

# **Chapter 3**

## **Methodology**

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### **METHODOLOGY**

The present research was undertaken with the aim to study the food shopping-orientation of the consumers of selected packaged foods (SPFs) i.e ready-to-eat soups, ready-to-use pastes, and ready-to-eat meals. The study focused upon the psychographics of the consumers, as would relate to their food shopping-orientations (FSOs). The psychographic variables, included; lifestyle orientations, personality traits, market beliefs, attitude and perceived risks. Research questions were mainly concerned with the relationships between the selected dependent and independent variables that were studied through descriptive research design.

This chapter deals with the methodological steps adopted for the present investigation. The research procedures followed have been described under the following subheads.

- 1.0 Research Design
- 2.0 Conceptual Framework and Variables under Study
- 3.0 Operational Definitions
- 4.0 Selection of the Sample
- 5.0 Interview Schedule
- 6.0 Pilot Study
- 7.0 Scoring the responses of the instrument
- 8.0 Data Collection Procedure
- 9.0 Analysis of Data

#### **1.0 RESEARCH DESIGN**

The present study aimed to investigate the food shopping-orientation of the consumers of selected packaged foods and their psychographics inclusive of their lifestyle orientation, personality traits, market beliefs, attitude, and perceived risks. The study described the state of affairs as they existed, thus descriptive research design was considered as the most suitable research design for the present study.

## **2.0 CONCEPTUAL FRAMEWORK AND VARIABLES UNDER STUDY**

### **2.1 Conceptual framework**

In order to procure a deeper and meaningful understanding of food shopping-orientation of the consumers of SPFs, an attempt was made to identify various possible variables which have their contribution towards it. The available literature and related researches, on consumer behavior guided the investigator to organize the selected variables into causative relationships. These linkages had been illustrated in the proposed conceptual framework (Fig.1).

The fundamental premise of the study was that different consumers have different concerns and motives while shopping, reflecting their orientation towards shopping. These concerns of the consumer, while shopping, are influenced by their psychological make-up. The present research was conceptualized on the basis of the above stated premise. The study focused on one of the crucial aspects of consumer behavior, i.e, his/her shopping-orientation. The theoretical framework conceptualized for this study is an attempt to unfold the major contributing factors in the food shopping-orientation of the consumers of selected packaged foods.

It was hypothesized that food shopping-orientation of the consumers differed with regard to certain demographic and psychographic attributes. The personal and family variables exerted a direct influence on food shopping-orientations of the consumer and this is indicated through continuous lines with arrows between the concepts in the framework (Fig.1). The personal variables included the age, education level, and occupational status; and the family variables included the family type, family size, family life-cycle stage, and socio-economic status. An explicit influence of psychographic variables, namely; lifestyle orientations, personality traits, market beliefs, attitude, and perceived risk on food shopping-orientation of the consumers has also been depicted in the framework. Moreover, the conceptual framework also revealed the influence of demographic variables on the consumption pattern of selected packaged foods, in relation to the frequency, duration, and quantity of consumption of selected packaged foods.

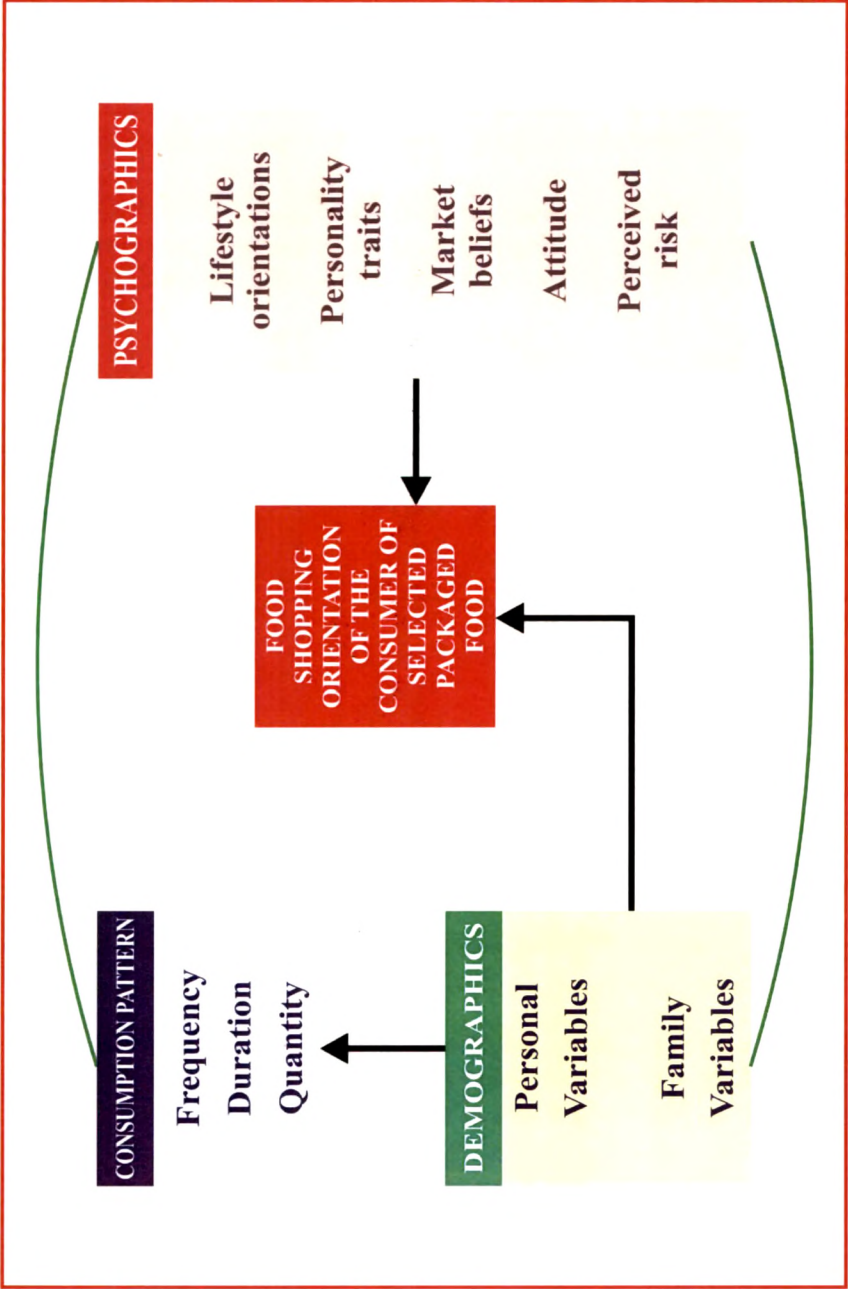


Fig.1: Schematic representation of the hypothesized relationship amongst the selected variables

Further, it was thought essential to segment the market of selected packaged foods to identify the potential target consumers, and to customize the marketing and promotion strategies. Market segments were developed based on the consumption pattern of the consumers of selected packaged foods. The market segments were evolved through a critical assessment of the selected attributes of the consumers that constituted the respective segments. A need was felt to develop an understanding of the make-up of the identified market segments. The study attempted to develop profile for each market segment with regard their demographics, food shopping-orientation, and psychographics of the consumers that belong to the respective segment.

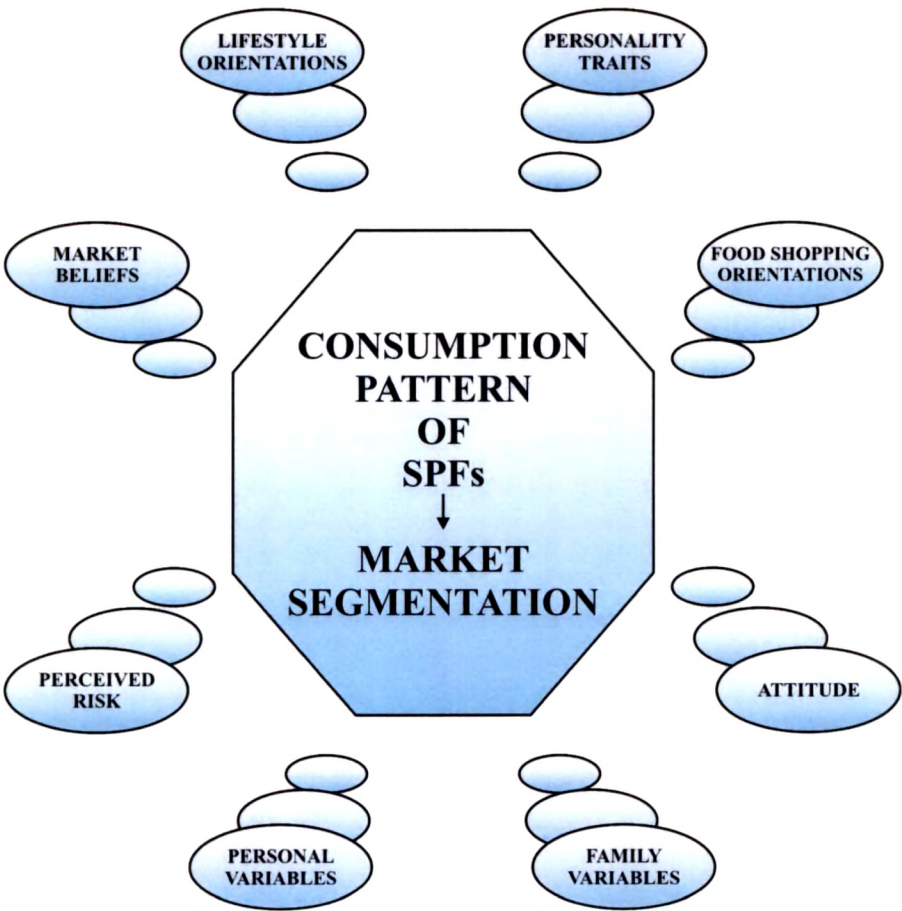


Fig. 2:

## **2.2 Variables under study**

### **2.2.1 *Independent Variables***

#### **2.2.1.1 Personal variables**

- i. Age
- ii. Education level
- iii. Occupational status

#### **2.2.1.2 Family variables**

- i. Family type
- ii. Family size
- iii. Family life-cycle stage
- iv. Socio-economic status

#### **2.2.1.3 Psychographic variables**

- i. Lifestyle orientations
- ii. Personality traits
- iii. Market beliefs
- iv. Attitude towards selected packaged foods
- v. Perceived risk

### **2.2.2 Dependent Variable**

#### **2.2.2.1 Food shopping-orientation**

## **3.0 OPERATIONAL DEFINITIONS**

Certain terms were operationally defined for measurement of variables of this investigation which are stated as follows

### **3.1 Consumer**

An individual who buys products or services for personal use and not for manufacture or resale. A consumer is someone who can make the decision whether or not to purchase an item at the store, and has the ability to choose between different products and suppliers. With respect to the present study, an individual who consumes at least any one of the selected packaged foods is the consumer.

### **3.2 Selected Packaged Foods**

The commercially prepared food that is partly or completely prepared already and that is sold frozen or in cans, packages etc, so that it can be prepared quickly and easily, designed for ease of consumption. With regard to the present study, three selected convenience foods, namely ready-to-eat soups, ready-to-use pastes, and ready-to-eat meals encompass the convenience food products at large, collectively labeled as selected packaged foods (SPFs.)

### **3.3 Food shopping-orientation**

Shopping orientation refers to the consumer's style or way of shopping. It is the general approach one takes to shop at a store. It reflects the basic concern/motive / pattern of a shopper while shopping. It varies with regard to individuals and different products over time, and with changing situations. For the present study, shopping orientation was studied with respect to quality, consumers cost saving tendency, convenience concern, brand loyalty, and other concerns of the consumers related to the SPFs.

### **3.4 Psychographic Variables**

Psychographic are the characteristics of an individual that describe them in their psychological and behavioral make-up. It involves the use of psychological, sociological, and anthropological factors. It is the term that consumer researchers use to describe consumers in terms of personality traits and concept of self, attitude towards product classes and brands, lifestyle, values system, and a few other aspects. With respect to the present study psychographics described the consumers of selected packaged foods with respect to their lifestyle orientations, personality traits, market beliefs, attitude towards SPFs, and perceived risk in the purchase and consumption of SPFs.

### 3.4.1 *Lifestyle Orientation*

Lifestyle is a constellation of individual characteristics that reflect their central life interests and commitment to certain behavior, which gets reflected via their attitudes, interest and opinions. With respect to the present study lifestyle of the consumers is their interest in and commitment to the behavioral aspects, like; green-orientation, innovative-orientation, nutrition-orientation, socially-outgoing orientation, service role-orientation, and trend-consciousness.

#### 3.4.1.1 Green-orientation

The consumers who have an inclination to use fresh and natural food products, as opposed to packaged food, and are conscious towards environment safety issues are referred to have a green-orientation.

#### 3.4.1.2 Innovative-orientation

The consumers who reveal the desire to have novelty in their day-to-day meals patterns, by experimenting with new type of food products and recipes. Also, the consumers who have the inclination to organize parties in innovative manner and try new things are referred to have an innovative-orientation.

#### 3.4.1.3 Nutrition-orientation

The consumers for whom nutrition from food is more important than its taste or flavor, and who take extra efforts to serve nutritious meals to their family are referred to have a nutrition-orientation.

#### 3.4.1.4 Service role-orientation

The consumers with the desire to go out of the way to please one's family, reflecting a self-less devotion towards the family, thus prioritizing the family before herself, and who have the inclination to serve their family via, cooking for the family members are referred to have a service role-orientation.



#### 3.4.1.5 Socially-outgoing orientation

The consumers who prefer spending their leisure time in social activities via get-togethers, parties and social visits are referred to have a socially-outgoing orientation.

#### 3.4.1.6 Trend-consciousness orientation

The consumers with a desire to keep themselves updated with the current trends and fashions via shopping at the latest department stores and who like spending money on latest arrivals in the departmental stores are referred to have trend-conscious orientation.

### 3.4.2 *Personality Traits*

Personality reflects individual differences. It can be defined as the inner psychological characteristics that both determine and reflect how a person responds to his or her environment. With respect to the present study the 16 personality factor trait scale, form C 1969 edition, Developed by The Institute for Personality and Ability testing, 1969 was used to in study the personality of the consumers. Five personality traits, namely; openness to change, reasoning, rule-consciousness, social-boldness, and vigilance considered relevant in context to the present study were identified. The above mentioned personality traits will be assessed with regard to the food shopping-orientation of the consumers of selected packaged foods. The description for each of the five adapted version is in the findings section. However, the prescribed operational definitions for each of the selected trait are as follows;

#### 3.4.2.1 Openness-to-change

Low scorers: The consumers, who were habitual buyers of a product. They preferred to use things to which they were familiar and were unwilling to change. They are the consumers who are stuck to conventional ways of doing things and followed the predictable and routine way of approach towards shopping.

High scores: The consumers, who were open-to-change with the market, had the inclination to try new things which come up in the market, and were

flexible in the choices they made. They were open-minded and innovative in their approach towards shopping. They enjoyed experimenting new things in the market.

#### 3.4.2.2 Reasoning

Low scores: The consumers who were not able to rationalize or justify a purchase and logically evaluate all possible aspects of a decision with respect to a purchase situation.

High scores: The consumers, who were able to rationalize or justify a purchase and logically evaluate all possible aspects of a decision with respect to a purchase situation.

#### 3.4.2.3 Rule-consciousness

Low scores: The consumers, who were expedient and nonconforming consumers who did not worry about conventions and were more spontaneous in their approach while shopping. They were accommodating and uncomplaining about the market in general.

High scores: The consumers, who were inflexible in the product choices they made. These consumers were well planned and careful in their behavior and conformed to conventional standards

#### 3.4.2.4 Social-boldness

Low scores: The consumers, who were self-conscious about their shopping decisions. They were sensitive in nature and were more aware of risk involved in the market situations or purchase of an item.

High scores: The consumers, who were socially bold, extrovert in their approach, communicative about their market experiences and were adventuresome in their food shopping trips. They were enthusiastic individuals looking for pleasure and adventure while shopping.

#### 3.4.2.5. Vigilance

Low scores: The consumers, who were unsuspecting about the market. As consumers, they were easy going in their approach towards the market in general and were not very observant about the changes in the market.

High scores: The consumers, who were watchful about the changes in the market. They were cautious in their approach and were attentive to others motives and intentions. They were sensitive to being taken advantage of.

### **3.4.3 *Market Belief***

Market beliefs are the assumptions or generalizations that the consumers make about the marketplace and the way it operates in order to simplify their purchase decisions. True or not, these market beliefs act as convenient shortcuts in alternative evaluation. Market beliefs are acquired through personal experience or through other socialization process. In the present study the general market beliefs were studied with respect to four aspects of selected packaged foods, namely; brand, product itself, sales and advertisement, and store beliefs. A detail of each aspect follows;

#### **3.4.3.1 Brand beliefs**

The belief's the consumers hold with respect to the brands of selected packaged foods. A brand differentiates the product from the competitor, and has functional and emotional elements which create a relationship between the consumer and the product, via the establishment of an image. The consumer can have positive or negative beliefs with respect to various aspects like brand value, image loyalty etc.

#### **3.4.3.2 Product beliefs**

The belief's that the consumers associated to the product itself, i.e. selected packaged foods. It includes the beliefs the consumers hold with respect to the product offerings, its cost related aspects, and future expectations from the product.

#### **3.4.3.3 Sales and Advertisement beliefs**

The belief's that the consumers hold towards the sales and marketing effort made in the direction to promote selected packaged foods. They include the beliefs the consumers hold on aspects like discount coupons and sales, quality reassurances, advertisement expenditure and related effect on the product price etc.

#### 3.4.3.4 Store beliefs

The belief's the consumer hold with respect to the stores where the selected package foods are available. It included the beliefs which differentiated the consumers liking for a particular store, on aspects like its window display, staff, credit and return policies etc.

#### 3.4.4 *Attitude*

Attitude can be defined as an expression of inner feelings that reflect the predisposition of a consumer to behave in a consistently favorable or unfavorable manner towards a product/ object. With respect to the present study attitude reflects the favorable or un-favorable predisposition of the consumers towards selected aspects of selected packaged foods, namely; their advantages, characteristics, consequences, health, hygiene and nutrition, and economy.

##### 3.4.4.1 Advantages

The consumers attitude towards the advantages of the products with respect to its usefulness to working women, how labor saving it is, its ability to avoid chaos of cooking, and simplicity involved in preparation.

##### 3.4.4.2 Characteristics

The consumers attitude towards the various characteristics of the product with reference to the appeal of the product, its taste, quality and packaging.

##### 3.4.4.3 Economy

The consumers attitude towards the economic feasibility of the product.

##### 3.4.4.4 Health, hygiene and nutrition

The consumers attitude on the health, hygiene and nutrition aspect of the product, with respect to aspects like the nutritional content of SPFs, hygienic processing and the related health effect on the consumption of the product.

#### 3.4.4.5 Consequences

It refers to the attitude of the consumers towards the repercussions of the product; like, creating dependency or creating addiction or developing lethargy in an individual.

#### 3.4.5 *Perceived Risk*

Consumers' uncertainty about the potential positive and negative consequences of the purchase of the selected packaged foods in reference to their actual utility and usability; economic feasibility; health concerns; ease and satisfaction of serving it to the family; and associated social stigma.

##### 3.4.5.1 Financial risk

Risk a consumer perceives for loss of money with the purchase of selected packaged foods, and can not anticipate a value-for-money with the product.

##### 3.4.5.2 Functional risk

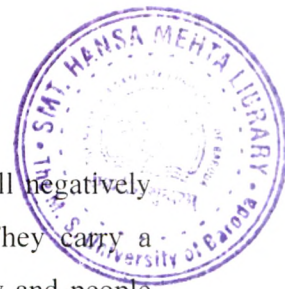
Risk a consumer perceives that the packaged foods might fail them at a time when they are expected to deliver the benefits they promise. The association of functional risk makes them perceive that, relying on packaged foods might land them up in a situation which will leave them with no alternatives or backup.

##### 3.4.5.3 Physiological risks

Risk that a consumer perceives that the selected packaged foods might cause health problems and certain side effects on their consumption; and hold apprehensions about the product with respect to its quality and standard of manufacturing.

##### 3.4.5.4 Psychological risk

Risk a consumer perceives with regard to their inability to relate their self image of being an ideal wife/ mother, with the consumption of the packaged foods. Serving packaged foods to their family members makes them feel quality.



#### 3.4.5.5 Social risk

Risk a consumer perceives that the use of packaged foods will negatively affect their social image or the way others think of her. They carry a perception that SPFs are not socially acceptable in the society and people will not appreciate the use of SPFs.

### 3.5 CONSUMPTION PATTERN

Consumption pattern of SPFs constitutes the frequency, duration, and quantity of consumption of SPFs.

#### 3.5.1 *Frequency of consumption*

Implies how often the SPFs are consumed, stretching from daily consumption to occasional consumption.

3.5.1.1 Habitual: When the selected packaged foods are consumed daily or at least once a week, reflecting the regularity of consumption.

3.5.1.2 Sporadic: When consumption of SPF occurs at irregular interval, stretching from once in two weeks to once a month.

3.5.1.3 Seldom: When the consumption of selected packaged foods is restricted to special events or occasions only

#### 3.5.2 *Duration of consumption*

Implies the stretch of time since when the consumer has been consuming selected packaged foods.

3.5.2.1 Experimenters: The consumers who are consuming selected packaged foods since the last 1 yrs.

3.5.2.2 Accepters: The consumers who are consuming selected packaged foods since the last 2 yrs.

3.5.2.3 Consistent users: The consumers who are consuming selected packaged foods since the last 3 or more yrs.

### **3.5.3     *Quantity of consumption***

Implies the amount of SPFs consumed, assessed in terms of number of packets consumed per month.

## **3.6        PRE-PURCHASE ASPECTS**

Aspects a consumer considers before the purchase of SPFs, and in the present study they include the outlet choice, factors affecting outlet choice, information sources referred and believability, and evaluation criteria's in purchase of SPFs.

### **3. 6.1     *Types of Outlets***

#### **3.6.1.1    Department store**

A departmental store is a large retail establishment with an extensive assortment of products, both in terms of variety and range of goods. The goods are organized into separate departments and all departments are housed under the same roof to facilitate buying, customer service, merchandising, and control.

#### **3.6.1.2    Supermarket**

A large departmentalized retail establishment offering a relatively broad and complete stock of dry groceries, fresh meat, perishable produce, and dairy products, supplemented by a variety of convenience, nonfood merchandise and operated primarily on a self service basis. (<http://en.mimi.hu/marketingweb/supermarket.html>)

#### **3. 6.1.3.   Local Kirana Store**

A local store established primarily for the retailing of food. The products stocked at such stores are as per the needs of the people residing in the close proximity of the store. Since, it mainly functions on the basis of trust between the shop owner and the consumers, it provides an option for the consumers to pay the monthly grocery bill at the end of the month.

### **3.6.2     *Factors affecting outlet choice***

The various factors which influence the choice of an outlet for the purchase of SPFs. It includes the in-store experiences and promotions, personal factors, store features and services, and additional services.

#### **3.6.2.1     In-store experiences and promotions**

The experience with the store with regard to the store layout, promotional aspects of availability of price reductions and coupons in the store, multiple item discounts in the store etc.

#### **3.6.2.2     Personal factors**

The personal factors that relate to the suitability and requirement of the consumer, in relation to the consumers time availability for food shopping, comfort level with the store, socio-economic status, and past experience with the store.

#### **3.6.2.3     Store features and services**

The store features and services include attribute like nearness of a store to the home, service speed in the store, crowding in the store, and store appearance and product layout form

#### **3.6.2.4.     Additional services**

The extra facilities provided by the store to the consumer like free home delivery / free parking, availability of more number of product variety, return and adjustment policy of the store etc.

### **3.6.3     *Information sources referred***

The sources referred by the consumes to collect information on the product before making a purchase decision. With respect to the present study the intra sources, inter sources, neutral sources, and market, were referred as the information sources.

#### **3.6.3.1     Intra sources**

The self experience of the consumer is considered as the intra sources.



#### 3.6.3.2 Inter sources

The recommendation from family, friends and relatives are referred as Inter sources.

#### 3.6.3.3 Market sources

Sources like in store salesperson, in store displays and samples, newspaper and magazine advertisements and television and radio commercials collectively form the market sources.

#### 3.6.3.4 Neutral sources

Sources like newspaper and magazine articles, chefs / cook books/ cookery shows and labeling of the product are referred as neutral sources.

### 3.7 Socio-economic status

The social position of an individual in the social hierarchy that prevails in modern urban rational conglomerations is the socio-economic status (Kalliath, 1999). For the present study the socio-economic status was the composite of the following factors, namely; type and nature of the family, type of accommodation and services in the home, total family income, literacy level of spouse/ father and self, occupation of spouse/ father and self, exposure to mass media, club membership and holiday memberships. The S.E.S for the present study was inspired from the S.E.S. inventory by Kalliath (1999).

## 4.0 SELECTION OF THE SAMPLE

### 4.1 Locale of the Study

The present study was conducted in Mumbai city. As per the information provided by the respective authorities of the two well known brands in the selected food category, namely; ITC and MTR (September, 2006), Mumbai was found to be the city with the highest sales figures of SPFs. Thus, in view of the possibility of identifying consumers consuming SPFs, Mumbai was selected as the locale of study. Due to vastness of city, the study was restricted to western line of North Mumbai only, stretching from Bandra to Borivali (Fig. 3).

## 4.2 Sampling Design

### 4.2.1 Sample

Working / Non-working housewives, consuming at least one of the SPFs constituted the sample of the study. The sample of the present study were also the unit of inquiry.

### 4.2.2 Sampling technique

The study was restricted to western line of North Mumbai location of Mumbai, extending from Bandra to Borivali. In order to procure a representative sample, a three stage sampling procedure was adopted. Stage I constituted selection of the location. The western line of North Mumbai comprised of nine stations, stretching from Bandra to Borivili, wherein every alternate station was identified as a location for study purpose, following a systematic sampling technique. Thus, in all five locations including Bandra, Santacruz, Andheri, Goregoan, and Borivali were selected (Fig.3). Stage II comprised of selection of the retail stores. Two supermarket/ departmental store/ kirana store were selected from each of the five selected locations of North Mumbai through convenience sampling, totaling to 20 stores. Higher authorities of the selected twenty stores were contacted for their permission to interact with their consumer, out of the identified retail outlets, namely; eight Spinach outlets, three Food Bazaar outlets, three D-mart outlets, two Spencer outlets, Hypercity, Hyco, Foodland, and Akbaralies, ten stores gave permission for the same, and were thereby included in the study. The details of the stores selected from the five locations is as follows:

Location		Stations to the east of western railway line	Stations to the west of western railway line
Bandra	:	Spinach	Akbaralies
Santacruz	:	--	Spinach , Foodland
Andheri	:	Hyco	Spinach
Goregoen	:	Hyper City	Spencers
Borivali	:	Spinach	D-Mart

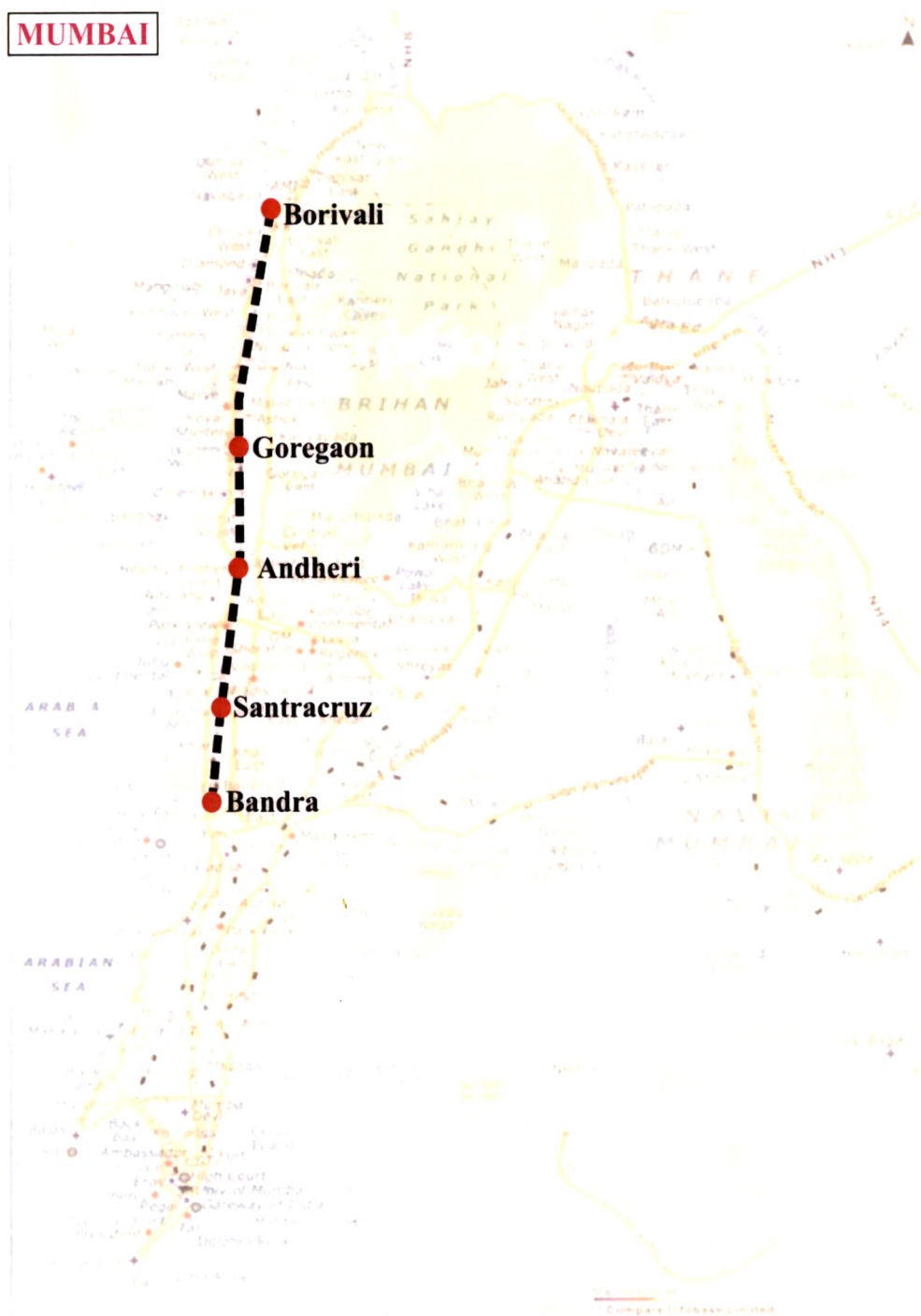


Fig. 3: Outline map of Mumbai showing the locale of the present study.

In Stage III the mall intercept method was used to identify the consumers of selected packaged foods. Consumers visiting the selected stores were individually contacted, and the ones consuming any one or more of SPFs were identified. Moreover, the rationale of the study was explained to them, and those who agreed to participate in the study were selected as respondents for the study.

### 4.2.3. Sample size

Forty five working / non-working housewives from each of the five locations were purposively selected for the study, making a sample size of 225 consumers. A diagrammatic representation of the same is as under (Fig.4).

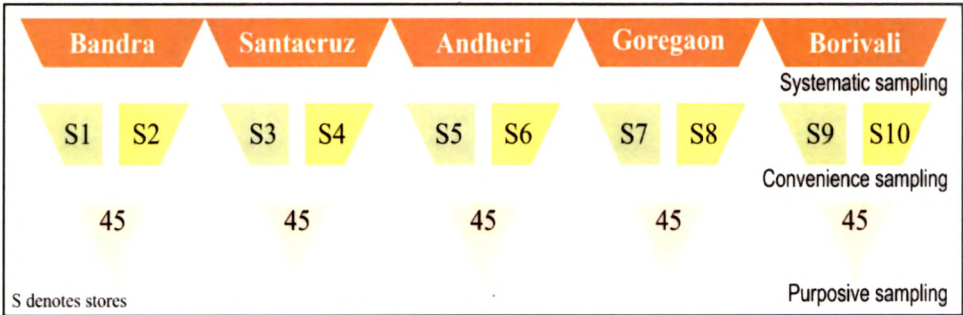


Fig.4: Diagrammatic representation of sampling procedure

## 5.0 INTERVIEW SCHEDULE

An interview schedule was resorted to build up data for the present study. An interview method of collecting data involved presentation of oral-verbal stimuli and reply in terms of oral-verbal responses. The merits claimed on behalf of interview method, as pointed out by Kothari (2004) are:

1. More information and that too in a greater depth can be obtained.
2. Samples can be controlled more effectively as there arises no difficulty of the missing returns; non-response generally remains very low.
3. The language of the interview can be adapted to the ability or education level of the person interviewed and misinterpretations concerning questions can be avoided.

4. The interviewer can collect supplementary information about the respondent's personal characteristics and environment which is often of great value in interpretation of results.

An exhaustive reviewing of the literature assisted and enabled the investigator in developing the interview schedule so as to achieve the objectives of the study. The interview schedule was constructed in such a way that it could be understood easily by the respondents and enabled them to answer the questions frankly and quickly. The questions were skillfully structured so that even the most reluctant consumer could have no hesitation in revealing on the necessary information. The objectives drawn for the study guided the development of an appropriate interview schedule, having four distinct sections.

The first section of the schedule comprised of questions related to the background information of the sample. It encompassed questions pertaining to the personal details and family attributes of the consumers of SPFs. Information was elicited on personal details of the respondents and their spouse with respect to the age, education level, and occupational status. Further, query was made on the family attributes of the consumer of SPFs that included the total family income, family type, family size, family life-cycle stage, and their socio-economic status. Moreover, in order to assess the socio-economic, status other details regarding the type of accommodation and services in the home, consumers exposure to mass media, their club memberships and holiday memberships, and their vacation trends were also gathered. The second section was designed to assess the details regarding the selected pre-purchase aspects like frequency of visits to an outlet (outlet choice), factors affecting outlet choice, information sources referred and related believability, and evaluation criteria applied in the purchase of SPFs. In addition, it comprised of questions to elicit information on the consumption pattern of SPFs in terms of its usage, reasons for consumption, frequency of consumption, duration of consumption, and quantity consumed. In the third section queries were made to identify the problem encountered by the consumers of SPFs with respect to the product and its labeling and their preferences for the same. The forth section consisted of a scale to study the food shopping-orientation of the consumers of SPFs. It also included scales to assess the five psychographic aspects, namely; lifestyle orientation scale, personality type scale, market beliefs scale, attitude scale, and perceived risk scale.

## 5.1 Development of the tool

In order to fulfill the objectives of the study, the investigator attempted to develop various tools to gather the relevant data. The tools were constructed to assess the various attributes of the consumers; which included food shopping-orientation, lifestyle orientations, market beliefs, attitude, perceived risk, problem and preferences. Development of the above mentioned tools required the researcher to formulate appropriate items for the respective tool. The following criteria's were carefully considered while crafting and editing the items;

1. The statements should be brief, clear and straight forward.
2. The statements should be simple as possible.
3. No statement should have double negatives or other confusing expressions.
4. Double-barreled statements should be avoided.
5. The statements should be such that persons with different views and ideas as far as a particular dimension is concerned, can endorse or reject it in accordance with their agreement and disagreement with those statements of the dimensions.

### 5.1.1 Food shopping-orientation Scale

Food shopping-orientation scale assessed the main concerns of the consumer at the time of shopping for SPF's. The main aim of studying food shopping-orientation was to identify the patterns and motives of consumers of SPF's while shopping, and general approach adopted by them in their purchases. It could be postulated that once the consumers with different shopping-orientations are identified, other consumer characteristics could be studied amongst sub-groups. Also, the marketers can design matching strategies to meet the needs of the consumers.

*Item collection:* The research paper by Roberts and Wortzel (1979) along with the related literature, bulletins and other publications formed the basis of the development of the scale. The items were inspired from aspect like the impulsive or preplanning orientation while shopping; orientation with respect to the price and quality of SPF's, cost saving tendency, convenience concerns while shopping; and brand loyalty

aspects. Important factors considered in collecting the items for FSO scale was that, overall they should be able to differentiate consumers on the basis of their orientation towards shopping. Finally, 24 items relevant in the present context were selected to form the initial test battery to carry out the content validation.

### **5.1.2 *Development of Lifestyle Orientation Scale***

The lifestyle scale was designed to study the individual characteristics of the consumers of SPFs that reflected their central life interests and their commitment to certain behaviors. Lifestyle of the consumer could include, inclination towards nutrition and environment conservation, participation in social groups and devotion towards the family, trend-consciousness etc.

*Item collection:* The AIO (attitude, interest, opinion) inventory developed by Wells and Tigert (1977) supported the investigator in developing the present scale. Six selected aspects of lifestyle orientation that were found suitable for the present purpose were identified. They were modified for the present study to make them more suitable in the Indian context and with respect to SPFs. The six selected aspects of lifestyle included socially out-going orientation, innovative-orientation, receptiveness-to-marketing-stimuli, service role-orientation, anti-cooking, and contemporary role-orientation. Further, three new lifestyle orientations thought to be relevant for the present context were generated by the investigator, that focused on aspects like trend-consciousness, green-orientation and nutrition-orientation. In total the scale comprised of nine categories of lifestyle. Each category comprised of 5 statements, totaling to 45 items in the lifestyle orientation scale.

### **5.1.3 *Development of Market Belief Scale***

Consumers make certain assumptions or generalizations about the marketplace and the way it operates in order to simplify their purchase decisions. True or not these market beliefs act as convenient short cuts in alternative evaluation. Therefore, with the intent to study the prevailing market belief of the consumers of SPFs, a market belief scale was included in the study.

*Item collection:* The market belief scale was developed on the basis of the market belief items cited in Lindquist, 2004. With the aim to make the scale more relevant for

the current study, the items were modified in a fashion so the consumers of SPFs are able to relate to them in a better manner. The scale comprised of 16 statements, which were developed in reference to four selected aspects of market belief, namely; brand beliefs, product beliefs, sales and advertisement beliefs, and beliefs with respect to stores.

#### **5.1.4 *Development of Attitude Scale***

With the purpose to study the favorable or unfavorable predisposition of the consumers towards SPF's, an attitude scale was designed. A five point semantic differential scale was developed to assess the attitude of the consumers with regard to selected aspects of SPFs. It was observed through literature survey that this method is used most prominently in consumer behavior researches to assess the consumers' attitude. The favorability or un-favorability of consumers towards SPFs was studied by focusing on aspects like the advantages, characteristics, consequences of use, health, hygiene and nutrition, and economy of SPFs.

*Item collection:* Article by Rangarao (2004) and Manohar (2005) formed the baseline for the bi-polar adjectives used in the scale. Also, the literature on convenience foods cited in Journals like Beverage and Food World and Indian Packaging was used. The scale comprised of 30 set of bi-polar adjectives (two adjectives which meant opposite). On one hand was the positive advantage, and on the other hand was the negative advantage. The two advantages were separated from each other at five levels i.e. very much agree, somewhat agree, neither agree nor disagree, somewhat disagree, and very much disagree. These five levels reflected the consumer's attitude towards the selected attributes of SPFs. The responses of the consumers on semantic differential scale reflected their attitude towards the degree of inclination towards the respective attributes of SPFs.

#### **5.1.5 *Development of Perceived Risk Scale***

Risk or uncertainty regarding the purchase of a product is a significant variable influencing the total amount of information gathered by consumers and the final purchase made. Every purchase decision involves some level of risk. Assuming, that there might be some risk involved in the purchase and/or consumption of SPFs,



perceived by the respondents, which may or may not bear strong relationship with the actual consumption of SPFs. Therefore, in consideration of the slow pick-up of SPFs in the Indian market, a perceived risk scale was designed with the aim to identify if the consumers of SPFs also perceived any risk in their purchase and/or consumption.

*Item collection:* The items for the scale were adapted from the review on perceived risk available in Loudan (1993) and Lindquist (2004). The scale comprised of 5 statements, each furnished one category of risk, namely; financial risk, functional risk, physiological risks, psychological risk, and social risk.

#### **5.1.6 Assessment of Selected Pre-purchase Aspects**

Selected pre-purchase aspects of the consumers of selected packaged foods encompassed aspects, namely; outlet choice, factors affecting outlet choice, information sources referred and related believability, and evaluation criteria applied. Lindquist (2004) and other literature cited in consumer behavior books formed the basis for developing the items for all the pre-purchase aspects.

- 5.1.6.1 Outlet choice: The outlet choice of the consumers was studied with respect to their frequency of visits to three selected types of outlets, namely; supermarkets, departmental stores, and local kirana stores.
- 5.1.6.2 Factors affecting outlet choice: This component gathered information on the factors considered by the consumers in their outlet choice. It comprised of 31 features which were well thought of before making an outlet choice, categorized as; additional store services, personal factors, in-store promotional factors, and store features and services.
- 5.1.6.3 Information sources referred and related believability: This question contained 19 aspects, which brought forth the various sources from which the consumer seeks for information on SPFs. The information sources were categorized as intra, inter personal, neutral, retail and market sources. The consumers were also asked to mention the extent to which they believed in the information provided by them.
- 5.1.6.4 Evaluation criteria applied for the purchase of SPFs: It comprised of the checklist of product/ product-related attributes that the consumers

considered as evaluation criteria while purchasing the SPFs. Sixteen criteria's found relevant with respect to SPFs were listed.

#### **5.1.7 Consumption Pattern**

The consumption pattern of the consumers of SPFs was studied with respect to the following aspects.

- 5.1.7.1 Usage of SPFs: It was studied to identify the popularity of three SPFs, namely; ready-to-eat soups, ready-to-use pastes, and ready-to eat meals amongst the consumers.
- 5.1.7.2 Reasons for the consumption of SPFs: Twelve statements were designed to probe into the various possible reasons for the purchase of SPFs by the consumers. The statements covered aspects like individual reasons, marketing reasons, product characteristic and situational reasons.
- 5.1.7.3 Frequency, Duration and Quantity of consumption of SPFs: The objective of studying the frequency, duration and quantity of consumption of SPFs was to obtain a composite picture of consumption pattern of the three SPFs. The frequency of consumption reflected the interval between consumption of SPFs, stretching form daily to occasionally. The duration of consumption provided information on the time period since which the consumer were consuming SPFs, and the quantity reflected the number of packets consumed per month in case of all the three SPFs.

#### **5.1.8 Development of Problem and Preference Checklist**

In order to identify the problems encountered by the consumers on various aspect of SPFs, and the changes they would like in the SPFs to make them more acceptable, a problem and preference checklist was prepared.

*Item collection:* The core aspects catered in both the checklists were with respect to the use and storage, purchase and preparation, quality and quantity, health problems; and problems related to packaging and labeling of SPFs. An item pool was prepared by the investigator, in consultation with the guide, along with suggestions and discussions with some users of SPFs. At this stage there were 63 items in the problem checklist; and 44 items in the preference checklist.

### **5.1.9 *Personality Trait Scale***

In consumer studies, personality is defined as consistent response to environment stimuli. It is an individual's unique psychological makeup, which consistently influence how the person responds to his or her environment (Blackwell, 2007). Thus, with the aim to study certain psychological aspects found relevant to the study a standardized personality scale called the 16 PF (form C) 1969 Edition, copyrighted by, The institute for Personality and Ability Testing was included in the study to assess the personality of the consumers. Of the 16 personality traits used in the original scale only five traits found relevant to the study, were included namely openness-to-change, reasoning, rule-consciousness, social-boldness, and vigilance. The reasoning trait comprised of 8 items, while the other four traits comprised of 6 items each, totaling to 32 items in the scale. The prescribed scoring pattern was followed to obtain the categories of high and low scores on the personality.

### **5.1.10 Kalliath S.E.S. Inventory**

This was a self-reporting tool to measure one's social and economic status. Ten attributes with regard to various aspects of one's family, economic, social and cultural background formed the basis for measurement of socio-economic-status. Each attribute had several sub-parts with a number of entries. For the present study, following attributes were included, namely; (i) type and nature of the family inclusive of family type and size (ii) type of accommodation and services in the home inclusive of tenure of house, size and location of house and household assistance (iii) total family income (iv) literacy level of spouse/ father and self (v) occupation of spouse/ father and self (vi) Exposure to mass media inclusive of the number of newspaper and magazines subscription (vi) club membership included information on club and holiday memberships (vii) family holiday membership included the frequency and destination of vacation. Minor modifications were done for categorizing the family type and family monthly income. The prescribed scoring pattern was followed to obtain the categories of low S.E.S. group; average S.E.S. group and high S.E.S. group.

## **5.2 • Content Validation**

The carefully edited items were submitted to a panel of ten judges for the purpose of content validation of food shopping-orientation scale, lifestyle orientation scale, market belief scale, perceived risk scale, factors affecting outlet choice, information sources referred and related believability, and evaluation criteria's applied for the purchase of selected packaged foods. The judges were experts in the field of marketing and marketing research, from institutions like IIM, Ahemdabad; S.P.Jain Institute of Management and Research, Mumbai; N.M.I.M., Mumbai and Faculty of Management Studies, M.S.U of Baroda.

With respect to the attitude scale and problem and preference checklist, the carefully edited statements were submitted to a panel of ten judges for content validation. The panel comprised of experts from The Department of Home Management and Department of Foods and Nutrition, Faculty of Home Science, Food and Drug Administration Department of Baroda. Consumer Education Research Center, Ahemdabad, G.B. pant Agriculture University, Uttranachal, and Indian Institute of Packaging, Mumbai.

The judges were requested to indicate whether each item of the scale was relevant/ irrelevant and clear/ ambiguous. The judges' responses were then coded and tabulated. The screening of the items was done on the basis of two criteria's. Firstly, the statement or question reported as relevant and clear by 85% or more of the judges were included for the study. Secondly, where 75% or more of the judges showed agreement, necessary modifications were made in the items and were then included in the interview schedule (Table 1).

## **6.0 PILOT STUDY**

Before final application of the instrument to gather data for the present study, the tool was tested in the field with the aim to (i) get first hand experience to interact with the interviewees (ii) identify the most appropriate manner to ask questions from the sample to procure correct information (iii) identify points where the probability of misinterpretation existed on part of the interviewee and interviewer (iv) make necessary modifications in the tool, if required. The tool was pre-tested on a sample of

thirty consumers of SPFs chosen through purposive sampling method from the western line of North Mumbai region. The lady of the house was interviewed to furnish the information on background characteristics, selected pre-purchase aspects, consumption pattern, food shopping-orientation scale, and their five selected psychographic aspects. The sample selected for pilot study was not the part of the final sample, but had characteristics similar to the sample for the present study. The pre-testing gave an idea that the interview took about one hour and thirty minutes for each consumer.

The conduct of pilot study gave directions to carry out a few changes and additions in the schedule, wherever necessary. The data pertaining to pre-purchase aspects, food shopping-orientation, and the five selected psychographic aspects were scored, coded, and subjected to item analysis and statistical verification for establishing the reliability of the instrument, and for constructing the final scale. Details on the reliability values for the above mentioned aspects are presented in the following pages (Table 1).

## **6.1 Item- Analysis**

Item analysis was carried out for lifestyle orientation scale, market belief scale, attitude scale, perceive risk scale, pre-purchase aspects of SPFs, problem and preference checklist for the three SPFs i.e. ready-to-eat soups, ready-to-use pastes, and ready-to eat meals. For the computation of item analysis, every item on the above mentioned scale was subjected to correlations with the total score of its respective scale. The items having correlation values of less than 0.40 on each scale were deleted and the remaining were retained. The details with respect to modifications in the number of items in each scale after item analysis is presented in Table 1.

With regard to lifestyle orientation scale, the 10 items pertinent to two categories, namely; receptiveness-to-marketing-stimuli and contemporary role-orientation had scores lower than 0.40. It was thus decided to eliminate the two categories from the scale. Further, two categories, namely; anti-cooking and service-role orientation with five items each, were merged, after eliminating the five items

that had low scores. The remaining five items were then considered as one category and was labeled as service role-orientation. Thus, after item analysis of lifestyle scale the researcher finally arrived at six lifestyle categories, each of the categories was considered as summated scales and was subjected to cronbach's alpha reliability calculation.

## **6.2 Reliability of the Instruments**

Reliability refers to the accuracy (consistency and stability) of measurement by a test (Anastasi, 1982). The reliability varies from zero to one, having the former value when the measurement involves nothing but error, and reaching later value only when there is no variable error at all in the measurement. Three different reliability procedures were followed to establish the reliability value for different scales. Lifestyle orientation scale was subjected to cronbach's alpha reliability. Market belief scale, perceived risk scale, and socio-economic scale were subjected to test-retest reliability. Attitude scale and aspects like factor affecting outlet choice, information sources referred, evaluation criteria's applied for the purchase of SPF's, problem and preference checklist for the three SPFs i.e. ready-to-eat soups, ready-to-use pastes, and ready-to eat meals, were put through split-half reliability. The reliability procedure adopted for each of the scale has been discussed in the ensuing paragraphs.

### *Cronbach's Alpha Reliability*

One of the most popular reliability statistics in use for summated scales i.e. cronbach's alpha was used to calculate reliability scores of lifestyle orientation scale in the study. Cronbach's alpha determines the internal consistency or average correlation of items in an instrument to gauge its reliability (<http://www.joe.org/joe/1999april/tt3.php>). Cronbach's alpha measures how well a set of items (or variables) measures a single uni-dimensional latent construct. When data have a multidimensional structure, Cronbach's alpha will usually be low. Technically speaking, Cronbach's alpha is not a statistical test - it is a coefficient of reliability (or consistency).

Cronbach's alpha can be written as a function of the number of test items and the average inter-correlation among the items. The standardized Cronbach's alpha formula is mentioned as below

$$\alpha = \frac{N \cdot \bar{c}}{v + (N-1) \cdot \bar{c}}$$

Here  $N$  is equal to the number of items,  $\bar{c}$  is the average inter-item covariance among the items and  $\bar{v}$  equals the average variance.

#### *Test-retest Reliability*

The responses of each respondent were recorded. After an interval of 21 days, the scales were again administered to the same respondents and the responses were noted. Then the scores were assigned to each response keeping in mind the weightage given to each point. The scores of all the statements (individually for each of the scales) were summed up for each individual on both the tests and were subjected to determine the reliability of the scale by using the following formula.

$$r_{xx'} = \frac{St^2}{Sx^2}$$

Where  $r_{xx'}$  = Reliability

$St^2$  = Variance of the first test.

$Sx^2$  = Variance of the retest

#### *Split-half Reliability*

In this method each scale was divided into two halves using odd numbered statements for one half and even number statements for the other half. Each of the two sets of the statements was treated as separate scales. The respondents who scored high on odd numbered statements should score high on even numbered statements as well, if empirical errors have been kept to a minimum and the same applies in the case of low scores as well. The coefficient of correlation computed using Pearson Moment formula served as a measure of reliability. From the self correlation of the half tests, the reliability coefficients of all the scales were estimated using Spearman Brown Prophecy formula which states

$$r_{rel} = \frac{2r}{1+r}$$

Where  $r_{rel}$  is the reliability coefficient and  $r$  is the correlation coefficient.

The reliability values of the above stated scales have been provided in the Table 1. Moreover, modifications in the number of items retained in each of the scale after content validity and item analysis has also been provided in the Table 1 in order to get the overview of each of the scale used in the present study.

**Table 1. Overview of the instrument with respect to the modifications after content validation, item analysis, reliability procedure followed, and the reliability values**

<b>Scale</b>	<b>Number of items in the scale before content validation</b>	<b>Number of items in the scale after content validation</b>	<b>Number of items in the scale after item analysis</b>	<b>Procedure adopted for reliability calculation</b>	<b>Reliability value</b>
Lifestyle orientations	45 items	45 items	22	Item analysis and Cronbach's alpha	
Green-orientation	5 items	5 items	3		0.497
Innovative-orientation	5 items	5 items	4		0.614
Nutrition-orientation	5 items	5 items	4		0.583
Service-role orientation	5 items	5 items	5		0.538
Socially-outgoing orientation	5 items	5 items	3		0.516
Trend-conscious orientation	5 items	5 items	3		0.605
Market beliefs	16 items	16 item	16	Test-retest	0.61
Attitude scale	30 items	21 items	21	Item analysis and split-half	0.90
Perceived risk	5	5	5	Test-retest	0.77
Socio-economic status	N.A	34	19	Test-retest	0.73
Factors affecting outlet choice	31 items	20 items	16	Item analysis and split	0.53
Information sources referred	19 items	9 items	9	Item analysis and split	0.61
Evaluation criteria's	16 items	11 items	11	Item analysis and split	0.77
Problem checklist (meals)	63 items	31 items	31	Item analysis and split	0.99
Problem checklist (soups)	63 items	31 items	31	Item analysis and split	0.97
Problem checklist (pastes)	63 items	31 items	31	Item analysis and split	0.99
Preference checklist	44 items	31 items	31	Item analysis and split	0.87



## 7.0 SCORING THE RESPONSES ON THE INSTRUMENT

Each of the scale selected for the present research attempted to assess a specific attribute of the consumer. The response provided by the respondents on each item on the selected scales was quantified by ascribing scores. These ascribed scores enabled the investigator to meaningfully interpret the respective attribute. The details on scoring of the various instruments is given below

**Food shopping-orientation Scale:** Food shopping-orientation scale assessed the main concerns of the consumer at the time of shopping for SPFs. The items were inspired from aspect like the impulsive or preplanning orientation while shopping; orientation with respect to the price and quality of SPF's, cost saving tendency, convenience concerns while shopping, and brand loyalty aspects. It comprised of 24 items. The respondents were asked to indicate their pattern/motive at the time of shopping in terms of 'yes', 'can't say' or 'no'. The score of 3 through to 1 were ascribed respectively for each positive statement, and vice-versa for a negatively framed statement. The 24 items in food shopping-orientation scale were subjected to factor analysis. On the basis of factor loading, all the 24 items were included for factor extraction.

**Lifestyle Orientation Scale:** The lifestyle orientation scale was constructed and standardized to study the lifestyle of the consumers of SPFs, on aspects like green-orientation, innovative-orientation, nutrition-orientation, service-role orientation, socially-outgoing orientation, and trend-conscious orientation. A total of 22 items were included in the scale. The respondents were requested to respond to each statement in terms of 'agree', 'partially agree' or 'disagree'. The positive statements were scored 3, 2, 1 respectively, while reverse scoring was followed for negative statements. The score range for each of the category varied on the basis of the number of statements in each category. The score range was 3 to 9 for green-orientation lifestyle, trend-conscious lifestyle and socially-outgoing lifestyle; 4 to 12 for innovative-orientation lifestyle and nutrition-orientation lifestyle; and 5 to 15 for service-role orientation. Each category was divided into low and high following equal interval method, wherein, high scores indicated a higher inclination of the consumers toward that particular lifestyle orientation, while low scores indicated lower inclination.

**Personality Traits Scale:** The personality trait scale used in the present study constituted five traits, namely; reasoning, rule-consciousness, vigilance, social-boldness, and openness-to-change. The reasoning trait comprised of 8 items, while the remaining four traits had 6 items each; totaling to 32 items in the scale. Three alternatives were provided for each item on the scale, and the respondents were asked to choose the option that they perceived most appropriate for each of the given item. The prescribed scoring pattern as given by the copyrighter i.e. The institute for Personality and Ability Testing is provided in the (Annexure IIa Table 1). Two categories were formulated for high and low scorers on the 5 personality traits, where high scores indicated the respondents was higher on the respective personality trait, and vice-versa.

**Market Belief Scale:** With the aim to study the prevailing market belief of the consumers of SPF, a market belief scale was included in the study. The scale was developed in reference to 4 identified aspects, namely; brand beliefs, product beliefs, sales and advertisement beliefs, and store beliefs. The respondents were specified that the statements were some examples of beliefs the consumer, in general, have about the market place. It was also mentioned that there was no correct or incorrect response. They were requested to respond in terms of 'agree', 'can't say' or 'disagree'. The scoring of 3,2,1 was followed respectively, where higher score was indicative of stronger inclination for the respective market belief.

**Attitude Scale:** The attitude scale was designed to assess the attitude of the consumers towards aspects like advantages, characteristics, consequences of use, health, hygiene and nutrition, and economy of SPF. The scale comprised of 21 sets of bi-polar adjectives with respect to the attributes of the SPF. They were designed in a fashion where on one hand there was a positive adjective, and on the other hand was a negative adjective. An inclination towards positive disposition was assessed in terms of 'very much agree' with a score of 5, and 'somewhat agree' with a score of 4. Similarly, an inclination towards negative disposition was assessed in terms of 'very much agree' with a score of 1, and 'somewhat agree' with a score of 2. The mid-point of score of 3 reflected a neutral disposition of the respondents. The respondents were asked to respond to each set of bi-polar adjective reflecting their degree of inclination.

The score range of the attitude scale ranged between 21-105. The higher was the score on the scale, the more favorable was the consumers' attitude towards SPFs. A diagrammatic representation of the semantic differential attitude scale is as under.

Semantic differential attitude scale						
Positive pole	Very much agree	Somewhat agree	Neither agree nor disagree	Somewhat agree	Very much agree	Negative pole
Adjective	5	4	3	2	1	Adjective

**Perceived Risk Scale:** The perceived risk scale was designed in order to assess if the consumers of SPFs perceived any risk involved in the purchase and/or consumption. The perceived risk was assessed with regard to financial risk, functional risk, physiological risks, psychological risk, and social risk. The consumers were asked to indicate the frequency with which they perceived the mentioned risk in terms of 'always, 'sometimes' or 'never'. The score of 3 through to 1 were ascribed respectively for each statement, where a higher score reflected a higher risk, and vice-versa.

#### **Selected pre-purchase aspects**

**Outlet choice:** The outlet choice was assessed in terms of the frequency of visits to selected outlets namely a departmental store, supermarket or local kirana store. Frequency was assessed in terms of 'always, 'sometimes' or 'never', wherein the score of 3 through to 1 was ascribed. Higher scores were indicative that the respective store was visited more frequently.

**Factors affecting outlet choice:** A set of 16 factors affecting outlet choice was provided to the respondents. The consumers were asked to indicate the extent to which they considered each factor for outlet choice in terms of 'always, 'sometimes' or 'never'. The score of 3 through to 1 were ascribed respectively for each statement. The higher score indicated that the respective factor contributed to a greater extent in choosing the outlet for food shopping.

**Evaluation criteria applied:** A list of 11 evaluation criteria was crafted with regard to selection of SPFs. The consumers were asked to assign a score to each of the criteria in the range of 1-10, reflecting the importance it holds for them while purchase of SPFs. A score of 1 indicated that the evaluation criterion was not at all important, while a score of 10 indicated that the evaluation criterion was extremely important.

**Information sources referred and related believability:** The information sources and related believability was categorized into intra, inter, market and neutral source. The consumers were requested to respond in terms of 'yes' or 'no' for each source of information. The score of 2 was assigned for 'yes' and 1 for 'no'. The consumers were also asked to mention the extent to which they believed in the information provided by them. The response structure was such that the respondents were to respond in terms of 'very much', 'some what', or 'not at all'. The response were ascribed the scores of 3, 2, and 1 respectively. The score range for the four categories with respect to the of believability in the information sources varied on the basis of number of items in each category. The score range was 1 to 3 for intra and inter sources; 3 to 9 for neutral sources; and 4 to 12 for market sources, wherein, higher score reflected higher believability.

### **Consumption pattern**

The objective of studying the frequency, duration and quantity of consumption of SPFs was to obtain a composite picture of consumption pattern of the three SPFs.

**Frequency of consumption:** With respect to the frequency of consumption of SPFs the consumer were requested to indicate how often did they consume the three SPFs, stretching from daily, twice a week, weekly, once in a fortnight, once a month, to occasionally; where a score of 6 was assigned to daily consumption and 1 to occasional consumption. The higher scores reflected that the respective SPF was consumed more frequently.

**Duration of consumption:** In reference to the information on duration of consumption, the consumer were requested to respond in terms of the stretch of time since when they have been consuming selected packaged foods; where more number of years reflected that the SPFs were being used since a longer duration of time.

Quantity of consumption: In order to collect information on quantity of consumption SPFs, the consumers were asked to respond in terms of the number of packets consumed per/month, where more number of packets reflected that the SPF was consumed in higher quantity.

### **Problem and preference checklist**

The problem and preference checklist was constructed to identify the problems encountered with respect to the product and its labeling, and the changes they would like in the SPFs to make them more acceptable. Both the checklist comprised of 31 items each. The problem checklist was meant to assess the frequency with which the consumers encountered the problems. The response structure was such that the respondents were to respond in terms of 'always', 'sometimes', or 'never'. The response were ascribed the scores of 3, 2, and 1 respectively, where a higher score indicated that the problems was encountered more frequently. With respect to the preference checklist there were two parts. In part one the consumers were required to respond in terms of 'yes', 'can't say', or 'no'. The scores of 3 through to 1 were ascribed to the items, where a higher score indicated the greater desirability for that trait and vice-versa. In the second part of the preference checklist the consumers were requested to rank order the 10 labeling information's, as per their preferences, where a score of '1' implied that the respective information source was most desired, and score of '10' implied that the information source was least desired.

## **8.0 DATA COLLECTION PROCEDURE**

A schematic plan for the procedure to collect data from the consumers of SPFs was developed in advance. The investigator took prior permission from the store management to utilize their premises to identify consumers of SPFs. As per the conditions given by the store management, the investigator carried out the purposive selection of the sample by mall intercept method. The investigator gave her introduction to each of the consumers exiting the store, and attempted to inquire if they were consuming any of the selected packaged foods. On identification of a consumer who consumed the SPFs, the researcher gave a further explanation for the purpose of the study and requested them to be the part of this study. It was explained

about what was expected out of them, and the importance of their co-operation for the successful completion of the study. Prior appointments were taken from the consumers who agreed to participate in the study and were interviewed as per their convenience.

The interviewer visited the respondents at their residence as per the appointment. The respondent were made comfortable about interview and reassured that the information provided by them will be kept confidential. They were made to feel at ease by communicating to them that the answers provided by them would solely be considered as a personal point of view or practice, and were thereby encouraged to be open and truthful in providing information. The background information was collected first, followed by the information on food shopping-orientation and five psychographic attributes. Information was also procured on pre-purchase aspects and consumption pattern of SPFs.

Where the interviewee was not able to respond properly, she was supported by reframing / repeating the idea. The researcher also carried a Hindi translation version of the questionnaire to facilitate the respondent who encountered language problem. Whenever, it was realized that the respondent was loosing interest in the interview she was directed towards some casual discussion, and thereafter brought back to the structured questions.

At the end of each day of data collection, the schedules were checked for completeness and correctness of data gathered. In case any clarifications were to be made, a follow up call was made to the consumers within 24 hours. The edited schedule was then ready for data processing. The data was analyzed using SPSS 13.0. The data collection period fell between October 2007 to April 2008.

## 9.0 ANALYSIS OF DATA

### 9.1 Categorization of the Sample for the Purpose of Analysis

For the purpose of analysis, the following variables of the study were categorized in a structure fashion. The categories crafted for the various variables are given below:

1. Age	i. Young	21-30
	ii Young-middle	31-40
	iii Middle	41-50
	iv Old	51 and above
2. Education	i. SSC	
	ii Graduates	
	iii P.G diploma/ Post graduates	
	iv Professional degrees/ Special skilled	
3. Total family income	i. Lower middle income group	Less than or equal to 50,000
	ii Middle income group	50,001-1,00,000
	iii Upper middle income group	1,00,001-1,50,000
	iv. High income group	1,50,001-Above
4. Family size	i. Small	1-3 members
	ii Medium	4-6 members
	iii Large	More than 6 members
5. S.E.S.	i. Low S.E.S	> 27
	ii Middle S.E.S	28-38
	iii High S.E.S	< 39
6. Information sources referred	i. Inter/ Intra	1-2
	ii. Market	4-8
	iii. Neutral	3-6
7. Information sources referred and related believability	i. Inter/Intra	1-3
	ii. Market	4-12
	iii. Neutral	3-9
8. Lifestyle orientation		
Green-orientation/ socially-outgoing/ trend-conscious	i. Low	3-6
	ii High	7-9
Innovative-orientation/nutrition-orientation	i. Low	4-8
	ii. High	9-12
Service-role orientation	Low	5-10
	High	11-15

9.	Personality Reasoning	i.	Low	0-4
		ii.	High	5-8
	Openness-to-change/rule-conscious/social-boldness/vigilance	i.	Low	1-6
		ii.	High	7-12
10.	Attitude towards advantages/ characteristics/ consequence/ health, hygiene and nutrition	i.	Unfavorable	5-11
		ii	Neutral	12-18
		iii	Favorable	19-25
	Attitude towards economy	i.	Unfavorable	1-2
		ii	Neutral	3
		iii	Favorable	4-5
	Overall attitude	i.	Unfavorable	21-48
		ii	Neutral	49-77
		iii	Favorable	78-105
11.	Perceived risk	i.	Low risk	5-7
		ii	Moderate risk	8-11
		iii	High risk	12-15
12.	Frequency of consumption of SPFs	i.	Habitual	Daily to Weekly
		ii	Sporadic	Fortnight to Once a month
		iii	Sporadic	Occasionally
13.	Duration of consumption of SPFs	i.	Experimenters	Since last 1 years
		ii	Accepters	Since last 2 years
		iii	Consistent users	Since last more than 3 years

## 9.2 Statistical Analysis

The data were analyzed using both descriptive and inferential statistics. Frequency and percentage were computed in relation to the education level, occupational status, family type and family life-cycle stage. Mean and S.D. values were also calculated along with frequency and percentages for age, family size, total family income, socio-economic status, outlet choice, factors affecting outlet choice,



information sources referred and related believability, evaluation criteria's, and all the five aspects of psychographics, namely; lifestyle orientation, personality traits, market beliefs, attitude, and perceived risk. Further, similar descriptive analysis was also done for the problems encountered with and preferences of the consumers with respect to each of the three SPFs.

With regard to the data on food shopping-orientation scale, 24 items incorporated in the scale were subjected to factor analysis with the aim to derive homogeneous categories of food shopping-orientations. The procedure adopted to conduct the factor analysis included the following four steps;

1. The 24 items were subjected to the correlation matrix.
2. Factors were derived and assessed for overall fit.
3. The factor were interpreted
4. Factor loadings were interpreted

A detail description follows in the findings chapter.

Further, in order to create segment of the consumers of ready-to-eat soups, the data on consumption pattern was processed through cluster analysis. The procedure followed for the same has been given below;

1. Distance measure: log-likelihood.
2. Clustering procedure: two step clustering method was used.
3. Count of variables: Three continuous variables, namely; the frequency of consumption, duration of consumption and quantity of consumption of ready-to-eat soups (RES) (standardized automatically).
4. Clustering criteria: Schwarz's Bayesian Criterion (BIC).
5. Number of clusters: The auto generation procedure was adopted to create clusters.
6. Interpret the clusters: As mentioned, the consumption pattern in terms of frequency, duration and quantity of consumption of RES was used as the basis of cluster analysis. The higher mean values were indicative of high consumption pattern. The clusters were labeled based on the consumption pattern.

Moreover, Pearson's product moment correlation coefficients and chi-square test were computed to test the relationship between the consumption pattern of selected packaged foods, and the personal and family variables of consumers. Analysis of variance and 't-test' was computed to test the significant differences between food shopping-orientation of the consumers of selected packaged foods and their (i) personal and (ii) family variables. Wherever 'F' values were found significant, post hoc Scheffe's test was applied. Pearson's product moment correlation coefficients was applied to study the relationship between the food shopping-orientations of consumers and their psychographic variables, namely; lifestyle orientations, personality traits, market beliefs, attitude, and perceived risks in the purchase and consumption of SPFs. Further, Analysis of variance was computed to study the differences amongst the three identified clusters of consumers of RES with regard to their background characteristics, food shopping-orientation, and psychographic attributes. Wherever 'F' values were found significant, post hoc Scheffe's test was applied.