Consumer Behavior of Purchase of Processed Cereal Food Products in Punjab

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Abstract: *Food consumption pattern in India is rapidly changing from unprocessed unbranded low quality food products to processed, packaged unbranded products. The main objective of this paper is to find the factors that lead to purchase of processed food.Research was carried out in three cities of Punjab. A sample of 300 respondents wastaken for research according to chosen methodological research approach the quantitative data was analysed by using confirmatory factor analysis through SPSS software. Research revealed that*
> *a. External influence*
> *b. Health and brand consciousness*
> *c. Quality*
> *are the major factors that influence people to eat Processed Cereal Food.*
***Keywords*:** *Processed Cereal Food, External Influence, Quality, Consumption Pattern*

I.   Introduction

Food is an integral part in everybody's life, be it prepared at home or elsewhere. The world market of processed food has undergone a drastic change, shifting away from the bulk form of processed food to value added consumer packed foods, swinging to changes in food habits, life styles and other market forces.(Rai 2007)

India has witnessed revolutions in Information technology and biotechnology. Now, it's the turn for a revolution in food technology (Paul 2007). Indian food industry which is of Rs 3.6 trillion is decisively surging ahead with a never before spring in its gait. Even sector analysts are predicting yummy times ahead .

Most importantly, the processed food market has changed due to changes in socio-economic conditions, where individuals decide on whether, what, when, where, how and from whom to purchase processed food. Food processing has become very important to encourage forward as well as backward linkages in farming.

India's middle class to spearhead the change: A definite change, hopefully for the better-is happening in the socio-economic conditions of people.

Factors that are likely to fuel rapid growth in demand for processed foods are:
- Changing lifestyles and growth in disposable income rising double-income families and proportion of women in the workforce
- Decreasing prices of processed foods, making them more affordable thereby accessing a much larger market
- Easy availability due to rapid growth in organised retail (> 20% p.a.) with a variety of retail formats being developed.
- Due to busy schedules and unavailability of time on weekdays, the Indian Society is looking for convenient options to fulfill basic needs. This has generated increased demand for processed and convenience foods such as ready-to-eat, ready-to-cook, ready-to-serve and ready to heat categories. (Technopak 2008).
- Rising household incomes, increasing urbanization and the rapid growth of the private-sector and dairy-processing industry may lead to greater demand for value-added, milk-based products, such as processed cheese, table butter and ice cream.
- Fruit consumption will increase at a CAGR of 4.33% for the period spanning from 2007-2011, highest among all the food products.
- Estimated investment of about $22 billion in the next 10 years.

The growth in consumption of processed foods today may be due to an increasing focus on private good attributes, such as health, taste and quality. Demand for Processed foods appears to be primarily sustained by

private good attributes such as health (including food safety attributes) and quality (e.g. taste and freshness attributes). Public good attributes (environmental and animal welfare attributes) are more widely acknowledged, but appear to have less importance for propensity to purchase processed foods. Thus private good attributes, primarily food safety attributes, appear to play an important role in consumers' willingness to pay. This is especially important as food safety attributes appear to play a key role in consumer demand. The household propensity to purchase processed foods increases significantly with the household's stated importance of private good attributes.

The present study is an attempt to meet the following objects:
- To study the present consumer behavior in buying the processed food products.
- To examine the consumers' motives for their choice of foods and to explore changes in demand behavior.
- To study the effect of private good attributes such as health, taste and quality on the consumption of processed food products.

II.   Literature review

E. Carrillo[1] (2011) investigated consumers' factors underlying food choice and their attitudes toward healthy eating. The participants completed a questionnaire composed by two parts. The first one was based on the Food Choice Questionnaire where the mean scores and factor analyses pointed to "sensory appeal," "price" and "convenience" as the most important factors in Spaniards' food choice. The second part of the questionnaire asked about the consumption frequencies of different kind of foods and revealed dairy products as the most consumed ones. Furthermore, foods with specific health-promoting ingredients exhibited low consumption frequency, most likely motivated by the low interest or knowledge about their health benefits. Knowing the main factors underlying consumers' food choice provides important information for having a better understanding of consumers' interest and attitudes toward healthy eating, as well as their concerns about factors involving purchase decision. Knowledge about perceptions toward healthy foods is useful for researchers, producer, manufacturers and health professionals as a first step to design public health policies and consumer education strategies. In addition, the methodology used in the present study with potential application to any kind of population, establishes relationships between consumers perception and food consumption behavior for Spanish consumers.

Efthimia Tsakiridou, Christina Boutsouki, Yorgos Zotos, Kostantinos Mattas[2] (2008) found Greek consumers seem to be informed about environmental and health issues. They seek information about the nutritional value of food and demand more products free from chemical residues. The results show that most consumers associate organic consumption mainly with fruit and vegetables. Although demographics seem to affect attitudes towards organics, their value in explaining actual behaviour is minimal.

Shivkumar (2004) showed that the consumer, irrespective of income groups, was mainly influenced by the opinions of their family members to purchase. Consumers were also influenced by the dealers' recommendation, followed by advertisement.

Kamalaveni and Nirmala (2000) reported that, there is complete agreement between ranking given by the housewives and working women regarding the reasons promoting them to buy Instant Food Products. Age, occupation, education, family size and annual income had much influence on the per capita expenditure of the Instant Food Products.

Rees (1992), in his study revealed that factors influencing the consumer's choice of food were flavour, texture, appearance, advertising, a reduction in traditional cooking, fragmentation of family means and an increase in 'snacking'.etc. Demographic and household role changes and the introduction of microwave ovens had produced changes in eating habits. Vigorous sale of chilled and other prepared foods was related to the large numbers of working wives and single people, who require value convenience. Development in retailing with concentration of 80.00 per cent of food sales in supermarkets was also considered to be important. Consumers were responding to messages about safety and healthy eating. They were concerned about the way in which food was produced and want safe, 'natural', high quality food at an appropriate price.However today, for the

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[1]http://onlinelibrary.wiley.com/doi/10.1111/j.1745-459X.2010.00325.x/abstract?deniedAccessCustomisedMessage=&userIsAuthenticated=false
[2] http://www.emeraldinsight.com/case_studies.htm/case_studies.htm?articleid=1711304&show=html

consumer on the go, eating breakfast cereal is an easier, healthier and quicker option as compared to breakfast options in the past that took time to prepare.

III.   Data & Methodology

The research was aimed at studying the consumer behavior & perception regarding the processed foods industry in urban Punjab. Punjab was divided into three belts i.e. Majha , Doaba and Malwa and based on this division the one city from each belt has been taken i.e. Ludhiana from Majha, Jalandhar from Doaba and Amritsar from Malwa belt. The major considerations for choosing these cities were increasing working population of couples, increasing demand for Processed Cereal Food and variable strata of population as basis of living standard. Different income groups of domestic consumers were chosen to get the information. For this study total samples of 300 consumers were selected on the basis of convenience sampling i.e. 100 from each city/town. Convenience sampling technique was used to conduct this study.

The collected data was analyzed with the help of SPSS and One-sample t test, ANOVA, Chi-square test, Regression and Exploratory Factor Analysis were conducted.

3.1   Reliability Test: Cronbach's Alpha

Reliability is the extent to which a list of scale items would produce consistent results if data collection were repeated (Malhotra, Birks 2007) and is assessed by determining the proportion of systematic variation in a scale. Calculating the Cronbach Alpha coefficient of a scale is the most commonly practiced indicator of internal consistency (Pallant, 2007), with the ideal Cronbach Alpha co-efficient being over 0.7 (Hair et al. 2010). A value of below 0.7 is considered to indicate unsatisfactory internal consistency reliability (Malhotra, Birks 2007). Cronbach's Alpha is used in this research to assess internal consistency reliability of the 22 scale items of the questionnaire.

Table No. - 3.1: Reliability Statistics

Cronbach's Alpha	N of Items
.911	22

The Cronbach Alpha coefficient of the shopping motivations scale of the research, as displayed in is 0.911[3]. Since this table is above the necessary 0.7 Cronbach Alpha ideal, the scale items used have a satisfactory internal consistency and can be deemed reliable statistically.

Factor Analysis:

Factor Analysis is a data reduction statistical technique that allows simplifying the correlational relationships between numbers of continuous variables. Exploratory factor analysis is been used in order to identify constructs and investigate relationships among key interval scaled questions.

Exploratory Factor Analysis

Exploratory Factor Analysis is a general name denoting a class of procedures primarily used for data reduction and summarization (Malhotra, Birks 2007). Exploratory Factor Analysis allows researchers to condense a large set of variables or scale items down into a smaller, more manageable number of factors or components (Pallant, 2007). It does this by summarising the underlying patterns of correlation and looking for groups of closely related or not related items (Tabachnick and Fidell, 2007). It identifies how many factors best represent the scale items in the context of the data collected and which factor each scale item loads most highly onto (Hair et al. 2010). In this research, Principle Component Analysis (PCA) is a key method in the Exploratory Factor Analysis process used to explore the underlying structure of the Indian women shopping motivations and their correlations in the data obtained. In which the original scale items are transformed into a smaller set of linear combinations, with all variance in the data being used. The following data and factor analyses were conducted within the Exploratory Factor Analysis process:

Data Factorability

The first data analysis in the Exploratory Factor Analysis process (Pallant, 2007) is the assessment of its suitability (factorability). Two statistical measures: Bartlett's Test of Sphericity and Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) can be used to investigate the factorability of the data.

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[3] See SPSS Table No - 3.1

Bartlett's Test of Sphericity

The Bartlett's Test of Sphericity should be significant (p<0.05) for the factor analysis to be considered appropriate (Tabachnick and Fidell, 2007; Malhotra, 2007). Since, as displayed in Figure below, the significance of Bartlett's Test of Sphericity in this research is p= 0.000, Exploratory Factor Analysis is appropriate, depending upon the outcome of the KMO sampling adequacy.

Table No. - 3.2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.841
Bartlett's Test of Sphericity	Approx. Chi-Square	3450.196
	Df	231
	Sig.	.000

Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO)

Kaiser-Meyer-Olkin Measure of Sampling Adequacy (MSA) for individual variance was studied. It found sufficient correlation between all the variables.

To test the sampling adequacy, Kaiser-Meyer-Olkin MSA was calculated which is found to be 0.760. It is indicated that that the sample is good enough for sampling.

The overall significance of correlation matrices is tested with Bartlett Test of Sphericity provided support for the validity of the factor analysis of the data set. (Table 3.2)

KMO is a sampling adequacy index (range from 0 to 1), with high values (between 0.6 and 1.0) indicating that Exploratory Factor Analysis is appropriate (Tabachnick and Fidell, 2007). Since, the KMO sampling adequacy of this research data is high at 0.760 and the significance of Bartlett's Test of Sphercity is appropriate, thus the test results provide sufficient evidence to support the appropriate use of Exploratory Factor Analysis on the shopping motivations scale items.

After the standards indicate that data is suitable for factor analysis, Principal Components Analysis (PCA) was employed for extracting the data, which lets determining the factor underlying the relationship between numbers of variables. The total variable Explained box was suggesting that it extracts one factor accounts for 64.2% of the variance of the relationship between variables. In order to 'extract' factors from the data, components that have an eigenvalue of 1 or more have to be identified from the Total Variance Explained extracted using Principle Component Analysis (Pallant, 2007). This determines the number of factors extracted from the data (Kaiser, 1960). The Scree plot is an alternative method of identifying the number of factors to extract via factor analysis (Cattell, 1966) as it displays the sharpest drop in the eigen values of the factors, which highlights that further factors would not explain a significant amount of the variance of scale items. As displayed in Principle Component Analysis of this research data identifies that the first five components have recorded eigen values above 1. (See SPSS Table 3.3)

Loading on factors may be positive or negative. A negative loading points to that this variable has an inverse relationship with the rest of the factors. The upper the loading the more important is the factor. However (Comrey 1973 : 1346) recommended that anything more than 0.44 could be considered salient, with increased loading becoming very important in determining the factor. All the loadings in the research were positive.
Rotation is necessary when extraction technique suggest there are two or more factors. The rotation of factors is calculated to give an idea of how the factors initially extracted differ from each other and to provide a clear picture of which item load on which factor.

There are only five factors, each having Eigen value exceeding 1 for consumption of breakfast cereal food. The Eigen values for five factors were 4.700, 2.798, 2.448, 2.278 and 1.905 respectively. (SPSS Output Table 3.3) The percentage of total variance is used as an index to determine how well the total factor solution accounts for what the variables together represent. The index for present solution accounts for 64.22% of the total variations for compensatory consumption. It is pretty good extraction as it can be economize on the number of factors (from 22 it has reduced to 5 factors) while we have lost 35.78% information content for factors for consumption of processed cereal food in Punjab. The percentage of variance explained by factor one to five for factors for consumption of processed cereal food are 21.362, 12.718, 11.128, 10.355 and 8.661respectively (SPSS Output Table 3.3). SPSS Output Table No. – 3.3 tells us that after five factors are extracted and retained, the communality is 0.669 for variable 1, 0.771 for variable 2 and so on. It means 64% of the variance of variable 1

is being captured by the five extracted factors together. The proportion of variance in any one of the original variables, which is being captured by the extracted factor, is known as communality (Nargundkar, 2002).

Table No. – 3.3: Total Variance Explained

Compo nent	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.008	36.400	36.400	8.008	36.400	36.400	4.700	21.362	21.362
2	2.104	9.564	45.964	2.104	9.564	45.964	2.798	12.718	34.080
3	1.570	7.135	53.099	1.570	7.135	53.099	2.448	11.128	45.208
4	1.364	6.201	59.300	1.364	6.201	59.300	2.278	10.355	55.563
5	1.083	4.924	64.224	1.083	4.924	64.224	1.905	8.661	64.224
6	.869	3.949	68.173						
7	.824	3.746	71.918						
8	.802	3.644	75.562						
9	.724	3.290	78.852						
10	.635	2.885	81.737						
11	.549	2.493	84.230						
12	.512	2.326	86.556						
13	.503	2.288	88.844						
14	.405	1.843	90.687						
15	.354	1.607	92.294						
16	.339	1.543	93.837						
17	.324	1.475	95.312						
18	.275	1.249	96.561						
19	.253	1.149	97.710						
20	.201	.916	98.626						
21	.158	.716	99.342						
22	.145	.658	100.000						

Extraction Method: Principal Component Analysis.

Components Matrix
The Components Matrix is the output of the Exploratory Factor Analysis process that lists the loadings of each of the scale items on each of the nine components. Valid components having scale item loadings of 0.5 and above (Hair et al. 2010) and scale items with the highest loading on that component (Wixom and Todd, 2005). This Components Matrix is subsequently rotated using Varimax Rotation to assist interpretation of its results (Malhotra, 2007), displaying only loadings of 0.5 and above.

Large commonalities indicate that a large number of variance has been accounted for by the factor solution. Varimax rotated factor analytic results for factor consumption of processed cereal food. The five factors have been discussed below:-

3.3   Interpretation of Factors
Each factor needs to be assigned a name or label to characterise it and aid its interpretation (Tabachnick and Fidell, 2007). Each of the shopping motivation factors that have been extracted via Principle Component Analysis in the Exploratory Factor Analysis process of this research data is displayed. The names allocated to each factor are a result of the interpretation of its consumption of processed cereal food factor scale items and are discussed in the following sub-sections.

3.3.1   External Influence
The first factor with the highest Total Variance Explained value has been interpreted as External Influence due to its inclusion of scale items identified and adapted from academic literature surrounding consumption of cereal food External Influence, as displayed in table below

Factor loadings for External Influence[4]

Easy Availability	.539
Influenced Advertisements	.770
Nice Packaging Design	.789
Friends Recommendation	.575
Very Good Promotional Offers	.773
Retailers Influence	.664
Availability of wide range flavours	.740

[4] See SPSS output Table No. – 3.4

The scale items that load onto the Factor 1 are related to the following for External Influence are Easy Availability, Influenced Advertisements, Nice Packaging Design, Friends Recommendation, Very Good Promotional Offers, Retailers Influence and Availability of wide range flavours.

Table No. – 3.4: Rotated Component Matrix[a]

	Component				
	1	2	3	4	5
Increase income					.589
Choice of children					.715
These products are nutritious				.729	
These products are tastier#				.806	
These products are easy to store					.580
Employed Women in home					
Doctors recommendation		.728			
Health consciousness		.697			
Consumption of these products is a modern trend		.634			
Reasonable prices					
Good Quality					
Better Quantity			.746		
Brand Image					
Easy Availability	.539				
Influenced Advertisements	.770				
Nice Packaging Design	.789				
Friends Recommendation	.575				
Very Good Promotional Offers	.773				
Easy to cook					
Retailers Influence	.664				
Long shelf life of the products			.762		
Availability of wide range flavours	.740				

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser No.rmalization.
   a. Rotation converged in

3.3.2   More Health Awareness

More health awareness has been identified as the factor of this research data with the second highest percentage of the Total Variance Explained. This second factor has been interpreted as More health awareness due to its inclusion of scale items identified and adapted from academic literature surrounding consumption of processed cereal food More health awareness as displayed in table below:

Factor loadings for more health awareness[5]

Doctors recommendation	.728
Health consciousness	.697
Consumption of these products is a modern trend	.634

The scale items that load onto the Factor 2 are related to the following more health awareness variables Doctors recommendation, Health consciousness, and Consumption of these products is a modern trend

3.3.3   Increased Quality Consciousness

Increased quality consciousness has been identified as the factor of this research data with the third highest percentage of the Total Variance Explained. This third factor has been interpreted as increased quality consciousness due to its inclusion of scale items identified and adapted from academic literature surrounding consumption of processed cereal food increased quality consciousness, as displayed in table below :

Factor loadings for increased quality consciousness[6]

Better Quantity	.746
Long shelf life of the products	.762

The scale items that load onto the Factor 3 are related to the following increased quality consciousness variables: Better Quantity and Long shelf life of the products.

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[5] See SPSS output Table No. - 3.4
[6] See SPSS output Table No. - 3.4

3.3.4 Taste and Nutrition

Taste and Nutrition has been identified as the factor of this research data with the fourth highest percentage of the Total Variance Explained. This fourth factor has been interpreted as Taste and Nutrition due to its inclusion of scale items identified and adapted from academic literature surrounding consumption of processed cereal food Taste and Nutrition, as displayed in table below:

Factor loadings for Taste and Nutrition[7]

These products are nutritious	.729
These products are tastier	.806

The scale items that load onto the Factor 4 are related to the following Taste and Nutrition variables: These products are nutritious and These products are tastier.

3.3.5 Change in Lifestyle

Change in Lifestyle has been identified as the factor of this research data with the fifth highest percentage of the Total Variance Explained. This fifth factor has been interpreted as Change in Lifestyle due to its inclusion of scale items identified and adapted from academic literature surrounding consumption of processed cereal food Change in Lifestyle, as displayed in table below:

Factor loadings for Change in Lifestyle[8]

Increase income	.589
Choice of children	.715
These products are easy to store.	.580

The scale items that load onto the Factor 5 are related to the following Change in Lifestyle variables: Increase income, Choice of children and These products are easy to store.

IV. Results and Discussion

Exploratory factor analysis was conducted and the names allocated to each factor are a result of the interpretation of its consumption of Processed Cereal Food factor scale items and are the following:-

a) **External Influence**: The first factor with the highest Total Variance Explained value has been interpreted as External Influence due to its inclusion of scale items identified and adapted from academic literature surrounding consumption of cereal food External Influence. The scale items that load onto the Factor 1 are related to the following external influence variables - Easy Availability, Influenced Advertisements, Nice Packaging Design, Friends Recommendation, Very Good Promotional Offers, Retailers Influence and Availability of wide range flavours.

b) **More health awareness:** More health awareness has been identified as the factor of this research data with the second highest percentage of the Total Variance Explained. This second factor has been interpreted as more health awareness due to its inclusion of scale items identified and adapted from academic literature surrounding consumption of Processed Cereal Food more health awareness. The scale items that load onto the Factor 2 are related to the following health awareness variables - Doctors recommendation, Health consciousness, and Consumption of these products is a modern trend.

c) **Increased quality consciousness:** Increased quality consciousness has been identified as the factor of this research data with the third highest percentage of the Total Variance Explained. This third factor has been interpreted as increased quality consciousness due to its inclusion of scale items identified and adapted from academic literature surrounding consumption of Processed Cereal Food increased quality consciousness. The scale items that load onto the Factor 3 are related to the following increased quality consciousness variables - Better Quantity and Long shelf life of the products.

d) **Taste and Nutrition:** Taste and Nutrition has been identified as the factor of this research data with the fourth highest percentage of the Total Variance Explained. This fourth factor has been interpreted as Taste and Nutrition due to its inclusion of scale items identified and adapted from academic literature surrounding consumption of Processed Cereal Food Taste and Nutrition. The scale items that load onto the Factor 4 are related to the following Taste and Nutrition variables - These products are nutritious and these products are tastier.

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[7] See SPSS output Table No. - 3.4
[8] See SPSS output Table No. - 3.4

e) Change in Lifestyle: Change in Lifestyle has been identified as the factor of this research data with the fifth highest percentage of the Total Variance Explained. This fifth factor has been interpreted as Change in Lifestyle due to its inclusion of scale items identified and adapted from academic literature surrounding consumption of Processed Cereal Food Change in Lifestyle. The scale items that load onto the Factor 5 are related to the following Change in Lifestyle variables: Increase income, Choice of children and these products are easy to store.

Further Confirmatory Factor Analysis was conducted using AMOS and three factor model (see Fig 1) was constructed that revealed that

        a.   **External Influence**
        b.   **Health and Brand Consciousness**
        c.   **Quality**

are the major factors that influence people to eat Processed Cereal Food
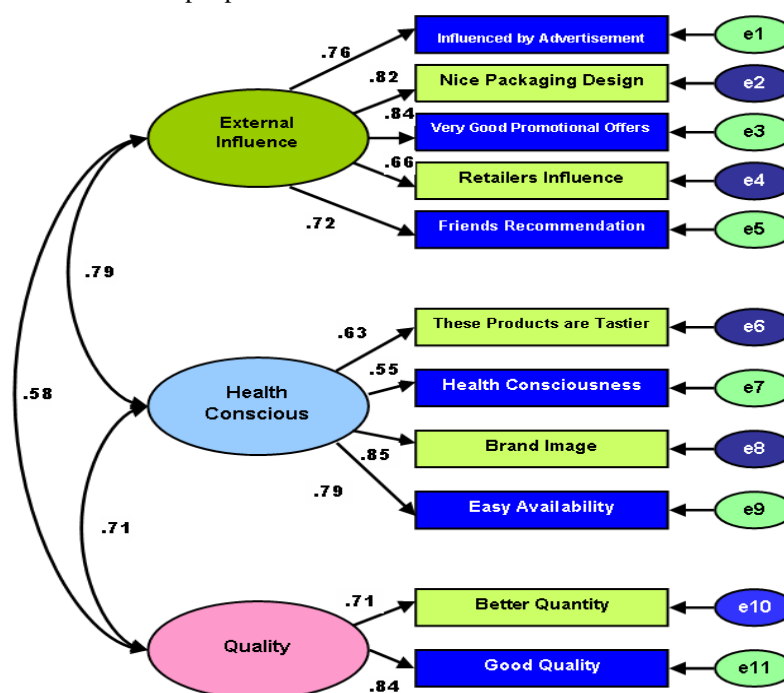

Fig – 1   Three Factor Model

The major implications to the marketers given are as follows:-

V.   Taste and Preferences

       It has been found in the findings that the age group less than 25 years and 26-35 years age consume more Processed Cereal Food than other age groups and females in Punjab Females consume more cereal process foods than males. Jackson and McDaniel(1985) in their research, titled "food shopping and preparation: psychographic differences of working wives and housewives" explores various psychographic characteristics exhibited by working wives as opposed to housewives in food shopping and food preparation by comparing responses of 246 working wives and 181 housewives to several food shopping and preparation related psychographic statements. Results have revealed that working wives have a greater dislike for food shopping and cooking and also exhibited a tendency to be less concerned with the impact of their food shopping and preparation activities on other family members vis a vis non working wives. The marketers should consider the consumption, taste and preferences of these age groups for designing marketing strategies for Processed Cereal Food and they should design the promotional campaign so that it may specifically cater to these groups. Further they should also increase their focus on males and other age groups by promoting it as a healthy option so that it can lead to increase in awareness and consumption of Processed Cereal Foods. The results coincide with the results obtained by the Kubendran and Vanniarajan (2005) while studying the change in consumption pattern due to changes in food habits. Nayga and Capps(1986-1998)l in their study titled " Determinants of Food away From Home Consumption: An Update" identified several socio economic and demographic characteristics of individuals who have consumed food away from home using 1987-1988 national food consumption survey. The analysis was performed using logit analysis. The significant characteristics have been race, ethnicity,

employment status, food stamp participation, seasonality, household size, age, income and frequency of consumption.

VI. Quantity and Quality

In the same line, the study conducted by Nandagopal and Chinnaiyan (2003) on preference of soft drinks in rural Tamil Nadu revealed that the product quality followed by retail price were the deciding factors of brand preference Since Singles and Graduates Post Graduates consume more cereal process food and family size 2-4 members and 4-6 members consume cereal process food, marketers should specifically work on the packaging strategy as the quantity in which cereal foods is bought will be substantially effected due to the size of the family and marital status. Therefore marketers can introduce larger packaging's i.e 2 kg and 5 kg and it will lead to lowering of price as well. As educated people are consuming Processed Cereal Foods taste, quality and nutritional values aspects count more, hence, manufacturers should plan marketing strategy focusing on Quality and nutritive value of Processed Cereal Products. It had been found that students and service class people working mostly in Private Sector consume more cereal process food than Government employees so manufacturers need to work towards making these products affordable and competitive. As the people in this group's spending habit purely depend upon the income they earn. It has also been found that people with higher income consume more Processed Cereal Food and for these people price is not an issue but in this segment also it has been found that the monthly spending on processed cereal products is around Rs 2000 to Rs 4000. So to make these products more affordable and competitive the manufacturers need to improve their supply chain management which will enable them in cutting the cost of storage and transportation and thus reducing the MRP. Regmi and Dyck in their study titled,"Effects of Urbanization on Global Food Demand" have analysed how urbanization accompanied by economic development and income growth has not just drastically impacted consumption patterns in developed countries but significantly impacting developing countries as well

VII. "Healthy breakfast cereal foods" or "Healthy instant breakfast"

People consume cereal process food in breakfast rather than in lunch or dinner and they prefer cornflakes and porridge/Dalia than oats or Muesli. So the marketers in Punjab should promote the Processed Cereal Food as an alternative to Traditional Breakfast and design their promotional campaigns focusing on health benefits of processed cereal foods and that they can be easily and instantly cooked as compared to traditional foods. Awareness of other cereal foods like oats and Muesli should also be increased in Punjab. Lowell (2004) in his work, "The food industry and its impact on increasing global obesity: a case study" has looked at the current crisis which is set to engulf both the developed and developing world using a variety of reliable sources like WHO (World health organization) and IOTF(International obesity task force). The author has plotted the global increase in obesity over the last two decades and points out the problems associated with childhood, adolescent and adult obesity with growing liking for fast food and snacking. The author has also pointed a finger at the food industry particularly the "fast-food industry", which over the few decades has perfected various marketing techniques which have been designed to make us eat more food (supersizing) and targeting more on schools and children. Despite huge obesity epidemic, fat consumption however is very high in the western world and is increasing in countries undergoing industrial development (Lands etal.,1990;Trichopoulou & Efstathiadis, 1989). A lot of international research on changing consumption patterns and its impact on the western world have revealed that there is a relationship between the consumption of food, particularly fast food and the state of obesity

VIII. Advertisement and Unique Selling Prepositions-Health and Quality

Processed Cereal Foods are no longer impulse purchase products and they are seen as healthy and time saving. Consumer also buys such products only if it catches his eye at the outlet. So players/manufacturers need to stress on attractive packaging and sales promotion. Further, these firms should increase their advertisements through mass media, particularly television and newspapers and it could lead to better sales of processed cereal foods. If any marketer wants to launch a new range of Processed Cereal Food, they should take the following unique selling prepositions to succeed in Punjab. They should promote health aspects of these foods and should work a lot on the quality of these Processed Cereal Foods. Huang and Howarth(1996) in their research titled "Structural Changes in the Demand for Food in Asia"have projected that Asian countries are undergoing transformations in their economies backed by rapid urbanization and this trend would continue in the years to come. As a result changes in tastes and lifestyles backed by urban living will significantly impact food demand and consumption patterns. Goyal and Singh(2007) in their research work,titled "Consumer Perceptions about fast food in India:an exploratory study" have explored that the young Indian consumer has passion for visiting fast food outlets for fun and change but they feel that home made food is better than convenience fast food .Their findings have revealed that consumer acceptability for fast food in the future would be decided only by the quality of food and customer service

IX. Less Price Sensitive

In the same line, the study conducted by Nandagopal and Chinnaiyan (2003) on preference of soft drinks in rural Tamil Nadu revealed that the product quality was the deciding factors of brand preference The people of Punjab were found more health and quality conscious while choosing Processed Cereal Food. Price was less important to them. This sends a message to the manufacturers of Processed Cereal Food, that they cannot compromise on quality of the products in view to offer the products at cheaper prices, particularly to such cosmopolitan consumers. Product loyalty to Processed Cereal Food is an important factor in such Processed Cereal Food. It has been found that if there is any change in the price people will not shift to traditional food but they may look for other retailers which are offering more discounts on same products. They may shift to other Brand if it offers better Quality at competitive Price. Any new firm entering into the market should study these things very critically. The quality aspects coupled with competitive price will only lead to change of brands. The innovative firms should keep these points in mind while entering into such type of business.

References

Journal Papers:
[1]   Rai Mangala and Bawa A.K (2007),Profitability a key determinant, The Hindu Survey of Indian Agriculture
[2]   Paul Angshuman (2007) When Biz gets Yummy. 4P's Business and Marketing, Aug 17-30
[3]   Knowledge Paper (2008), " Land of Opputunities : The Food Industry in India" A report by MOFPI,GOI, FICCI, Technopak.
[4]   E. Carrillo, P. Varela, A. Salvador, S. Fiszman (2011) Main Factors Underlying Consumers' Food Choice: A First Step For The Understanding Of Attitudes Toward "Healthy Eating" Journal of Sensory Studies Volume 26, Issue 2, pages 85–95, April 2011.
[5]   Efthimia Tsakiridou, Christina Boutsouki, Yorgos Zotos, Kostantinos Mattas, "Attitudes and behaviour towards organic products: an exploratory study", Emerald 36, (2008)
[6]   Shivkumar, Journal, 2004, Buying behaviour of consumers towards the products produced by SSI units. Indian Journal of Marketing, 34 (3) : 19-25.
[7]   Kamalaveni, D. and Nirmala, 2000, Consumer behaviour in instant food products. Indian Journal of Marketing, 30 (5-7) : 12-18
[8]   Rees, A.M., 1992, Factors influencing consumer choice. Journal Soc. of Dairy Tech., 45 (4) : 112-116.
Book
[9]   Marketing Research: An Applied Approach, Naresh K. Malhotra, Dr. David F. Birks, Pearson Education, Limited, 2007
[10]   SPSS Survival Manual: A Step by Step Guide to Data Analysis using SPSS for Windows, Julie Pallant, (3rd edition, Open University Press, 2007)
[11]   Multivariate Data Analysis (7th Edition) ,Joseph F. Hair Jr (Author), William C. Black (Author), Barry J. Babin (Author), Rolph E. Anderson (Author) ,ISBN-10: 0138132631 • ISBN-13: 9780138132637 ©2010 • Prentice Hall
[12]   Marketing Research: An Applied Approach, Naresh K. Malhotra, Dr. David F. Birks, Pearson Education, Limited, 2007
[13]   Marketing Research: An Applied Approach, Naresh K. Malhotra, Dr. David F. Birks, Pearson Education, Limited, 2007
[14]   SPSS Survival Manual: A Step by Step Guide to Data Analysis using SPSS for Windows, Julie Pallant, (3rd edition, Open University Press, 2007)
[15]   Using Multivariate Statistics (6th Edition), Barbara G. Tabachnick (Author), Linda S. Fidell (Author),Pearson Education
[16]   Multivariate Data Analysis (7th Edition) ,Joseph F. Hair Jr (Author), William C. Black (Author), Barry J. Babin (Author), Rolph E. Anderson (Author) ,ISBN-10: 0138132631 • ISBN-13: 9780138132637 ©2010 • Prentice Hall
[17]   SPSS Survival Manual: A Step by Step Guide to Data Analysis using SPSS for Windows, Julie Pallant, (3rd edition, Open University Press, 2007)
[18]   Using Multivariate Statistics (6th Edition), Barbara G. Tabachnick (Author), Linda S. Fidell (Author),Pearson Education
[19]   Marketing Research: An Applied Approach, Naresh K. Malhotra, Dr. David F. Birks, Pearson Education, Limited, 2007
[20]   Using Multivariate Statistics (6th Edition), Barbara G. Tabachnick (Author), Linda S. Fidell (Author),Pearson Education
[21]   SPSS Survival Manual: A Step by Step Guide to Data Analysis using SPSS for Windows, Julie Pallant, (3rd edition, Open University Press, 2007)
Journal Papers:
[22]   The application of electronic computers to factor analysis. Kaiser, Henry F. Educational and Psychological Measurement, Vol 20, 1960, 141-151. doi: 10.1177/001316446002000116
[23]   Cattell, R. B. (1966). The Scree test for the number of factors. Multivariate Behavioral Research, 1, 245-276.
Book
[24]   A First Course in Factor Analysis, Comrey, Andrew L.,Published by Academic Press, NY, 1973
Journal Papers:
[25]   Nargundkar, Rajendra (2002). Marketing Research: Text and Cases, Tata McGraw Hill, New Delhi.
Book
[26]   Multivariate Data Analysis (7th Edition) ,Joseph F. Hair Jr (Author), William C. Black (Author), Barry J. Babin (Author), Rolph E. Anderson (Author) ,ISBN-10: 0138132631 • ISBN-13: 9780138132637 ©2010 • Prentice Hall
Journal Papers
[27]   WIXOM BH and TODD PA (2005) A theoretical integration of user satisfaction and technology acceptance. Information Systems Research 16(1), 85–102.
Book
[28]   Marketing Research: An Applied Approach, Naresh K. Malhotra, Dr. David F. Birks, Pearson Education, Limited, 2007
[29]   Using Multivariate Statistics (6th Edition), Barbara G. Tabachnick (Author), Linda S. Fidell (Author),Pearson Education
Journal Papers:
[30]   Jackson, Ralph W & McDaniel, Stephen W & Rao, C P, 1985. " Food Shopping and Preparation: Psychographic Differences of Working Wives and Housewives," Journal of Consumer Research, University of Chicago Press, vol. 12(1), pages 110-13, June.
[31]   Kubendran, V. and Vanniarajan, T., 2005, Comparative analysis of rural and urban consumers on milk consumption. Indian Journal of Marketing, 35 (12) : 27-30.

[32]   Nayga, Rodolfo M. and Capps,Oral (1992)"Determinants of Food Away from Home Consumption: An Update", Agribusiness,Vol.8,Iss.6,pp.549-559

[33]   Nandagopal, R. and Chinnaiyan, P., 2003, Brand preference of soft drinks in rural Tamil Nadu. Indian Journal of Marketing, 33 (1) : 14-17.

[34]   Lowell,Janathan(2004), "The food industry and its impact upon increasing global obesity: a case study",British Food Journal,Vol.106,Iss.2/3,pp.238-248.

[35]   Lands, W. E. N., Hamazaki, T., Yamazaki, K., Okuyama, H., Sakai, K., Goto, Y. & Hubbard,V. S. (1990) Changing dietary patterns. American Journal of Clinical Nutrition ,51,991–993

[36]   Huang, Jikun & Bouis, Howarth E., 1996. "Structural changes in the demand for food in Asia," 2020 vision briefs 41, International Food Policy Research Institute (IFPRI).

[37]   Anita Goyal, N.P. Singh, (2007) "Consumer perception about fast food in India: an exploratory study", British Food Journal, Vol. 109 Iss: 2, pp.182 – 195

[38]   Nandagopal, R. and Chinnaiyan, P., 2003, Brand preference of soft drinks in rural Tamil Nadu. Indian Journal of Marketing, 33 (1) : 14-17.