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Consumer perception about fast food in India: an exploratory study

Anita Goyal and N.P. Singh Management Development Institute, Sukhrali, India

Abstract

Purpose – This paper seeks to estimate importance of various factors affecting the choice of fast food outlets by Indian young consumers.

Design/methodology/approach – The study applies multivariate statistical tools to estimate importance of various factors affecting the choice of fast food outlets by Indian young consumers. In addition, the authors analysed the consumption patterns, impact of hygiene and nutritional values, and rating of various attributes of McDonald's and Nirula's.

Findings – Results indicate that the young Indian consumer has passion for visiting fast food outlets for fun and change but home food is their first choice. They feel homemade food is much better than food served at fast food outlets. They have the highest value for taste and quality (nutritional values) followed by ambience and hygiene. Three dimensions (service and delivery dimension, product dimension, and quality dimension) of fast food outlets' attributes are identified based on factor analysis results. The two fast food outlets' rating differs significantly on the seven attributes. McDonald's scores are higher on all attributes except "variety". Further, consumers feel that fast food outlets must provide additional information on nutritional values and hygiene conditions inside kitchen.

Practical implications – Fast food providers need to focus on quality and variety of food besides other service parameters. There is need to communicate the information about hygiene and nutrition value of fast food which will help in building trust in the food provided by fast food players.

Originality/value – Estimates importance of various factors affecting the choice of fast food outlets by Indian young consumers.

Keywords Perception, Fast foods, Factor analysis, India

Paper type Research paper

Introduction

Food diversity in India is an implicit characteristic of India's diversified culture consisting of different regions and states within. Traditionally, Indians like to have home-cooked meals — a concept supported religiously as well as individually. However, with times due to increasing awareness and influence of western culture, there is a slight shift in food consumption patterns among urban Indian families. It started with eating outside and moved on to accepting a wide variety of delicacies from world-over. Liberalization of the Indian economy in the early 1990s and the subsequent entry of new players set a significant change in lifestyles and the food tastes of Indians. Fast food is one which gained acceptance of Indian palate after the multinational fast food players adapted the basic Indian food requirements viz. vegetarian meals and selected non-vegetarian options excluding beef and pork totally from their menu.

Multinational fast food outlets initially faced protests and non-acceptance from Indian consumers. This was due to primary perception that these fast food players serve only chicken and do not serve vegetarian meals. In addition, fast food is



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Fast food

From onion rings to double cheeseburgers, fast food is one of the world's fastest growing food types. Fast foods are quick, reasonably priced, and readily available alternatives to home cooked food. While convenient and economical for a busy lifestyle, fast foods are typically high in calories, fat, saturated fat, sugar, and salt[1]. Many other definitions are proposed for fast foods in the literature. A few of these are mentioned below:

- Definition 1. Fast food have been defined by Bender and Bender (1995) as a "general term used for a limited menu of foods that lend themselves to production-line techniques; suppliers tend to specialize in products such as hamburgers, pizzas, chicken, or sandwiches".
- Definition 2. In Data Monitor's (2005) survey the fast food market is defined as the sale of food and drinks for immediate consumption either on the premises or in designated eating areas shared with other foodservice operators, or for consumption elsewhere.
- *Definition 3*[2]. As per "the free dictionary" fast food is "inexpensive food, such as hamburgers and fried chicken, prepared and served quickly".
- Definition 4[3]. According to Merriam-Webster online dictionary fast food is "designed for ready availability, use, or consumption and with little consideration given to quality or significance".

Fast food is a very fast growing industry in world as well as in India especially in urban areas (small and large cities). However, not much research literature is available on fast food preferences of consumers' especially young consumers in India. This article that is based on an exploratory study is an effort to fill that gap in the literature in the context of North India. The objectives of this exploratory study are as follows:

Objectives of the study

- To identify the factors affecting the choice of (Indian youth) consumers for fast food.
- To study the consumption pattern towards fast foods particularly with respect to the frequency of visits and choice of fast food outlets.
- To identify the impact of hygiene and nutritional value of fast foods on consumer purchase decision.
- To study the consumer perceptions about two popular fast food outlets in National Capital Region (NCR), New Delhi.

Fast food industry in India

According to worldwatch.org, India's fast-food industry[4] is growing by 40 percent a year and supposed to generate over a billion dollars in sales in 2005 as per their estimates. Before the entry of multinational fast food outlets, Nirula's was a popular domestic fast food provider for eating-out. Nirula's started with ice-cream parlours and later moved on the range of fast food including burgers, pizzas, sandwiches etc. Established in 1934, Nirula's today is a diversified group having a chain of Elegant Business Hotels, Waiter Service Restaurants, Family Style Restaurants, Ice Cream Parlours, Pastry Shops and Food Processing Plants in India. The chain with over 60 outlets operating in five states successfully caters to the Indian palate of over 50,000 guest everyday for over 70 years[5].

Wimpy was another fast food provider besides Nirula's in Indian market. Wimpy was the only multinational fast food outlet in India before 1990s with one outlet in New Delhi. In the initial years of its operations, Wimpy used to be visited by foreigners in India. Indians were occasional visitors. Today Wimpy has 8 outlets in the capital city New Delhi and it is expanding its menu with Indian dishes with a view to attract Indian consumer.

After the liberalization policy that came in force in 1991, fast food industry grown in India as multinational fast food providers have set up their business either jointly with Indian partners or independently. McDonald's signed two joint ventures — one with Amit Jatia and another one with Vikram Bakshi in April 1995. The first outlet was opened in New Delhi. It has 50 outlets in North India and 76 in total all over India. It aims for 100 outlets by the end of 2006[6].

In 1995, Kentucky Fried Chicken (KFC) also entered the Indian market and opened its first outlet in Delhi. In 1996, Domino's set up base in India by entering into a long-term franchisee agreement with the Bhartia Brothers who had businesses in chemicals and fertilizers. By 2000, Domino's had presence in all the major cities and towns in India. Domino's had grown from one outlet in 1995 to 101 outlets in April 2001. Pizza Hut entered India in June 1996 with its first outlet in Bangalore. Initially, the company operated company-owned outlets and then moved on the franchisee owned restaurants.

McDonald's, Domino's, Pizza Hut and Nirula's are the most popular and frequently visited fast food outlets. KFC has limited outlets and has faced number of problems since entry in India. Besides these, there are Pizza Express and Pizza Corner of which are not so popular. With changing life style and aggressive marketing by fast food outlets, fast food is also becoming popular in small towns; therefore, success of existing fast food outlets and entry of more is inevitable (Gupta, 2003).

Fast food and consumption patterns

According to the findings of the recent online survey from AC Nielson[7, 8] India being at the seventh place, is among the top ten markets for weekly fast food consumption among the countries of Asia-Pacific region. Over 70 per cent of urban Indians consume food from take-away restaurants once a month or more frequently. Survey indicates that Pizza Hut is the most preferred fast food outlet in India. Identifying the drivers for preference of one-brand over another, the survey results indicate that Indians (66 per cent) are amongst the consumers who consider hygiene and cleanliness their most important criterion for selection. A total of 24 per cent of Indians use the quality of

service as a decision making criterion to purchase a fast food brand's offering and 22 per cent rely on their perception of whether a take-away brand offers them healthy food options.

Kara *et al.* (1995) has presented the consumers' perceptions of and preferences for fast-food restaurants in the US and Canada. According to their study, the consumers in the age of 12 to 24 years look for variety, price, delivery service and location in America and for price and novelties in Canada. In the age group of 46 years to above 55 years cleanliness, nutritional value, quality and taste are considered by Americans and preference is given to nutritional value and seating capacity by Canadians in identifying fast food restaurants. In the middle age group of 25 to 45 years, Americans preferred for speed and friendly personnel whereas Canadians looked for speed, quality and service. Brown *et al.* (2000) emphasized the need for nutritional awareness and fast food preferences of young consumers during adolescent years. Davies and Smith (2004) have analysed the importance of nutritional values of fast food and also information printed/disclosed by the fast food providers in London.

In addition to the factors considered for choosing a fast food outlet, there are research studies towards the nutritional value of fast food. A survey of more than 9,000 consumers nationwide in US has shown that about 25 percent of those who eat fast foods and drink sugary, carbonated soft drinks generally consume more calories, fats, carbohydrates, added sugars and proteins than those who do not (Bowman, 2005). According to the study of McNeal *et al.* (1980), respondents felt that meals were moderately nutritious and a good food buy, but they were fattening and contained harmful additives. These findings further indicate that although the consumers perceive the nutritional aspects of fast food meals to be important, they often ignore the aspects in practice. Adams' (2005) paper outlines the bases for establishing fast food industry responsible for obesity as articulated in litigation against fast food chains in US.

In Indian context, there is high concern towards health in twenty-first century. There are health related articles in daily newspapers, and health shows on television. There are special health related magazines that are now very popular. Health related articles do mention to consume more fruits, vegetables, water and to consume less or nil of junk food including fast food being high on fat and calories. Recent news article by Barker (2006) indicates that Indians are facing the problem of obesity and among kinds of food – fast food is one of the reasons for the same. However, there is gap of a particular research in Indian context to have a link between the health problems and fast food consumption. In future, genetically modified food may take the place of fast food of today (Onyango *et al.*, 2004; Sharma, 2005).

Methodology

Sampling unit

Samples for the study consisted of youth segment (indicated as consumer in this study) in the age group of 20 to 27 years. Convenience samples are drawn from NCR region among the college students. Our definition of convenience samples includes only one dimension that is easy access to the sample units other wise it was random selection of individuals from a large number of customers at the fast food outlets. This segment of population was selected due to their adoption of modern lifestyle pattern inclined towards eating outside and socializing with friends. The data were collected using a

structured questionnaire. Data were collected from the targeted customer while they were in malls or in fast food outlets. Questionnaires were handed over to them with a request for filling at the spot. Due care has been taken to reduce possible biases in selecting the young customers for the purpose of data collection by way of asking few questions to them in relation with their eating habits and demographic profile. In addition, a thorough analysis was done for each filled-in questionnaire to see the consistency of data provided by targeted customer specifically for customers who had filled the questionnaire when they were with their peers. In such cases many incomplete questionnaires were found by the authors. Such questionnaires were not considered worthy for analyses and were rejected. The questionnaire had the following dimensions:

- · demographics of the respondent such as age, qualification and marital status;
- behaviour of visiting fast food outlets such as time of the day, getting home delivery, pressure from friends, influenced by nutritional values etc.;
- factors affecting selection of fast food outlets;
- comparisons between fast food outlets on various parameters such as service speed, price, hygiene, seating space, food taste, variety, and ambience etc.;
- · media for source of information for fast food outlets; and
- provision of information sharing on various items such as nutrition, hygiene conditions etc.

Sample size

Since it is an exploratory study, a sample size of 200 thought to be an adequate one. Accordingly 200 respondents from the target population were approached to fill in the questionnaire. Out of 200 only 171 respondent's data were valid.

Selection of fast food outlets

In all there are six fast food outlets in this region that is Nirula's, McDonald's, Pizza Hut, Wimpy, Domino's, KFC, and Pizza Corner as mentioned in the introduction. However, in the sample of this study not many were customers/visitors of Wimpy and Pizza Corner.

Methods of data analysis

Data were subject to statistical analysis such as descriptive statistical analysis and frequency distribution. This analysis was applicable to mainly categorized data. For scaled data, reliability analysis is applied before subjecting the data for testing mean difference using t-test, and carrying out factor analysis (Welles and Sheth, 1971). The reliability analysis was done with a view to identify inconsistencies in the data set. To make comparison of ratings, t-test was applied to the mean scores of two major fast food outlets that are McDonald's and Nirula's. Though, the exploratory study does not consist of large number of variables but still data were subjected to factor analysis as one of the most used tool for exploratory data analysis (Santos and Clegg, 1999). It explains the association occurring between scale level responses.

The food habits of youngsters are influenced by many factors such as environment at home, educational environment, availability and accessibility to fast food providers, and social environment in their surroundings. In addition, emergence of traits of independence in their eating habits, nutritional education, divergence of food preferences at home and at fast food outlets and ambience of place for socializing affects their visit and liking of fast food outlets. The results of data analysis with respect to these issues of food consumption behaviour of youngster's *vis-à-vis* fast food outlets are presented in the following sub-sections.

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Demographics of the respondents

As mentioned above, data were collected with respect to three demographics of the youngsters, i.e. educational background (science stream, commerce and art stream and engineering stream), age (15-20 years, 21-25 years, 25-30 years, and 30-35 years), and marital status. Based on the analysis of data, it was found that none of the respondents except two were married. A total of 92.8 per cent respondents were in 21-25 years age category. It means there were not many variations in case of age and marital status. However, 42.1 percent respondents were from the art and commerce stream and 48 per cent from the engineering stream and the rest were from science backgrounds that do not make a significant difference either way.

Consumer behaviour with respect to timing of visits, preference of a particular fast food outlet, purpose of visit and factors influencing the visits

Frequency distribution presented in Table I indicates that going for snacks is most preferred time for visiting fast food outlet followed by dinner and lunch. Young consumers of fast foods visit fast food outlets one to two times in a week or in a month. It is not a regular behaviour of their eating habits (Table I). Based on multiple answer questions, it can be inferred that McDonald's is the most favoured fast food outlet (Table II) followed by Pizza Hut, Nirula's and Domino's. Most of the young prefer Domino's for home orders followed by Pizza Hut, Nirula's and McDonald's (Table III). Further, based on multiple answer questions it is inferred that their preference to visit a particular fast food outlet is influenced by friends in 93 per cent of cases (Table IV) followed by relatives and other factors.

	Lunch		Snack		Dinner		
No. of times	Frequency	%	Frequency	%	Frequency	%	
Not at all	17	9.9	6	3.5	6	3.5	
Once a month	25	14.6	17	9.9	26	15.2	
1-2 times a month	48	28.1	43	25.1	58	33.9	F
1-2 times a week	20	11.7	55	32.2	38	22.2	
>3 times a week	2	1.2	23	13.5	08	4.7	
Missing data	59	34.5	27	15.8	35	20.5	
_	171	100	171	100.0	171	100.0	

Table I.
Frequency distribution of
the respondents for
visiting fast food outlets
for lunch, snack and
dinner

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Rating of fast food outlets' attributes

With a view to identify major attributes for choosing eating outlets, the data were collected on six attributes of fast food outlets, that is:

- (1) Variety of food.
- (2) Food taste and quality.
- (3) Ambience and hygiene.
- (4) Service speed.
- (5) Price.
- (6) Location.

Data were collected using five point Likert type scale. For the purpose of ranking, attributes mean scores along with standard error and mode values (in brackets) were calculated and presented in Table V. The mean scores indicate that food taste and quality has highest importance in the mind of fast food consumers while selecting a fast food outlet for outings followed by ambience and hygiene, service speed, price, varieties and location of the outlet. Location of the outlet has minimum mode value of three. This clearly indicates that young consumer is attracted more with quality,

Table II.Frequency distribution of the respondents for visiting a particular fast food outlet

Name of fast food outlet	Frequency
Nirula's	69
McDonald's	124
Pizza Hut	108
Dominoes	47

Table III.Frequency distribution of the respondents as per their orders for home delivery from fast food outlets

Name of fast food outlet	Frequency	
No order is placed Nirula's McDonald's Pizza Hut Dominoes Missing values	14 43 18 73 79 17	

Table IV.Distribution of the respondents as per influence on decision regarding selection of the fast food outlet

Individuals influencing decision	Frequency
Spouse	4
Children	1
Friends	159
Relatives	43
Neighbours	4

The data were also subjected to reliability test and factor analysis. The value of reliability coefficient is greater than 0.70, an accepted figure for reliability of data. The value of Kaiser-Meyor-Olkin (KMO), the measure of sampling adequacy is 0.742 and the chi-square value of Bartlett's test of Sphericity is 163.772 with 15 degrees of freedom and significance value of 0.00. The value of KMO suggests that degree of common variance is middling and the values of Bartlett's test are indicative that sample inter-correlation matrix did not come from a population in which inter-correlation matrix is an identity matrix.

Based on the factor analysis, three factors/components emerged to explain 71.306 per cent variation as shown in Table VI. The total variation explained by factor 1 is 27.370 per cent, followed by factor 2 (26.781 per cent) and factor 3 (17.155 per cent). Further, the proportion of variance in each variable accounted (communality) for by the three factors is not the same as presented in Table VI. The factor loading indicates that ambience, service speed, location of the outlet correlates (loads) high on factor 1 (service delivery dimension), varieties and price on factor 2 (product dimension) and food taste and quality on factor 3 (quality dimension).

Consumer perception and factors affecting their visits

Most of the young Indian consumers visit fast food outlets for change and fun as indicated by the results presented in Table VII. However, only 3 per cent feel that fast food outlets offer healthy food. Majority of the consumers believe that fast foods have inadequate nutritional values (Table VIII). Another set of results indicates young

Attributes	Rating scores	
Varieties	3.92 ± 0.690 (4)	
Food taste and quality	4.87 ± 0.340 (5)	
Ambience and hygiene	$4.57 \pm 0.420 (5)$	Table V.
Service speed	$4.07 \pm 0.670 (4)$	Rating of attributes of
Price	4.05 ± 0.730 (4)	fast food outlets for
Location of the outlet	$3.68 \pm 0.760 \ (3)$	choosing eating point

Attributes	Factor 1	Factor 2	Factor 3	Communality	
Varieties	0.164	0.748	0.223	0.636	
Food taste and quality	0.119	0.085	0.959	0.941	
Ambience and hygiene	0.853	0.073	0.102	0.744	
Service speed	0.748	0.219	0.135	0.626	
Price	0.130	0.845	-0.015	0.730	Table VI.
Location of the outlet	0.544	0.523	-0.176	0.601	Factor analysis-rotational
Total variance explained (%)	27.370	26.781	17.155		component matrix and
Cumulative variance explained (%)	27.370	54.151	71.306		communality

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consumers are very particular about nutritional value and hygiene factor of fast food outlets. Young consumers rated hygiene factor very high with a mean score of 4.50 out of 5 (Table IX). These results are based on multi-answer questions.

Comparative analysis of McDonald's and Nirula's

With a view to compare and identify major attributes for choosing the two identified fast food outlets, the data were collected on seven attributes of fast food outlets such as:

- (1) Service speed.
- (2) Price.
- (3) Hygiene.
- (4) Seating space.
- (5) Food taste.
- (6) Variety.
- (7) Ambience.

In this case also data were collected using five point Likert type scale. The data were subjected to reliability analysis, z-test, factor analysis and descriptive statistics. For the purpose of ranking, attributes' mean scores along with standard error and mode values (in brackets) for McDonald's and Nirula's are calculated and presented in Table X. The mean score is highest for service and hygiene followed by price, food taste, ambience, seating space and variety in case of McDonald's. On the other hand, Nirula's highest mean score is for variety followed by hygiene, food taste, price, seating space, ambience and service. Service factor has highest score in case of McDonald's but

Table VII.Distribution of respondents as per reasons for eating out

Reason for eating out	Frequency
For change	118
For fun	084
Saves time	007
Family outing	028

Table VIII.Distribution of the respondents with respect to rating of nutritional values

	Frequency		
Rating of nutritional values	n	%	
Minimal	97	56.7	
Adequate	69	40.4	
Healthy food	5	2.9	
Total	171	100	

Table IX.Rating of hygiene and nutritional values of fast food outlets

Rating of nutritional values and hygiene factors	Rating scores
Nutritional values	2.77 ± 0.079 (3)
Hygiene factors	4.50 ± 0.061 (5)

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The value of Cronbach's alpha (reliability coefficient), Kaiser-Mayor-Olkin (KMO), the measure of sampling adequacy and chi-square value of Bartlett's test of Sphericity are given in Table XI. The values of Cronbach's alpha are greater than 0.70 in both cases that is McDonald's and Nirula's data. The value of KMO suggests that degree of common variance is middling and the values of Bartlett's test are indicative that sample inter-correlation matrix did not come from a population in which inter-correlation matrix is an identity matrix in both cases.

For both fast food outlets, based on the factor analysis three factors/ components emerged to explain variation in the consumers' perception scores. The details of factor loading and variation explained by different factors are presented in Tables XII and XIII. For Nirula's, the variation explained by factor 1 (ambience, seating arrangement and hygiene) is 27.003 per cent, by factor 2 (service and food taste) is 22.172 per cent, and by factor 3 (price and variety) is 18.502 per cent. Cumulative variation explained by all the three factors is 67.678 per cent that is not a very high value. For McDonald's the factor 1 consists of price, food taste, and variety, factor 2 consists of service and hygiene and factor 3 of seating space and ambience. In this case total variation explained is 65.459 per cent which is at par with Nirula's. Although there are similarities in three new dimensions of factor analysis but these are not exactly same. It means the two fast food outlets are having different perception for their service and food attributes in the eyes of young consumers in India.

Attributes	McDonald's	Nirula's	Significance (two-tailed)	t-values	
Service	4.23 ± 0.750 (4)	3.17 ± 0.770 (3)	0.000	14.515	
Price	3.88 ± 0.890 (4)	3.39 ± 0.870 (3)	0.000	5.467	
Hygiene	$4.22 \pm 0.700 (4)$	3.71 ± 0.660 (4)	0.000	8.098	
Seating space	3.51 ± 0.830 (4)	3.35 ± 0.850 (4)	0.047	2.005	
Food taste	3.82 ± 0.800 (4)	3.60 ± 0.840 (4)	0.013	2.510	Table X.
Variety	3.22 ± 0.880 (3)	$3.83 \pm 0.770 (4)$	0.000	-6.987	Comparative rating of
Ambience	$3.73 \pm 0.730 (4)$	3.36 ± 0.740 (3)	0.000	5.132	McDonald's and Nirula's

Fast food outlet	Reliability coefficient – Cronbach's alpha	KMO	Bartlett test	
McDonald's			Chi-square = 187.583 Degree of freedom = 21	
Nirula's	0.7035	0.703	Significance = 0.000 Chi-square = 263.396	Table XI. Reliability coefficient,
	0.7688	0.789	Degree of freedom = 21 Significance = 0.000	KMO and Bartlett test output

Advertising and promotional information

Consumers of fast food were asked to express their views relating to information availability about maintaining hygiene conditions in and around kitchen, around eating areas, about nutritional charts and its impact on their visits to fast food outlets. A total of 83 per cent of the consumers are of the view that fast food outlets must provide information on hygiene conditions. A total of 70 per cent of the consumers pointed out that such information will increase their frequency of visiting fast food outlets. In addition 68 per cent consumers want to have nutritional chart of all food items served is to be displayed by fast food outlets. The most interesting part of the finding is about preference of fast food versus home cooked food. A total of 81 per cent of the consumers prefer home cooked food in comparison to fast food outlets food. The major reasons cited by the consumers are:

- fast food outlets food is heavy for wallet and stomach;
- ambience at home is better;
- home food is more nutritious, delicious, tasty, fresh, clean and healthy for body;
- we know what is prepared and how but not sure about fast food outlets;
- · home food is cooked as per our needs, personal liking;
- fast food outlets food is for fun, change, entertainment of the friends and some time for convenience:
- · fast food outlets food may be harmful; and
- · home cooked food has low fat contents.

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Table XII. Factor analysis-rotational component matrix and communality (Nirula's)

	Attributes	Factor 1	Factor 2	Factor 3	Communality
	Service	0.154	0.812	0.040	0.685
	Price	0.644	0.470	-0.229	0.688
	Hygiene	-0.026	0.736	0.441	0.737
	Seating space	0.329	0.206	0.562	0.467
	Food taste	0.648	0.189	0.284	0.536
1	Variety	0.806	-0.133	0.300	0.758
	Ambience	0.117	0.064	0.833	0.712
	Variance explained (%)	23.290	21.736	20.433	
	Cumulative variance explained (%)	23.290	45.027	65.459	

Table XIII.Factor analysis-rotational component matrix and communality (McDonald's)

As shown in Table XIV, majority of them believe that television is the best choice for advertising for fast food outlets followed by newspapers, cinema halls, magazine and others. Among others, means of advertising suggested by the consumers are:

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- · mobile phones;
- pamphlets in the market and malls and with discount coupons;
- · hoardings on the roads;
- · banners;
- · billboards;
- · reference of friends: and
- · word-of-mouth, etc.

Managerial implications

Fast food providers need to focus on the quality and variety of food besides other service parameters. Study clearly shows that consumers do not visit these outlets primarily for food but for fun, change and social reasons as they prefer home food over the fast food. This is an important parameter to focus to have sustainable growth in the times to come. Further, information about hygiene and nutrition value of the fast food must also be communicated to the consumers. Thus, in nutshell, there is need to focus on the food contents by the fast food marketers.

Concluding remarks

Consumer acceptance of food served by fast food outlets is critically important for the future growth of fast food outlets in any economy. Though the rating of fast food outlets' attributes under study based on mean score is very high but still consumers visit fast food outlets for fun, change or entertaining their friends but certainly not as a substitute of home made food. Comparison of McDonald's and Nirula's indicates a clear cut difference in their mean score of their attributes and also dimensions identified with factor analysis. Consumers demand more and more information related to hygiene issues and nutritional values of the products of fast food outlets. Based on the analysis and results, we can say that with more and more acceptability of fast food outlets and change in life style, competition among fast food outlets with respect to quality of food and customer service will be more prominent in the days to come.

Limitations of the study

This exploratory study has some limitations that however do not liquidate the purpose of the study. Data for the study are collected from National Capital Region (NCR) that includes the capital of India with four surrounding cities well connected with the

Advertising media	Frequency	70.11 XXX
Nowananara	65	Table XIV. Distribution of
Newspapers Television	103	respondents towards
Cinema halls	48	preference for advertising
Magazines	17	media for fast food
Others	32	outlets

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capital. Sampling units are primarily of young unmarried consumers. Further, among the identified fast food providers Wimpy, Pizza Express and Pizza Corner are not frequently visited by the respondents and thus do not represent the analysed data.

Notes

- 1. http://health.allrefer.com/health/fast-foods-info.html
- 2. www.thefreedictionary.com/fast + food
- 3. www.m-w.com/dictionary/fast-food
- 4. www.worldwatch.org/pubs/goodstuff/fastfood/
- 5. www.nirula.com
- 6. www.mcdonaldsindia.com
- "Urban Indian consumers amongst the top 10 most frequent eaters of fast food globally" www.acnielsen.co.in/newsID = 112
- 8. "Survey puts India among top markets for fast food", www.thehindubusinessline.com/2005/01/22/stories/2005012201150400.htm

References

- Adams, R. (2005), "Fast food, obesity and tort reform: an examination of industry responsibility for public health", *Business and Society Review*, Vol. 110 No. 3, pp. 297-320.
- ANI (2006), "Toilet water is cleaner than ice of fast food joints", available at http://in.news.yahoo.com/060217/139/62jvd.html
- Barker, K. (2006), "Fast food greases India's way to fat", *Chicago Tribune*, available at: www. chicagotribune.com/news
- Bender, A.E. and Bender, D.A. (1995), A Dictionary of Food and Nutrition, Oxford University Press, Oxford.
- Bowman, S.A. (2005), "Agricultural research", Science Update, Vol. 53 No. 1, p. 23.
- Brown, K., McIlveen, H. and Strugnell, C. (2000), "Nutritional awareness and food preferences of young consumers", *Nutrition & Food Science*, Vol. 30 No. 5, pp. 230-5.
- Data Monitor (2005), "Fast food in Asia-Pacific: industry profile", available at: www.datamonitor.
- Davies, G.F. and Smith, J.L. (2004), "Fast food: dietary perspectives", Nutrition & Food Science, Vol. 34 No. 2, pp. 80-2.
- Gupta, M. (2003), "Small town India on fast food express", Express: Hotelier & Caterer, September 8, available at: www.expresshotelierandcaterer.com/20030908/foodservice01.shtml
- Kara, A., Kaynak, E. and Kucukemiroglu, O. (1995), "Marketing strategies for fast-food restaurants: a customer view", *International Journal of Contemporary Hospitality Management*, Vol. 7 No. 4, pp. 16-22.
- McNeal, J.U., Stem, D.E. Jr and Nelson, C.S. (1980), "Consumers' nutritional ratings of fast-food meals", *The Journal of Consumer Affairs*, Vol. 14 No. 1, p. 165.
- Nichani, M. (2005), "Urbanites in India junk health, turn fast foodies", *The Economic Times*, India, January 12.
- Onyango, B., Govindasamy, R., Hallman, W., Hang, H.-M. and Pudari, V.S. (2004), "Consumer acceptance of genetically modified food in Korea: factor and cluster analysis", Food Policy Institute, working paper no. 1104-015, The State University of New Jersey, Rutgers, New Brunswick, NJ.

Santos, J.R.A. and Clegg, M.D. (1999), "Factor analysis adds new dimension to extension surveys", *Journal of Extension*, Vol. 37 No. 5, available at: www.joe.org/joe/1999october/index.html

Sharma, D. (2005), "Is industrially produced food the new killer?", April 26, available at: www.zmag.org/Sustainers/Content/2005-04/26sharma.cfm

Welles, W.D. and Sheth, J.N. (1971), "Factor analysis", in Ferber, R. (Ed.), *Handbook of Marketing Research*, McGraw-Hill, New York, NY, pp. 458-71.

About the authors

Anita Goyal is presently working as Associate Professor (Marketing) at Management Development Institute, Gurgaon, India. She has 11 years of experience in academics after spending a year in industry. She has an MBA in Marketing Management from the University of Poona, India and a PhD in Services Marketing and Consumer Behaviour from Jamia Millia Islamia, New Delhi, India. She has exposure of teaching and supervising projects at International level. Anita Goyal is the corresponding author and can be contacted at: agoyal@mdi.ac.in

N.P. Singh is presently working as Professor (Information Technology) at Management Development Institute, Gurgaon, India. Previously, he had worked as Professor (Comp and MIS) with National Institute of Financial Management, Faridabad, Associate Professor with Institute of Rural Management, Anand, Assistant and Associate Professor, and In-charge Computer Center – CCS Haryana Agricultural University, Hisar. He has also worked as Professor (IS and OM) at KIMEP Almaty, Kazakhstan since August 2004 to July 2005. He holds MSc, MS and PhD degrees. He had consulted the projects funded by Asian Development Bank, World Bank, National Dairy Development Board, Karnataka Milk Federation, Mother Dairy New Delhi, North East Council, ATI Washington, etc. He has published more than 50 research papers and guided three PhD students.