117(58.5)	134
	2 member	146(73.0)	47(23.5)	193
	above2 members	37(18.5)	36(18.0)	73
Monthly Income(Rs)	Up to 25,000	57(28.5)	43(21.5)	100
	25,000-50,000	77(38.5)	71(35.5)	148
	Above 50,000	66(33.0)	86(43.0)	152
M $\pm$ SD	38,125$\pm$19,550		40,625+20,825	
Monthly Income Spent on food (Rs)	Up to 10,000	162(81.0)	164(82.0)	326
	11000 to 20000	35(17.5)	34(17.0)	69
	Above 20000	3(1.5)	2(1.0)	5
M $\pm$ SD	8465.5$\pm$5181.08		8625$\pm$4716.25	
Monthly Income Spent on Processed Foods (Rs)	Up to 10000	149(74.5)	159(79.5)	308
	11000 to 20000	37(18.5)	28(14.0)	65
	Above 20000	14(7.0)	13(6.5)	27
M $\pm$ SD	1093.5$\pm$1126.94		1029$\pm$972.60	

(Numbers in parenthesis indicates percent cases.)

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Table 2 :Distribution of women consumers according to users and non-users of *papad*

S N	Papad	Working N= 200		Non-Working N=200		x^2	P Value
		User	Non-User	User	Non-User		
1	Moong papad	119(59.5)	81(40.5)	125(62.5)	75(37.5)	0.378	0.539
2	Udad Papad	90(45)	110(55)	79(49.5)	121(60.5)	1.240	0.266
3	Rice Papad	3(1.5)	197(98.5)	8(4)	192(96)	2.337	0.126
4	Sabudana	3(1.5)	197(98.5)	5(2.5)	195(97.5)	0.510	0.475
5	Potato And Sago Papad	1(0.5)	199(99.5)	4(2)	196(98)	1.823	0.177

(Numbers in parenthesis indicate per cent cases.)

Table 3 : Distribution of women consumer according to brand-wise consumption of *papad*, Working women (W) N= 200, Non working women (NW) N= 200)

S N	*Papad*	*Moong*		*Udad*		*Sabudana*		Rice		*Potato and sago papad*	
		W	NW	W	NW	W	NW	W	NW	W	NW
	Non-branded	2(1)	4(2)	1(0.5)	2(1)	2(1)	5(2.5)	3(1.5)	8(4.0)	-	4(2.0)
Branded *Papad*											
1	Agrawal	-	1(0.5)	-	-	-	-	-	-	-	-
2	Haldiram	14(7)	12(6)	6(3)	11(5.5)	-	-	-	-	-	-
3	Lijjat	75(37.5)	81(40.5)	67(33.5)	54(27)	-	-	-	-	-	-
4	Mother's Receipe	3(1.5)	2(1)	2(1)	1(0.5)	-	-	-	-	-	-
5	Suruchi	25(12.5)	25(12.5)	12(6)	11(5.5)	-	-	-	-	-	-
6	Kelkar	-	-	2(1)	-	-	-	-	-	-	-
7	Nilons	-	-	-	-	1(0.5)	-	-	-	1(0.5)	-
	Total *	117	121	89	77	1	-	-	-	1	-
	x^2	2.482		6.101		2.296		2.337		5.023	
	P Value	0.870		0.412		0.317		0.126		0.170	

** includes total of only branded items. Numbers in parenthesis indicate per cent cases.*

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Table 4: Distribution of women consumers according to purchasing pattern of *moong papad*

SN	Demographic characteristics	Women Consumer			Chi Square and p Value
		Working N= 119	Non-Working N= 125	Total	
1	Age in Years				
	30 - 35	33(16.5%)	44(22%)	77	x^2=9.09 p=0.028
	36 - 40	33(16.5%)	48(24%)	81	
	41 - 45	26(13%)	18(9%)	44	
	46 - 50	27(13.5%)	15(7.5%)	42	
2	Qualification				
	Undergraduate	5(2.5%)	2(1%)	7	x^2=32.311 p=0.000
	Graduate	18(9%)	49(24.5)	67	
	Graduate+	27(13.5%)	17(8.5%)	44	
	Post Graduate	27(13.5%)	41(20.5%)	68	
	Post Graduate+	42(21%)	16(9%)	58	
3	Family Size				
	1 to 4 Members	74(37%)	73(36.5%)	147	x^2=3.958 p=0.138
	5 to 10 Members	45(22.5%)	48(24%)	93	
	11 and Above Members	0	4(2%)	4	
4	Earning Members				
	1 to 2 Members	98(49%)	104(52%)	202	x^2=0.390 p=0.823
	3 to 4 Members	19(9.5%)	20(10%)	39	
	5 or More Members	2(1%)	1(0.5%)	3	
5	Monthly Income(Rs.)				
	<25000	27(13.5%)	26(13%)	53	x^2=0.937 p=0.626
	25000 To 50000	45(22.5%)	42(21%)	87	
	>50000	47(23.5%)	57(28.5%)	104	

(Numbers in parenthesis indicate per cent cases.)

Table 5: Distribution of women consumers according to purchasing pattern of *udad papad*

SN	Demographic characteristics	Women Consumer			Chi Square and p Value
		Working N= 90	Non-Working N= 79	Total	
1	Age in Years				
	30 - 35	20(10)	26(13)	46	x^2=3.473 p=0.324
	36 - 40	27(13.5)	25(12.5)	52	
	41 - 45	22(11)	13(6.5)	35	
	46 - 50	21(10.5)	15(7.5)	36	
2	Qualification				
	Undergraduate	6(3)	2(1)	8	x^2=34.99

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	Graduate	11(5.5)	30(15)	41	p=0.000
	Graduate+	20(10)	13(6.5)	33	
	Post Graduate	16(8)	27(13.5)	43	
	Post Graduate+	37(18.5)	7(3.5)	44	
3	Family Size				
	1 to 4 Members	54(27)	43(21.5)	97	x^2=0.883 p=0.643
	5 to 10 Members	35(17.5)	34(17)	69	
	11 and Above Members	1(0.5)	2(1)	3	
4	Earning Members				
	1 to 2 Members	72(36)	71(35.5)	143	x^2=4.948 p=0.084
	3 to 4 Members	14(7)	8(4)	22	
	5 or More Members	4(2)	0(0)	4	
5	Monthly Income(Rs.)				
	<25000	19(9.5)	17(8.5)	36	x^2=1.216 p=0.544
	25000 To 50000	40(20)	29(28.5)	69	
	>50000	31(15.5)	33(16.5)	64	

(Numbers in parenthesis indicate per cent cases.)

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