Consumer knowledge and attitude towards fast food eating habit in India

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Abstract:
This study was undertaken to explore the trend of having fast food related life styles among the college students, to identify their socio –demographic characteristics and investigate the attitude towards fast food. A Primary Research using multivariate analysis, into fast food eating habits of the youth of India revealed insight and put general hypothesis and perception about fast food consumption to test. It revealed with statically significant data that a large number of youth belonging to multiple age strata's, go outside Mostly 2-3 Times a week but not on any specific day of the week and consume fast food. The frequency of such trips is positively associated with increased expenditure on fast food on such occasions. Age is a clear factor in giving preference for fast food because mostly it tastes good, though the factor goes down in significance as age of the respondents increases. Age is not a factor that affects concern with delivery and quality of fast food. No clear dominating factor appears for the whole population showing why they eat fast food, the factors being as diffused as the data that represents them.

Keywords: Fast food, Consumption of fast food, Consumer Perception about Fast Food

Introduction
Fast Food culture is a vigorously uprising trend among the youngsters. Its impact exists on the whole society, irrespective whether one belongs to lower class, middle class and/or elite class. But, besides this, till today there is no proper definition of Fast Food. According to leading websites, 'Fast Food' is the term given to food that can be prepared and served very quickly while some others describe fast food as quickly prepared, reasonably priced and readily available alternatives to home cooked food. We can find the imprints of its existence at restaurants, stadiums, airports, zoos, schools and universities, on cruise ships, trains and aero planes, at supermarkets, petrol stations and even hospitals. Fast food industry has transformed not only our diet, but also our economy and culture as well. Fast food has now become a regular part of the American diet and on an average, of almost one third of youths in the age group 14-19 years consumes fast food on a typical day. According to TIF, India has seen a massive rise in the consumption of fast food over the recent few years. Various factors have influenced Indian market to lean towards fast food culture involving improved living standard, rapid citification and westernization of Indian culture leading to the vigorous growth. According to the research, the consumption of fast food on a regular basis leads to excess energy intake leading to an increased risk of overweight and obesity. According to WHO, frequent fast food consumption is also a health concern because most fast foods are rich in saturated fats, trans fats, simple carbohydrates and sodium-all of which are nutrients associated with hypertension, cardiovascular disease, and type 2 diabetes. But this is the factor which is associated with every country's generation. The most important thing is staying away from the parent's home that means at hostels, because this life is completely independent and has an increased access to food choices apart from those available at home.

It is also the time when a boy or girl increases their social interactions with peers of similar age and develop different eating habits.

Fast Food Industry in India :

Globalization has created many opportunities and posed many challenges for MNCs who are dealing with dynamic cultural elements in extremely diverse markets. The fast food industry in post liberalized India has grown significantly due to the addition of MNC-operated fast food outlets to the existing Indian operated fast food outlets. The Indian fast food industry has witnessed about 40% growth year after year for more than a decade. MNC giants such as McDonalds, KFC, Pizza Hut, Domino's Pizza and Subway have established their presence in the Indian market since India liberalized its economic policies in the early 1990's. Fast-food industry is expected to double in size between 2013 and 2016, to $1.12 billion, according to the Economist Intelligence Unit. And demographic trends mean it could become the next mega-market for international fast food players. Fast food culture in India has particularly grown over the last ten-fifteen years. Be it burgers or doughnuts, pasta or pizza, the fast food industry of India is one of the ever growing, booming businesses. In India, there are millions of fast food restaurants around, but they never seem to be sufficient and there is always a room for improvement. India's population stands at 1.2 billion, but it has only a little over 2,700 chain fast food outlets, leaving most people unreached, according to Euromonitor International. Fast food has yet to broadly expand beyond the largest cities. The country has 356 million people between the ages of 10 and 24, giving it the world's largest youth population, according to a United Nations report. With more young people entering the workforce daily, growth in the economy, a rising female work force, and increased mobility among consumers, the traditionally difficult Indian market has become hungry for a more diverse menu. The country's fast-food market today is only one tenth the size of China's. But unlike China, which saw a decline in fast-food sales last year, India's market is expected to grow due to changing consumer preferences and the largest youth population on earth. Multinational companies, by and large, have similar products across markets. However, international fast-food chains have had to change this business model completely, to adapt to Indian preferences.

SAME-STORE SALES GROWTH HAS PICKED UP IN MOST CHAINS
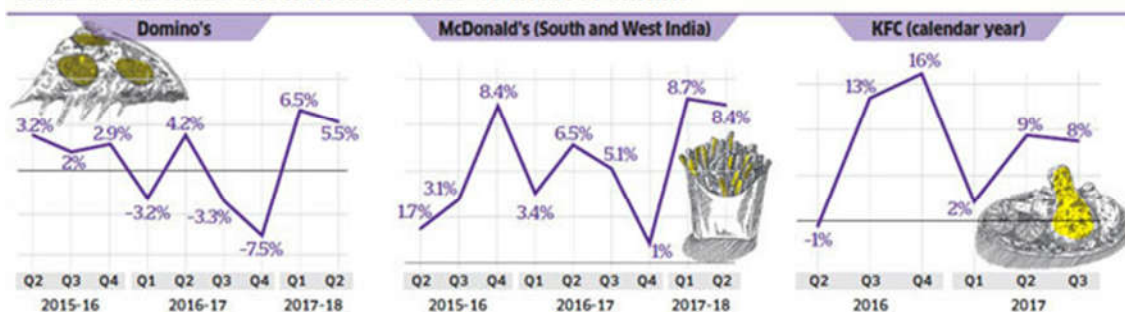
Consumer Perception about Fast Food in India :

The young Indian consumer has passion for visiting fast food outlets for fun and change of taste, but homemade food is their first choice. They feel homemade food is much healthier than the food served at fast food outlets. In 2014, the World Health Organization published a study which claims that deregulated food markets are largely to blame for the obesity crisis, and suggested tighter regulations to reverse the trend. To combat criticism, fast food restaurants are starting to offer more health-friendly menu items. In addition to health critics, there are suggestions for the fast food industry to become more eco-friendly. The chains have responded by "reducing packaging waste".

This project seeks to estimate importance of various factors affecting the choice of fast food outlets by Indian young consumers. The study applies multivariate statistical tools to estimate importance of various factors affecting the choice of fast food outlets by Indian young consumers.

Research Objectives:
The following are the objectives of this research:
- To study the demographic of consumer that prefers eating fast food
- To study the frequency of consuming fast food and the spending patterns of consumer
- To study the reasons of fast food being preferred despite its lack of any nutrition
- To study the perception of the nutritional value of fast food
- To study the correlation between the nutritional concerns and choice of fast food

Research Methodology:-
Data collection
An online survey was conducted in India to collect primary data. A web-based survey was suitable for this study because it could reach a wide audience anytime and anywhere (Neuman, 2004). It was 'the most efficient method of data collection considering their time and constraints', because it had minimal financial impact and could collect responses more accurately (Lokken et al., 2003, p. 128). Also, participants did not reveal their identity when completing the questionnaires. The anonymity of respondents improves the reliability of data collected (Mehta and Sivadas, 1995; Kent and Lee, 1999; Gunn, 2002; Ilieva et al.,2002; Archer, 2003; Parker et al., 2004).

Statistical tests
Descriptive statistics, including frequencies and percentage frequencies, were used to analyse the data. Also, differences between the two variables were analysed using inferential statistical methods, including cross-tabulations and chi-square tests. Only these two statistical tools were used because both dependent and independent variables in this research were treated as nominal data. Hence, the use of other types of correlations was inappropriate (Sheskin, 1997; Hosmer and Lemeshow, 2000; Pallant, 2005; O'Connell, 2006; Tabachnick and Fidell, 2007; Ha H. and Coghill K, 2008).

Demography
The demography of the respondents is shown in Table 1. Four hundred and sixty valid responses were received.
Table 1: Demographics of the sample

Predictor(s)	% (n = 460)
Age (years)	
15-20	11.95
21-25	73.26
26-30	9.13
31-35	5.65
Do you eat fast food?	
Yes	84.13
No	15.86

How much money you spend?	
Below Rs.50	9.56
Rs. 50 to 100	26.52
Rs. 100 to 200	38.04
Above 200	25.86
How often do you eat outside?	
Daily	14.78
2-3 times a week	31.95
Once a week	27.39
1-2 times a month	25.86
When do you usually consume fast food?	
Beginning of the week	1.52
Middle of the week	4.13
Weekends	28.04
No specific Time	66.30
Why do you eat fast food ?	
Tastes good	57.60
Availability of fast food joints	14.78
Advertisements	1.73
Convenience	20.21
other	5.65
Issues that concerns you most about Fast food?	
Hygiene of the restaurant	20.86
Price	15.65
Quality	29.34
Health Factors	34.13

Source: survey data.

Table 1 shows that 73.26 per cent of the respondents were between 21-25 years old, followed by 11.95 per cent belonging to the 15-20 age group. The majority of the respondents were within the age range of 21-25 years old. This indicates that the respondents were mature enough to make independent decisions about eating fast food. Data in Table 1 reveal that 84.13 per cent of the respondents likes to eat fast food. An explanation of the high proportion of respondents likes to eat fast food is that the working population included staff and students of a university.

Research Hypothesis:
1. There is a Positive relationship between Age and Habit to eat Fast Food
2. There is a Positive relationship between Eating Fast food and Eating Outside
3. There is no specific relationship between having Fast food and the timing of having it.
4. There is a relationship between how often someone eats and the Money they spend per meal.
5. Reasons for eating fast food depend on the age of the respondent.
6. Concerns regarding fast food depend on the age of the respondent
7. Reasons for eating fast food are dependent on the concerns of the respondent with respect to fast food restaurants.
8. Perception of nutritional value of fast food is dependent on the age of the respondent.

Hypothesis Testing & Interpretation:-
Hypothesis 1:- There is a Positive relationship between Age and Habit to eat Fast Food
Assumption for all Hypothesis- H0 would be the reverse of H1.
Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	23.199[a]	3	.000
Likelihood Ratio	19.199	3	.000
Linear-by-Linear Association	13.377	1	.000
N of Valid Cases	460		

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 4.13.

According to Chi Square Test researcher found that the Pearson Chi-Square valve is as less as 0.000 which shows that the confidence level is much more than 95% which researcher have considered.

Age of the Respondents * Do you eat at Fast food restaurant?
Cross tabulation Count

		Do you eat at Fast food restaurant?		Total
		Yes	No	
Age of the Respondant	15-20	48	7	55
	21-25	295	42	337
	26-30	26	16	42
	31-35	18	8	26
Total		387	73	460

Interpretation:- The Majority of the respondents were from the age group of 21-25 and a Significant no. of them do have an habit of eating Fast Food. Also of the total 460 respondents 387 do have Fast Food as per the survey.

Hypothesis 2:- There is a Positive relationship between Eating Fast food and Eating Outside
Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	18.069[a]	3	.000

Likelihood Ratio	16.916	3	.001
Linear-by-Linear Association	13.131	1	.000
N of Valid Cases	460		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 10.79.

According to Pearson's Chi-Square test, the confidence level can be seen at more than 95%. Therefore where say that the alternative Hypothesis is right.

Do you eat at Fast food restaurant * How often do you eat outside?
Crosstabulation Count

		How often do you eat outside?				
		Daily	2-3 times a week	once a week	1-2 times a month	Total
Do you eat at Fast food restaurant	Yes	60	133	108	86	387
	No	8	14	18	33	73
Total		68	147	126	119	460

Interpretation:- Out of the 460 respondents, 387 do eat Fast Food and major of the population is located in 2-3 times a week and Once a week. This show a significant number of people eating Fast Food.

Hypothesis 3:- There is no specific relationship between having Fast food and the timing of having it.
Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	28.406[a]	9	.001
Likelihood Ratio	28.119	9	.001
Linear-by-Linear Association	.609	1	.435
N of Valid Cases	460		

a. 6 cells (37.5%) have expected count less than 5. The minimum expected count is 1.03.

The Alpha value of the Pearson Chi Square is 0.001 which shows that the confidence level is much higher than the estimated 95% and the data can be taken for consideration.

How often do you eat outside? * When do you usually consume fast food?
Crosstabulation Count

		When do you usually consume fast food?				
		Beginning of the week	Middle of the week	Weekends	No specific Time	Total
How often do you eat outside?	Daily	3	3	8	54	68
	2-3 times a week	1	7	39	100	147
	once a week	1	3	54	68	126
	1-2 times a month	2	6	28	83	119
Total		7	19	129	305	460

Interpretation: - As the data clearly mentions that there is no specific relation between the timing of having the fast food, the respondents mentioned that they prefer no Specific time for having the fast food. And as shown in the graph all the major of the respondents' i.e 305 people preferred No specific time.

Hypothesis 4:-There is a relationship between how often someone eats and the Money they spend per meal.

Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	24.785ᵃ	9	.003
Likelihood Ratio	24.832	9	.003
Linear-by-Linear Association	1.956	1	.162
N of Valid Cases	460		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 6.50.

The confidence level that researcher want was 95%. I.e. to limit the alpha value to 0.05. Here the Pvalue is 0.03, which shows that the data justify the hypothesis.

How often do you eat outside? * How much do you spend per meal
Cross tabulation Count

		How much do you spend per meal				
		Below Rs.50	Rs. 50 to 100	Rs. 100 to 200	Above 200	Total
How often do you eat outside?	Daily	9	28	22	9	68
	2-3 times a week	9	34	59	45	147
	once a week	10	33	57	26	126
	1-2 times a month	16	27	37	39	119
Total		44	122	175	119	460

Interpretation: - Here from the data researcher found that the maximum amount that a person spends per meal ranges from 100 to 200 Rs. Of which this people eat outside for mostly 2-3 times a week or once a week. This shows the pattern of spending for the respondents and also shows the relation of the same with the frequency.

Hypothesis 5: Reasons for eating fast food depend on the age of the respondent.
α = 5%
Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	33.108ᵃ	12	.001
Likelihood Ratio	31.841	12	.001
Linear-by-Linear Association	20.647	1	.000
N of Valid Cases	460		

a. 7 cells (35.0%) have expected count less than 5. The minimum expected count is .45.

Age of the Respondents * Why do you eat fast food
Cross tabulation Count

	Why do you eat fast food					
	Tastes	Availability	Advertisement	Convenience	other	Total

		good	of fast food joints				
Age of the Respon dant	15-20	38	9	2	6	0	55
	21-25	197	53	4	67	16	337
	26-30	21	4	0	11	6	42
	31-35	9	2	2	9	4	26
Total		265	68	8	93	26	460

Interpretation: Since the p-value (0.001) is smaller than our chosen significance level (α = 0.05), researcher accept the alternate hypothesis H_1. From the cross-tabulation, researcher observe that for all the age groups the main reason for consuming fast food was that it tastes good. 265 out of the 460 respondents (>50%) eat fast food because it tastes good. The ratio of respondents decreases as the age group increases (~70% for 15-20years to ~35% for 31-35years of age). Hence researcher conclude that with 95% confidence level, there is an association between age of the respondent and the reason for eating fast food.

Hypothesis 6: Concerns regarding fast food depend on the age of the respondent.
α = 5%
Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	10.028[a]	9	.348
Likelihood Ratio	10.421	9	.317
Linear-by-Linear Association	.484	1	.487
N of Valid Cases	460		

a. 1 cells (6.3%) have expected count less than 5. The minimum expected count is 4.07.

Age of the Respondents * Issues that concerns you most about Fast food?
Cross tabulation Count

		Issues that concerns you most about Fast food?				Total
		Hygiene of the restaurant	Price	Quality	Health Factors	
Age of the Respondant	15-20	14	8	22	11	55
	21-25	69	54	92	122	337
	26-30	6	5	15	16	42
	31-35	7	5	6	8	26
Total		96	72	135	157	460

Interpretation: Since the p-value (0.348) is very high than our chosen significance level (α = 0.05), researcher accept the null hypothesis H_0. Also, researcher can observe from the cross-tabulation and bar graph that there is no specific pattern between the two variables. Hence researcher conclude that there is not enough evidence to suggest an association between age of the respondent and their concerns relating to fast food restaurants.

Hypothesis 7: Reasons for eating fast food are dependent on the concerns of the respondent with respect to fast food restaurants.
α = 5%
Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	7.128[a]	12	.849
Likelihood Ratio	8.425	12	.751
Linear-by-Linear Association	.006	1	.938
N of Valid Cases	460		

a. 5 cells (25.0%) have expected count less than 5. The minimum expected count is 1.25.

Why do you eat fast food * Issues that concerns you most about Fast food?
Cross tabulation Count

		Issues that concerns you most about Fast food?				Total
		Hygiene of the restaurant	Price	Quality	Health Factors	
Why do you eat fast food	Tastes good	58	40	73	94	265
	Availability of fast food joints	13	14	18	23	68
	Advertisements	0	2	4	2	8
	Convenience	20	13	30	30	93
	Other	5	3	10	8	26
Total		96	72	135	157	460

Interpretation: Since the p-value (0.849) is extremely high than our chosen significance level ($\alpha = 0.05$), researcher accept the null hypothesis H_0. Also, researcher can observe from the cross-tabulation and bar graph that there is no specific pattern between the two variables. Thus researcher conclude that the association between why the respondents eat fast food and their concerns relating to fast food restaurants cannot be established with the collected data.

Hypothesis 8: Perception of nutritional value of fast food is dependent on the age of the respondent.
$\alpha = 20\%$
 Chi-Square Tests

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	12.810[a]	9	.171
Likelihood Ratio	11.512	9	.242
Linear-by-Linear Association	2.626	1	.105
N of Valid Cases	460		

a. 3 cells (18.8%) have expected count less than 5. The minimum expected count is 1.24.

Age of the Respondents * How do you find the nutritional value of fast food
Cross tabulation Count

	How do you find the nutritional value of fast food				
	High	Acceptable	Low	Don't know	Total

Age of the Respondant	15-20	3	13	17	22	55
	21-25	14	119	129	75	337
	26-30	2	17	14	9	42
	31-35	3	7	9	7	26
Total		22	156	169	113	460

Interpretation: Since the p-value (0.171) is smaller than our chosen significance level (α = 0.20), researcher accept the alternate hypothesis H_1. From the cross-tabulation, researcher can observe that for majority of the age groups the perception of nutritional value is either "acceptable" or "low". This corresponds with the total observations with 156 out of 460 respondents finding the nutritional value "acceptable" and 169 out of 460 perceiving it as "low". The age group of 15-20years can be seen as an outlier in this hypothesis. Researcher conclude that with 80% confidence level that there is an association between age of the respondent and their perception of the nutritional value of fast food.

Conclusion :-

From the above statistics, researcher can see that of all 460 respondents, respondents between the ages of 21 and 25 were the majority that eats at fast food restaurants. Researcher also learnt that despite Health Factors and Quality of fast food being the highest concerns among all age groups and knowledge of its low nutritional value, respondents continue to majorly spend 100-200 Rupees per meal, 2-3 times a week at no specific time because it tastes good. Taste is the greatest influencer to food purchases. The tastiness of fast food is what drives the respondents to eat fast food over more nutritional food. A majority of respondents, i.e. 265 out of 460, consume fast food not because of its availability or convenience or even under the influence of advertisements but under the influence of their taste buds. The joy of a tasty meal, rather than a good meal is what rules all age groups, all consumers. Hypothesis was really supportive to result. Researcher think the tests he did went smoothly and researcher had no problems. As the data clearly mentions that there is no specific relation between the timing of having the fast food, the respondents mentioned that they prefer no Specific time for having the fast food. There is a Positive relationship between Age and eating Habit of Fast Food. Researcher conclude that with 95% confidence level that there is an association between age of the respondent and the reason for eating fast food. Hence researcher conclude that there is not enough evidence to suggest an association between age of the respondent and their concerns relating to fast food restaurants. This show a significant number for people eating Fast Food. Researcher also shows the pattern of spending of the respondents and also show the relation of the same with the frequency. Researcher conclude that the association between why the respondents eat fast food and their concerns relating to fast food restaurants cannot be established with the collected data. Researcher conclude that the association between why the respondents eat fast food and their concerns relating to fast food restaurants cannot be established with the collected data conclude that with 80% confidence level that there is an association between age of the respondent and their perception of the nutritional value of fast food.

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