A Study of Preference for Grocery Shopping Outlets Among the Consumers In Pune And Pimpri-Chinchwad Cities

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Abstract

This research article aims to detect the buying behaviour of grocery goods shopping among the resident of the Pune and Pimpri-Chinchwad cities. In consideration of objectives the probability sampling method was used to based on the exploratory research design. Total 50 samples was choose to understand the underlaying phenomenon of shopping behaviour in respect to two major hypotheses. For testing these hypotheses one sample t test and independent sample t test were applied due to small sampling size through the SPSS 22.0 version. From this analysis it is found that, annual income of Rs.500,000 are less preferable to like price of product. It is seen from one sample t-test that buying behaviour of grocery products by the respondents are relatively equal with very less difference. Whereas it is worth to note that there is no significant association between equal variance of annual income with shopping outlet of shopping grocery goods. At the end it is noted that reasons of buying of grocery goods have positive equal variance with annual income to indicate that income of people have close relation with choice of product to buy during shopping of grocery goods. Finally it is concluded that, buying of grocery goods among the respondents in the Pune and Pimpri-Chinchwad cities are still persistent on the local grocery shops because of retaining its reliability.

Keywords: retail shopping, local kirana store, buying behaviour, grocery shopping, Pune City, Pimpri-Chinchwad city.

1. INTRODUCTION

It is interesting to know that any product or service is good in quality with attractive packing and supported by best promotion activities does not get good market, but it is necessary that the product or services shall be easily available for consumers. Hence, the proper distribution channel is needed for every company to be available to consumers. In today's Vuca world meeting customer demand is really a challenging job for each company. They need to develop successful marketing strategy in a way that all the expectations of the customers are met. The various difficulties in distribution are giving challenges to the experts of marketing in a particular market place. Retailing is major and essential service industry which is directly connected with consumers as all the products are available where and when the consumers need. Hence, the companies doing correct retails strategies are more successful than others.

The consumer decision making of buying any product or services never happen with choice of product or its brand but the choice of retails outlet, it is most important factor (Jobber, 2009). Another scholar make a statement that the countries are developing fast where retailing is mostly conducted in department stores and super markets (Oghojafor, Ladipo & Nwagwu, 2012). The retail choice and support are hardly a single factor phenomenon (Verhallen & de Nooij, 1982; North & Kotze, 2004). Thus, studies on retail patronage and store choice have been done from various directions. Morschett et al, (2005) and Ghosh (1990) they made detailed study about the effects of store attributes or store images on retail patronage. Also, various objective variables like traffic patterns, distance from home, and density of population and size of the store do affect the retail shopping behaviour (Alpert, 1971).

The scholars and thinkers have argued that changes in consumer's social, natural environment and technology do have big impact on the buying patterns, behaviour and shopping behaviour as all the changes directly change the lifestyle of the consumers and they have influence on their socio economic status (Arnould, Price & Zinkhan,2002; North & Kotze,2004). As per the definition and meaning

mentioned on Wikipedia, "Socio-economic status (SES) is an economic and sociological combined total measure of a person's work experience and of an individual's or family's economic and social position in relation to others, based on income, education and occupation". As far as grocery store investment is concerned, though the previous studies (Enis and Paul, 1970; Dunn and Wrigley, 1984) could find that loyalty to be a characteristic of poorer shoppers, a recent study indicates significantly higher incomes and weekly expenditures of the loyal shoppers (McGoldrick and Andre, 1997).

As literature reveals, that the impact of socioeconomic variables on choice of shopping outlets for grocery products women in Pune. The gap is now identified in literature and the responsibility is on this study to find whether the socio-economic profile of women influences their choice of outlets for the purchase of grocery products.

2. MATERIALS AND METHODS

A) Objectives: Following are the main objectives of this article.
1. To study preference of respondents for selecting the grocery shop.
2. To find the relation of various social factors with behaviour of respondents for buying the grocery products.
3. To find the relation of annual income with behaviour of respondents for buying the grocery products.

B) Hypothesis: This article deals to test the following hypothesis.
Hypothesis-1
Null Hypothesis $H_0=$ There is no significant difference between choices for outlet of shopping grocery, frequency of shopping of grocery product and reasons for buying the goods from desired grocery shop.

Alternate Hypothesis $H_1=$ There is definite significant difference between choices for outlet of shopping grocery, frequency of shopping of grocery product and reasons for buying the goods from desired grocery shop.

Hypothesis-2
Null Hypothesis $H_0=$ There is no significant relationship between behaviour of respondent on various grocery goods with annual income.

Alternate Hypothesis $H_1=$ There is definite significant relationship between behaviour of respondent on various grocery goods with annual income.

C) Methodology : In conducting this study, an Exploratory research design is adopted as understanding the selection of grocery outlets by women in Pune , this research design helps in getting more information about the hypothesis which are formed for the study. Respondents used for this study are female residents of Pune city, Pimpri-Chinchwad area. Pune is the City of IT Park and other upcoming industrial area, also it have many recognised Universities. It is considered as education centre of Maharashtra state. Sample size of 50 respondents, employing a convenience sampling approach was involved in the study.

A questionnaire is used as the instrument for data collection. This instrument was designed with multiple-choice or closed-ended questions and has the property of self-administration. Our preference for this design is influenced by the capability of the instrument to generate better response rate than its open-ended counterpart. Data is collected through the combination of purposive and random sampling of probabilistic sampling technique from Pune and Pimpri-Chinchwad cities.

D) Data Analysis Tools: The collected data was tested through the SPSS 22.0 software and descriptive, frequency analysis, one sample t test and independent t test was used to test the hypotheses.
 Under H_0 and H_1, the independent test statistic is

$$t = \frac{\overline{x}_1 - \overline{x}_2}{s_p \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

S_p is an estimator of the common variance of the two samples. It can be calculated as follow

$$s_p = \sqrt{\frac{(n_1 - 1)s_1^2 + (n_2 - 1)s_2^2}{n_1 + n_2 - 2}}$$

Where

$\overline{x}1=$ Mean of first sample
$\overline{x}2 =$ Mean of second sample

n1= Sample size (i.e., number of observations) of first sample

n2 = Sample size (i.e., number of observations) of second sample

s1 = Standard deviation of first sample

s2 = Standard deviation of second sample

sp = Pooled standard deviation

3. RESULT AND DISCUSSION

Table No.1: Number of members in family.

No. of Members in Family	Frequency	Percent
>7	4	8
3-6	41	82
2	4	8
1	1	2
Total	50	100

There are total 50 participants revealed their opinion on grocery shopping choices. During buying grocery products the choices of family members and their numbers are most crucial factors. The more the family members more the choices and amount are directly proportional to type and amount of grocery goods consumed (French, S. A. et al, 2019). In the present study it is found that 82% of respondent have 3-6 members in their family. Therefore, equivalently big family members it helps understand the factors affecting shopping of grocery goods.

Table No.2: Occupational status of respondents.

	Frequency	Percent
Student	14	28
Unemployment	7	14
Civil Servant	1	2
Private Company	18	36
Self-Employed	10	20
Total	50	100

The above table gives occupational status of respondent. Occupation of the person was key detriment during selection of grocery shopping and its access (National Research Council, 2013). In the present work it is found that 36% respondents are working in private

company, 28% are students and 20% are self-employed. From this it is revealed that except student and unemployed (14%) rest of are working. Therefore, this work gives the varied class responses on shopping habits of grocery goods.

Table No.3: Annual income of respondent

Earning in Rs.	Frequency	Percent
No earning	19	38
<500,000	15	30
500,001-1,000,000	13	26
>1,000,001	3	6
Total	50	100

Both personal and family income was affecting the buying of grocery goods. Particularly when income level is succeeds the numbers of family members have varied choices and simultaneously raises more demands of grocery goods (Krueger A.V., 2014). The finding of this study shown that 38% mentioned that presently they don't have any source of earning and they were depending on their family. However, 30% respondents have annual income less than Rs.500,000 while 26% respondent have annual income Rs.500,000-Rs.1,000,000 and 6% have family income more than Rs.1,000,001.

Table No.4: Frequency of buying grocery goods by respondents.

Frequency	Frequency	Percent
Once in month	35	70
Once in fifteen days	4	8
As and When needed	11	22
Total	50	100

Generally, it is observed that buying of grocery goods all together was preferred since beginning of the month and it will be furnished after due consultation of family members their needs and amount to comply whole month (French S.A., et al 2010). However, someone

like to buy the grocery goods as and when it required. Here it is seen that almost 70% respondents buy grocery goods once in month while 22% buy it as and when required. Merely 8% said that they buy it once in fifteen days.

Table No.4: Opinion of consumers on reasons for buying grocery goods.

Factors	Frequency	Percent
Quality of products	29	58
Price of products	4	8
Convenience of location	7	14
Reliability of store	10	20
Total	50	100

Although the grocery goods produce is now campaigned and advertised by many national as well as multinational companies. The grocery goods product was favourable section was based on the various factors. It is very difficult to find the any key factor to make popularity of grocery products (Morganosky, M. A., & Cude, B. J., 2000). The choice of these factor depends on the budget and availability of product in market (Moser A.K., 2016). In the above table it is witnessed that about 58% respondents believed that quality of product was major element during buying of grocery goods while interestingly reliability of store was mostly likely second most factor for buying of grocery goods. Whereas 14% respondent said that convenience of grocery shop also considered during shopping. While 8% respondent believes that price of product also considered for buying the goods from grocery shop. Among all reliability of grocery store and their product depends on the customer satisfaction. The friendly behaviour and varies of grocery goods many not averted consumer to like and trust on particular grocery shop (De Krom, M. P., & Mol, A. P., 2010).

Table No.5: Crosstabulation of reasons for buying grocery goods in different grocery shops.

Reasons for buying grocery products	Which outlet you like to do shopping of grocery goods		
	Supermarket	Regular Kirana Store	Total
Quality of products	19 38.0%	10 20.0%	29 58.0%
Price of products	4 8.0%	0 0.0%	4 8.0%
Convenience of location	3 6.0%	4 8.0%	7 14.0%
Reliability of store	4 8.0%	6 12.0%	10 20.0%
Total	30 60.0%	20 40.0%	50 100.0%

From the above table it is ascertain that 38% respondents buying grocery goods from super market as compare to 10% buying from Kirana store who believed on quality of product; amazingly 12% respondent felt Regular Kirana Store founds most reliable than 8% an factor impacting for buying grocery goods. All 8% respondents like to buy grocery goods from supermarket because they felt that price product is less. Again as far as convenience regular Kirana market was on top most preference among the respondents. One of the striking observations shows that still in the era of online marketing and arriving of mall

culture still regular Kirana store was most reliable part of customer shopping point. This is

also confirmed by Stillerman, J., and Salcedo, R. (2012) in their study.

Table No.6: Crosstabulation of annual income with different grocery shops

Which outlet you like to do shopping of grocery goods	Supermarket	Regular Kirana Store	Total
No earning	11 22.00%	8 16.00%	19 38.00%
Rs. <500,000	10 20.00%	5 10.00%	15 30.00%
Rs. 500,001-1,000,000	7 14.00%	6 12.00%	13 26.00%
Rs. >1,000,001	2 4.00%	1 2.00%	3 6.00%
Total	30 60.00%	20 40.00%	50 100.00%

From the above table it is observed that almost every group of annual income along with buying of grocery goods, there are supermarket was mostly famous accession

place. This may be due to wide range of products available in one roof with having fun of shopping along with family.

Table No.7: Crosstabulation of annual income with reasons for buying grocery goods

Reason for buying the goods from desired grocery shop	Quality of products	Price of products	Convenience of location	Reliability of store	Total
No earning	10 20.0%	1 2.0%	3 6.0%	5 10.0%	19 38.0%
Rs. <500,000	12 24.0%	0 0.0%	2 4.0%	1 2.0%	15 30.0%
Rs. 500,001-1,000,000	7 14.0%	2 4.0%	2 4.0%	2 4.0%	13 26.0%
Rs. >1,000,001	0 0.0%	1 2.0%	0 0.0%	2 4.0%	3 6.0%
Total	29 58.0%	4 8.0%	7 14.0%	10 20.0%	50 100.0%

The earning respondents of annual income more than Rs. 1,000,001 didn't prefer the quality of product during buying of grocery goods as compare to 4% reliability of store. In contrast to this respondent's annual income of less than Rs. 500,000 widely prefer (24%) quality of product than reliability of store (2%). Whereas, annual income of Rs. 500,001-

1,000,000 class 7% respondents opted quality of product and 2% each reliability of store, convenience of location and price of product. From the above statement it is clear that, high level of income doesn't give any preference to quality of product rather than reliability of store during buying grocery products.

Table No.8: Crosstabulation of residence of respondent with buying grocery from different shop

Which outlet you like to do shopping of grocery goods	Supermarket	Regular Kirana Store	Total
Pune City	19 38.0%	11 22.0%	30 60.0%
Pimpri-Chinchwad City	11 22.0%	9 18.0%	20 40.0%
Total	30 60.0%	20 40.0%	50 100.0%

It is realized that respondent staying at Pune city (38%) was more oriented towards supermarket for grocery shopping as compare to 22% respondents staying in the Pimpri-Chinchwad city. This may be because of convenience to connect supermarket more in the Pune city as compare to Pimpri-Chinchwad city.

Table No.9: Crosstabulation of resident of respondent with frequency of buying grocery goods

Frequency of buying grocery	Once in month	Once in fifteen days	As and when needed	Total
Pune City	19 38.0%	4 8.0%	7 14.0%	30 60.0%
Pimpri-Chinchwad City	16 32.0%	0 0.0%	4 8.0%	20 40.0%
Total	35 70.0%	4 8.0%	11 22.0%	50 100.0%

However, frequency of monthly shopping of grocery products in both Pune and Pimpri-Chinchwad city. From this it is clear that there is not certain shifts or changes in frequency of shopping among the respondents staying at the Pune and Pimpri-Chinchwad cities.

Table No.10: Crosstabulation of residence of respondent with reasons for buying grocery goods

Reason for buying the goods from desired grocery shop	Quality of products	Price of products	Convenience of location	Reliability of store	Total
Pune City	18 36.0%	3 6.0%	5 10.0%	4 8.0%	30 60.0%
Pimpri-Chinchwad City	11 22.0%	1 2.0%	2 4.0%	6 12.0%	20 40.0%
Total	29 58.0%	4 8.0%	7 14.0%	10 20.0%	50 100.0%

From the above table it is further revealed that reliability of store was found lower preference for shopping the grocery products among respondents staying at Pimpri-Chinchwad (12%) as well as Pune City (8%). But on contrary this scene was different in case of Quality of products as reason for buying the grocery products among these two cities.

Whereas the earlier finding vouches the convenience of grocery shop was more in Pune City (10%) as compare to Pimpri-Chinchwad city (4%). This was noteworthy to said that Pimpri-Chinchwad city have less supper market

and fails and make sure continent for buying grocery products.

Hypothesis testing- In pertinent to above said hypothesis number 1 following is the discussion given below-

Table No. 11: One-Sample Test of various parameters

| | Test Value = 0 | | | | | |
| | | | | | 95% Confidence Interval of the Difference | |
	t	df	Sig. (2-tailed)	Mean Difference	Lower	Upper
Which outlet you like to do shopping of grocery goods	20.004	49	0.000	1.400	1.26	1.54
Frequency of buying grocery products	12.813	49	0.000	1.520	1.28	1.76
Reason for buying the goods from desired grocery shop	11.134	49	0.000	1.960	1.61	2.31

From the output of table number 11 it is seen that statistically significance difference shows that data was disperse and rejecting the homogeneity. The independent t value for equal variance for 1) Which outlet you like to do shopping of grocery goods was assumed t=20.004, df=49 at significance p=0.000 for is much lesser than the assumed significance value i.e. α=0.05; 2) Frequency of buying grocery products was assumed t=12.813, df=49 at significance p=0.000 for is much lesser than the assumed significance value i.e. α=0.05; 3) Reason for buying the goods from desired grocery shop was assumed t=11.134, df=49 at significance p=0.000 for is much lesser than the assumed significance value i.e. α=0.05.

Henceforth,

Null Hypothesis H_0= There is no significant difference between choices for outlet of shopping grocery, frequency of shopping of grocery product and reasons for buying the goods from desired grocery shop is rejected by 0.05 level of significance.

Whereas

Alternate Hypothesis H_1= There is definite significant difference between choices for outlet of shopping grocery, frequency of shopping of grocery product and reasons for buying the goods from desired grocery shop is accepted.

The discussions of hypothesis number 2 is present below.

Table No.12: Independent Samples Test of responses on shopping grocery goods with annual income

	Annual Income	N	Mean	Std. Deviation
Which outlet you like to do shopping of grocery goods	No earning	19	1.42	0.507
	Rs. <500,000	15	1.33	0.488
Frequency of buying grocery products	No earning	19	1.74	0.933
	Rs. <500,000	15	1.33	0.724
Reason for buying the goods from desired grocery shop	No earning	19	2.16	1.344
	Rs. <500,000	15	1.47	0.990

(B) Independent Samples Test						
		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
Which outlet you like to do shopping of grocery goods	Equal variances assumed	1.025	0.319	0.509	32	0.614
	Equal variances not assumed			0.511	30.699	0.613
Frequency of buying grocery products	Equal variances assumed	5.577	0.024	1.377	32	0.178
	Equal variances not assumed			1.420	31.996	0.165
Reason for buying the goods from desired grocery shop	Equal variances assumed	7.204	0.011	1.664	32	0.106
	Equal variances not assumed			1.725	31.883	0.094

From the output of table number (A) the Mean (M) and Standard Deviation (SD) of responses on shopping of grocery products with annual income of 1) Which outlet you like to do shopping of grocery goods among the respondent have no earning (M= 1.42 SD=0.507) and annual income Rs.<500,000 (M= 1.33 SD=0.488) have less difference,

Whereas in table number __(B) results of Levene's Test of Equality of Variances F=1.025 at significance p=0.319 is much greater than the assumed significance value i.e. α=0.05. Henceforth, Null Hypothesis $H_0=$ There is no significant relationship between behaviour of respondent on various grocery goods with annual income is approved and accepted at 0.05 level of significance. From this it is clear that. There is no relation between preference for choosing out for shopping with grocery goods with annual income.

Simultaneously, 2) Frequency of buying grocery products among the respondent have no earning (M= 1.74 SD=0.933) and annual income Rs.<500,000 (M= 1.33 SD=0.724) have more difference, Whereas in table number __(B) results of Levene's Test of Equality of Variances F=5.577 at significance p=0.024 is much lesser than the assumed significance value i.e. α=0.05. Henceforth, Alternate Hypothesis $H_1=$ There is definite significant relationship between Frequency of buying grocery products with annual income was established. From this it is clear that annual income of the respondent have certain relationship with frequency of buying the grocery goods.

Then, 3) Reason for buying the goods from desired grocery shop among the respondent have no earning (M= 2.16 SD=1.344) and annual income Rs.<500,000 (M= 1.47 SD=0.990) have more difference, Whereas in table number (B) results of Levene's Test of Equality of Variances F=7.204 at significance p=0.011 is much lesser than the assumed significance value i.e. α=0.05. Henceforth, Alternate Hypothesis $H_1=$ There is definite significant relationship reason for buying the goods from desired grocery shop with annual income was found at 0.05 level of significance. From this it is clear that annual income of the respondent has certain relationship with reasons for buying the goods from different grocery shop.

4. CONCLUSION

From the result it is concluded that, respondent is more likely to prefer to buy the grocery of goods once in month. However, there is significant association between annual income with the frequency of shopping. From this it is very much well verse that higher income level may increases the frequency of shopping grocery goods. It also most important conclusion is that respondents of the present work buying the grocery goods because of reliability store rather than the quality of products. This phenomenon was more consistently seen among the resident of Pimpri-Chinchwad city than Pune City. However, in corresponding to the convenience of location the said statement was very true. One more significant conclusion of this work stated that annual income of Rs.500,000 are less preferable to like price of product. Finally, it is seen from one sample t-test that buying behaviour of grocery products by the respondents are relatively equal with very less difference. Whereas it is worth to note that there is no significant association between equal variance of annual income with shopping outlet of shopping grocery goods. At the end it is noted that reasons of buying of grocery goods have positive equal variance with annual income to indicate that income of people have close relation with choice of product to buy during shopping of grocery goods. Finally it is concluded that, buying of grocery goods among the respondents in the Pune and Pimpri-Chinchwad cities are still persistent on the local grocery shops because of retaining its reliability.

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