Factors of Buying Behavior In Food And Grocery Sector: A Study Of Demographic Influence

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Abstract

Purpose-The purpose of this paper is to carry out a research on identification of factors of buying behavior in food and grocery sector and to study influence of demographic profile of customers on these identified factors.

Design/methodology /approach- A quantitative research approach was utilized, collecting data from a self structured questionnaire from 500 consumers of six 6 cities of Punjab. Cluster convenience sampling method has been used for the study. The emerging retail formats considered in the present study are –malls and Standalone stores dealing in food and grocery segment. ANOVA as a statistical tool has been used for causation among demographic variables and extracted factors

Findings- The findings of the paper reveal that thirteen factors of buying behavior were extracted using Exploratory Factor Analysis in food and grocery segment. Further the demographic variables do have a significant influence on the extracted factors of buying behavior.

Originality/value-The results of this study improve our understanding of how the above significant variables affect consumer behaviour more as compared to other variables.

Keywords- Food and Grocery, Consumer behavior, Demographic influence
Paper type –Research

Introduction

The word ‘Retail’ has been derived from the French word ‘retaillier’, which means to cut off a piece or to break bulk. A retailer may be defined as a dealer or trader who sells goods in small quantities. Retailing is the final step in the distribution of merchandise - the last link in the Supply Chain - connecting the bulk producers of commodities to the final consumers. Retailing covers diverse products such as foot apparels, consumer goods, financial services and leisure. A retailer, typically, is someone who does not affect any significant change in the product except breaking the bulk. Retailer is also the final stock point that makes products or services available to the consumer whenever require. Hence, the value proposition a retailer offers to a consumer is easy availabilities of the desired product in the desired sizes at the desired times.

India is currently in the second phase of the retail evolution, with domestic customers becoming more demanding with their rising standard of living and changing lifestyles. Unavailability of quality retail space has been one of the main constraints for development of organized formats in India. In the past, negative yield on leased property and lack of bank funding due to unorganized property market resulted in a dearth of quality retail space in the

country. Therefore, it is opening its horizons and welcoming global brands to enter the country.
Retail has become one of the pillars of the Indian economy. It has emerged as the fourth largest economy in the world in terms of purchasing power parity (ppp) and identified as third most attractive retail destination globally (Kearney, 2010) after USA and China. In India, the retail sector is divided in two broad sectors-unorganized and organized. Earlier retail in India has evolved to support the unique needs of the country. Since 1990's retail scenario in India has seen a major shift from traditional kirana shops to modern formats such as departmental stores, hypermarkets, specialty stores. Though the market has been dominated by unorganized players, the entry of domestic and international organized players is set to change the scenario. An estimated growth of 13 percent annually was recorded (Kokatnur 2009) due to change in changing income profiles, lifestyle of consumers' growing young population, increased credit friendliness and changing taste and preferences. There is going to be immense growth in retail sector due to changing consumer profile and demographics, increasing urbanization, increasing investment in technology and real estate building a world class shopping environment for the consumers. Consumer perception in retailing is more unpredictable and volatile than ever before.

Retailing in India is receiving global recognition and attention and this emerging market is witnessing a significant change in its growth and investment pattern. It is not just the global players like Wal-Mart, Tesco and Metro group are eying to capture a pie of this market but also the domestic corporate behemoths like Reliance, Godrej, Aditya Birla group, and Bharti group too are at some stage of retail development. Reliance, announced that it would invest $3.4 billion to become the country's largest modern retailer by establishing a chain of 1,575 stores. The last couple of years have been rosy for real estate developers and the retailers are finding suitable retail space in prominent locations.

Over the last 6-7 years, Indian consumer market has seen rapid growth in the modern day shopping centers popularly known as 'Malls'. The retail boom in India is likely to push the number of malls in the country, but uncertainty remains about the success of these malls. Another retail format, Standalone store is that store that is not directly connected with the shopping mall, being a single unit. It is small, independent, usually family owned, controlled, and operated business that has a minimum amount of employees, and is typically not franchised, therefore open for business only in a single location.

Among organized segments; food and grocery and apparel are segments growing faster than other segments. The Indian food and groceries sector can be divided into fresh groceries, branded packaged food, personal hygiene products and toiletries and dry unprocessed groceries. Thus, there is a need to study these two prominent retail formats (Malls and Standalone Retail Outlets) dealing in food and grocery sector for identifying factors of buying behaviour and related demographic influences. The present research paper is an attempt for the same.

Literature Review

Previous studies had identified that customer prefer organized retail formats like malls and standalone store due to certain factors such as attractiveness of store, convenience to stores, product range and services provided by retail outlets, offers and after sale services availed by customer, entertainment value. Reasons behind this are services provided by these stores and there is rise in the working population in India which is contributing to the growth of the organized retail sector. As the earning capacity of Indian people is on a rise the demand for

organized retailing is also increasing; opined by Jasveen Kaur (2013)[1] Khan and Mehtab (2013)[2]
Earlier studies by Jhamb & Kiran (2012)[3], Kaur & Sinha (2007)[4] and Goswami et al (2009)[5] analyzed that in modern retail formats consumers' prefer product attributes like improved quality, variety of brands and store attributes like parking facility, trained sales personnel and security. Consumers prefer mall and specialty store to purchase shopping goods like clothing, footwear and jewellery. Studies explored that higher income consumers, disposable income consumers and young generation visit modern retail formats more as compared to older once with low income. Kavita kanaba (2012)[6] examined the mall culture gaining acceptance among consumers. Consumers are preferring mall because of air-conditioned environment, availability of categories of products under one roof, car parking facilities, convenience of shopping food courts, window shopping, entertainment and leisure.

Prasad & Aryasri (2011)[7], Nilsson, Tommy ,Garling,& llnordvall (2015)[8], Pandey, Khare,& Bhardwaj (2015)[9], Trivedi (2008)[10] examined the effect of shopper's socio- demographic, geographic and psychographic dimensions in terms of format choice behavior in the fast growing food and grocery retailing. The findings suggested that shopper's age, gender, occupation, education, monthly household income, family size and distance travelled to store have significant association with retail format choice decisions. Further accessibility by car is the most important grocery store attribute, stores quality ,childcare are most important facilities.

The research studies by Singh & Sahay (2012)[11], Khare, Achtani & Khattar (2014)[12] explored the mall shoppers and identified factors: ambience, physical infrastructure, marketing focus, convenience, and safety and security for visualizing shopping experience and improving convenience and creating ambience. Further, price discounts, gifts, coupons, and rebates are offered by mall retailers to attract store traffic and increase sales. India has seen a rapid mushrooming of shopping malls in the recent past.

Earlier studies by Anandan et al (2006)[13], Singh (2007)[14] and khan et al (2011)[15] Jhamb & Kiran (2012)[16] analyzed that in modern retail formats consumers' prefer product attributes like improved quality, variety of brands and store attributes like parking facility, trained sales personnel and security. Consumers prefer mall and specialty store to purchase shopping goods like clothing, footwear and jewellery. Studies explored that higher income consumers, disposable income consumers and young generation visit modern retail formats more as compared to older once with low income.

Earlier studies examined that generalized attributes like convenience, comfort, safety, shopping area attraction and shopping are mobility have significance in choice of shopping area. Also, effect of shopper's socio- demographic, geographic and psychographic dimensions have significance in terms of format choice behavior in the fast growing food and grocery retailing. The findings suggested that shopper's age, gender, occupation, education, monthly household income, family size and distance travelled to store have significant association with retail format choice decisions. Further accessibility by car is the most important grocery store attribute, stores cape quality ,childcare are most important facilities, opined by McCarthy(1980)[17], Prasad & Aryasri (2011)[18],Sukhwal(2008)[19]

Previous studies had identified consumer buying behavior factors involved in purchase decision in organized sector such as consumer demographics like age, income, occupation, education influence purchase decision. Service and quality play an important role for customer satisfaction and loyalty. Customer prefer organized retailers because of factors such as location, cleanliness, offers, quality and helpful nature of employees which are at disadvantage in kirana stores, Further, one point shopping for all your needs, layout, ambience, value added services, technology, self-service are the dimensions that influence buying behavior as opined by Somasekhae and Saleem (2014)[20],Kainth & Joshi(2008)[21],Khosla(2009)[22] and Tiwari & Abraham(2010)[23]

Rohita Dwivedi (2019)[24] in her study find out that Women are increasingly controlling the purchase decision of the household products like food and grocery and hence marketers are interested in understanding women better. Women can no more be generalized and segmented based on their gender only. Winter & Grebitus (2019)[25] in a study investigated how students of university perceive food quality and attempts to demonstrate how ones individual lifestyle is a useful variable for segmentation purposes. The study revealed that there are two dominant factors influencing the food choice behaviour of young students, that is, food convenience and food certifications, and two main factors affecting the food store selection, that is, food disposability and store convenience. Rohita Dwivedi (2019)[26] in their study established the importance of gender identity within a biological gender and its impact on shopping style. The findings of the study are useful for Food and grocery retailers and marketers to understand their most important customer better – women.

Based on the existing review of literature, it was observed that none of the researchers attempted to study factors of buying behavior for shopping of food and grocery and their relationship with the demographic profile of the customers. Also, no such research was carried out in Punjab region in India. So, the contribution of the present research would aid the marketing strategists to identify prominent factors of buying behavior and also to understand that witch demographic characteristics of the customers can be mulled over while designing strategies.

OBJECTIVES AND METHODOLOGY

From the study of literature and research gaps discussed in the previous section, it was decided to carry out a research on factors of buying behavior in food and grocery sector with following research objectives. Firstly, to identify prominent factors of buying behavior in food and grocery sector and secondly, to study influence of demographic profile of customers on identified factors.

Based on aforesaid objectives, the following hypothesis was formulated for tested.

H_0: There is no influence of demographic profile of customers on identified factors regarding buying behavior of customers in food and grocery sector

The captured demographic profile of customers was categorical in nature and was captured through seven variables i.e. Gender, Age, Marital status, Income, Education, Family size and Profession. Perceived influence of demographics on extracted factors was measured for each demographic factor separately.

Hence following influences have been tested to attain objectives of the study -

- Influence of gender of student on identified factors
- Influence of age of student on identified factors
- Influence of marital status of student on identified factors
- Influence of income on identified factors
- Influence of education of parents on identified factors

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- Influence of family size of student on identified factors.
- Influence of profession on identified factors.

Sampling Plan

Data has been collected through survey method from 6 cities of Punjab i.e. Ludhiana, Amritsar, Jalandhar, Mohali, Patiala and Bathinda. The sampling size is 500 customers and cluster convenience sampling method has been used for the study, clusters being the top 6 cities of Punjab based on the urban population of these cities as per statistical abstract of Punjab, 2014. The respondents in each cluster were picked up on pro rata basis based on the urban population of that city.

According to Public Interest Opinion Research (PIOR)[29], a sample size of 400 produces a likely margin of sampling error falling between 4-6% and doubling it (i.e. 800) will reduce the sample error by 1% (to the 3-4% range) at increased cost and time. Factor analysis requires sample size of at least five times of the number of observations or variables to be analyzed in the study (Hair, Black et al 2012)[30]. So considering all these factors a sample size of 500 customers was decided.

Survey Instrument

The present study is descriptive in nature and is based upon primary data. A self structured questionnaire including questions being measured on ordinal scale (for capturing buying behavior of customers) and nominal scale (for capturing demographic profile of the respondents) have been used for collection of data from customers of Punjab.

Data analysis techniques used

After finalizing the questionnaire and data collection, the data had been classified, tabulated and subjected to the statistical computations. Exploratory Factor Analysis has been used to reduce data and group variables into prominent factors. To study association among demographic profile of participants and factors extracted through factor analysis ANOVA technique was used. Leven's test was used to check homogeneity of variance across groups. So, F or welch statistics were used as indicated by the Leven's test.

Demographic Profile of the Respondents

The demographic characteristics of the respondents (Table1) shows that almost equal respondents were female (50.4%) and male (49.6%). In regard to 'age group', most of them are young people (59.4%) with unmarried (58%). Education profile of the respondents shows that most of them have graduate (42.2%) or post-graduate (35.6%) level qualification followed by professional education (18.4%). Most of the sample consumers i.e. (50.8%) belong to service class followed by professionals (21.2%). It was further revealed that most of the respondents belong to the monthly income group of Rs 20000-30000. The most of the respondents fall in the category 4-5 members (57.6%) against variable 'family size'.

Table -1 Demographic profile of respondents

Demographic		No of respondents	
		Frequency	Percentage
Gender	Male	248	49.6
	Female	252	50.4
Total		500	100.0
Age Group (in years)	Less than 20	28	5.6
	20-30	297	59.4
	31-40	122	24.4
	41-50	44	8.8
	Above 50	9	1.8
Total		500	100.0

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Marital status	Married	184	36.8
	Unmarried	290	58.0
	Others	26	5.2
Total		500	100.0
Education	Matriculation	19	3.8
	Graduate	211	42.2
	Post Graduate	178	35.6
	Professional	92	18.4
Total		500	100.0
Profession	Agriculture	25	5.0
	Business	75	15.0
	Service	254	50.8
	Professional	106	21.2
	Housewife	13	2.6
	Student	27	5.4
Total		500	100.0
Income(per month in Rs)	5000-10000	54	10.8
	10001-20000	133	26.6
	20001-30000	177	35.4
	30001-40000	74	14.8
	>40000	62	12.4
Total		500	100.0
Family Size	1-3	139	27.8
	4-5	288	57.6
	5-6	73	14.6
Total		500	100.0

Data analysis and discussion

The analysis pertaining to extraction of factors and their relationship with demographics of the respondents has been discussed in this section. Exploratory Factor Analysis was applied on the statements related to the buying behavior of the customers regarding purchase of food and grocery products, either in malls or in standalone retail outlets. The statistics related to this analysis has been depicted in Table – 2, given below.

Table – 2 Statistics related to factors extracted

Factor	Factor Name	Reliability (Chronbach Alpha)	Total Igen Values	% of Variance
F1	Facilities	0.773	2.952	6.708
F2	Exchange	0.742	2.709	6.157
F3	Entertainment	0.657	2.276	5.173

F4	Recent trends	0.643	2.170	4.932
F5	Good time pass	0.668	2.148	4.881
F6	Product quality	0.664	2.111	4.798
F7	Ambiance	0.644	2.089	4.748
F8	Convenient cash counters	0.580	2.078	4.722
F9	Approachability	0.555	1.979	4.498
F10	Staff	0.685	1.812	4.119
F11	Supporting Facilities	0.715	1.753	3.985
F12	Customer satisfaction	0.584	1.494	3.395
F13	Credibility	-	1.364	3.101

The results shown in the table demonstrate that total thirteen factors were extracted explaining 61.218% variance (total of per cent variance column) together. The Chronbach Alpha values indicate that the reliability of the factors extracted is satisfactory as the Alpha values of most of the factors is more than 0.6. The Chronbach Alpha of the last factor 'Credibility' is missing, as there was only one statement in this factor. The factors are ranked as per their Eigen values, which indicate their relative importance.

After the extraction of factors ANOVA was used to check if the demographic profile of the respondents had any significant effect on the factors related to buying behavior of the respondents. The discussion related to the results of this analysis has been given in the ensuing paragraphs.

Table 3 - Relationship between Demographic Profile and Factors Extracted

Demographic Variables → / Factors↓	Age	Gender	Marital Status	Education	Profession	Income	Family Size	Number of times remained significant
1.Facilities	0.348 (0.845)	0.009 (0.926)	0.343 (0.849)	1.375 (0.241)	0.868 (0.503)	0.674 (0.610)	0.115 (0.892)	0
2.Exchange	1.381 (0.239)	0.096 (0.757)	0.169 (0.954)	1.437 (0.220)	0.860 (0.508)	1.677 (0.154)	2.458** (0.087)	1
3.Entertainment	1.988** (0.095)	1.020 (0.313)	0.580 (0.677)	1.302 (0.268)	1.118 (0.350)	0.745 (0.562)	1.302 (0.273)	1
4.Recent trends	1.148 (0.333)	3.138** (0.077)	0.788 (0.533)	3.218* (0.013)	1.605 (0.157)	0.084 (0.987)	4.709* (0.009)	3
5.Good time pass	0.506 (0.731)	0.014 (0.905)	1.180 (0.319)	1.419 (0.227)	1.885** (0.095)	0.790 (0.532)	1.471 (0.231)	1
6.Product quality	0.494 (0.740)	2.636 (0.105)	3.009* (0.018)	0.752 (0.557)	0.806 (0.546)	2.039** (0.088)	2.195 (0.112)	2
7.Ambiance	2.150** (0.074)	0.222 (0.638)	1.252 (0.288)	2.453* (0.045)	4.211* (0.001)	6.442* (0.000)	0.651 (0.522)	4
8.Convenient cash counters	2.719* (0.029)	1.662 (0.198)	1.170 (0.323)	1.352 (0.250)	3.819* (.002)	0.795 (0.529)	0.300 (0.741)	2
9.Approachability	1.322 (0.261)	0.189 (0.664)	0.370 (0.830)	1.148 (0.333)	1.199 (0.308)	0.803 (0.524)	0.590 (0.555)	0
10.Staff	1.505 (0.199)	1.945 (0.164)	4.286* (0.002)	2.247** (0.080)	2.242* (0.049)	2.158** (0.076)	0.783 (0.458)	4
11.Supporting Facilities	1.069 (0.371)	1.089 (0.297)	2.045** (0.087)	0.358 (0.838)	2.965* (0.012)	1.803 (0.127)	0.781 (0.459)	2
12.Customer satisfaction	0.607 (.660)	0.869 (0.352)	0.931 (0.446)	1.325 (0.276)	2.137** (0.060)	1.347 (0.254)	0.078 (0.925)	1
13.Credibility	2.592* (0.036)	4.614* (0.032)	2.466* (0.044)	0.905 (0.461)	1.726 (0.127)	2.759* (0.027)	0.397 (0.673)	4
Number of times remained significant	4	2	4	3	6	4	2	25

(Significance values of F/Welch statistics are given in parenthesis)
*Significant at 5% level of significance
**Significant at 10% level of significance

Table - 3 demonstrates that all the demographic variables have significant effect on various factors of buying behavior. 'Profession' of the respondents was the demographic variable which was capable of maintaining a significant relationship with the extracted factors for the most number of times (6). Similarly, factors like 'Ambiance', 'staff' and 'credibility' were affected by the demographics of the respondents for maximum number of times. Thus it can be held that demographics of the respondents do have a considerable amount of causation towards the factors of buying behavior of the respondents and the policy makers must keep in mind the demographic profile of the target customers while designing the marketing strategies for their businesses.

Conclusion

Overall analysis reflects that the formulated null hypothesis was partially rejected for all the demographic variables as each demographic variable was capable of establishing a significant relationship with the extracted factors at least once. We can conclude that 'profession' of the customer plays an important role in buying food and grocery as it is influencing the factors for the most number of times.

It is also evident that factors 'Ambiance', 'staff' and 'credibility' came out to be most sought after factor falling significant for maximum demographic variables. The outcome of this study will give help in creating an effective and engaging marketing plan by the food and grocery companies so that maximum footfall can be insured.

Companies in the business of food and grocery can improve their presence by focusing more on emerged factors. The dependency relationship of factors will also help in projecting strategies and outreach.

References

1. Jasveen Kaur,"Customers' Perception towards Global Retailers influencing the Indian organized Retailing", The Indian Journal of Commerce vol. 66 No.3 july-sept 2013.
2. A.Q Khan,Meriyam Mehtab,"Changing scenario of retail sector in India and global competitiveness",Finance India vol XXVII 2013 pp121-145
3. Deepika Jhamb Ravi Kiran, "Emerging Retail Formats and its Attributes: An Insight to Convenient Shopping" Global Journal of Management and Business Research Vol. 12 Issue 2, version 1.0 Feb. 2012.
4. Sinha, Piyush, and Sanjay Kumar Kar. "An Insight into the Growth of New retail Formats in India." Research and Publication *IIMA* W.P. No.2007-03-04 (2007): 2-25. Print
5. Protima Goswami, Mridula S. Mishra,"Would Indian consumers move from kirana stores to organized retailers when shopping for groceries?", Asia pacific journal of Marketing and Logistics, vol. 21 Issue:1 2009 pp127-143
6. Kavita kanaba, "Change in Consumer Behavior in Surat with introduction of mall" International Journal of Research in Finance & Marketing Vol. 2 Issue 4 April 2012
7. Cherukuri Jayasankara Prasad,Ankisetti Ramachandra Aryasri, "Effect of shopper attributes on retail format choice behavior for food and grocery retailing in India" International Journal of Retail and Distribution Management Vol. 39 Issue 1,2011 pp 68-86
8. Elin nilsson, Tommy garling, Agneta marell, Anna nordvall, "Importance ratings of grocery store attributes", International Journal of Retail and Distribution Management Vol. 43 Issue 1,2015 pp 63-91
9. Shivendra Pandey, Arpita Khare, Preshth Bhardwaj, "Antecedents to local store loyalty influence of culture, cosmopolitanism and price", International Journal of Retail and Distribution Management vol.43 Issue1,2015,pp5-25

10. Manoj K Trivedi "From Traditional Markets to Shopping Malls... A paradigm shift" Published in www.indianmba.com/FC745/fc745.html
11. Harvinder Singh, Vinita Sahay, "Determinants of Shopping experience: Exploring the mall shoppers of national capital region (NCR) of India," International Journal of Retail and Distribution Management Vol. 40 Issue 3, 2012 pp 235-248
12. Arpita khare,Dhren Achtani,Manish Khattar," Influence of price perception and shopping motives on Indian consumers' attitude towards retailer promotion in malls", Asia pacific journal of Marketing and Logistics, vol. 26 Issue:2 2014 pp272-295
13. Anandan, Medapatti Satish, Is brand variety influencing Brand Loyalty, Asia-pacific Business Review, Vol II, No.2, pp.37-44
14. Singh, Harvinder, Stop-over Retailing: An emerging option. Pragyaan, Vol. V, No.1, 4-9pp
15. Khan, Zafar., A study of Buying Behavior and Brand perception of Consumers in shopping malls, VSRD Int. Journal of Business & Management Research, Vol., I(6),2011, 348-361pp.
16. Deepika Jhamb Ravi Kiran, "Emerging Retail Formats and its Attributes: An Insight to Convenient Shopping" Global Journal of Management and Business Research Vol. 12 Issue 2, version 1.0 Feb. 2012
17. McCarthy, P. S. (1980). "A Study of the Importance of Generalised Attributes in Shopping Choice Behaviour", Environment and Planning A, Vol 12 (11), pp 1269–1286
18. Tiwari R.K., Abraham Understanding the consumer behavior towards shopping Malls in Raipur city, International journal of Management & Strategy July-Dec 2010 Vol., I, No.1, 34-41pp
19. Sukhwal, Anita. "An Integrated and Inclusive Model for the Development of Retailing in India." Marketing Mastermind June 2008: 20-24. Print.
20. G.Somasekhaeand S.Saleem, "Shopper's Preference and Problems: A study of unorganized & unorganized Retail Outlets in Chittoor district of Andhra Pradesh" International Journal of Retailing & Rural Business Perspectives" Vol 3 No. 4 2014
21. Gursharan Singh Kainth & Mr. Divakar Joshi "The Perception of Customer & Retailers towards Malls in Jaladhar in Punjab." Published in www.indianmba.com,2008.
22. Surbhi Khosla "Understanding Retail Sector in India: A Journey from Ancient to Modern Era" published in www.indianmba.com/FC1050/fc1050.html
23. Tiwari R.K., Abraham Understanding the consumer behavior towards shopping Malls in Raipur city, International journal of Management & Strategy July-Dec 2010 Vol., I, No.1, 34-41pp
24. Rohita Dwivedi, "Role of Gender Identity of Women Shopping Styles of Food and Grocery" International Journal of Innovative Knowledge Concepts, Vol. 7, Issue 4, April, 2019 pp277-286
25. Sophie T. Winter & Carola Grebitus ,"Effect of Consumers' Personality on Store Brand Choice in Grocery Stores: Insights from France and Germany", Journal of International Food & Agribusiness Marketing, 31:4, 400-416.
26. Rohita Dwivedi,"Impact of Social Role on Shopping Styles of Food and Grocery among Women in Urban", International Journal of Innovative Knowledge Concepts India, Vol.7, Issue 1, January, 2019 pp 236-242.

