CHAPTER SIX

RESEARCH METHODOLOGY

In the preceding chapter, a conceptual model explaining various variables and their relationships has been developed to provide directions for the current study. Based on the research questions, objectives are defined for the study. This chapter is devoted to understanding the methodology used for conducting the empirical study. It basically entails research design, data collection methods employed, sampling procedure, and the data analysis plan. Besides, operational definition of the constructs provides further clarity to various variables discussed in the previous chapter.

6.1 Objectives of the Study

The objectives of this empirical study are as follows:

a) To understand the basic socio-demographic and psychographic details of the households in Gujarat in context of ‘pester power’.

b) To understand the impact of various independent variables like the age, gender, family income, family structure, birth order of the child, number of children in the family and the number of working parents on pester power effect.

c) To find the influence of children in the purchase decision of selected six product categories i.e. Toys, Chocolates/biscuits, Stationery items, Computer, Television and Car.

d) To find the general request strategies used by children based on their age group and gender to persuade parents to fulfill their demands

e) To study the parental strategies in response to these demands.

f) To find various attitudinal and behavioural dimensions of the child-parent relationship.
g) To study the impact of other socialization agents like the peers and advertising media on children.

h) To find various occasions/ festivals during which parents face relatively more pestering amongst different age groups.

### 6.2 Research Design

The research study basically aims to investigate the impact of demographic variables on children’s purchase related influence and the resultant pester power. Hence, the research approach is descriptive in nature with the main objective of addressing the various issues related to pester power and the influence of children in family purchases.

#### 6.2.1 Scope of the Study

The study was restricted to the state of Gujarat. The sample was selected from four cities of Gujarat namely, Ahmedabad, Vadodara, Surat and Rajkot. These cities reflect the urban population of Gujarat thereby providing a rich amalgam of various demographic and social variables in terms of social class, education and the income levels of the households, exposure to media and consumerism, lifestyles, attitudes and consumer behavior attributes. Respondents have been selected to cover most of the important and diversified geographical locations across these cities to capture maximum heterogeneity and representativeness of the population.

#### 6.2.2 Data Sources

It is well established that while the secondary data provides good conceptual clarity and direction to begin with, primary data based on empirical study often helps the researcher get insightful inferences about the subject of interest. Hence, for the purpose of gaining maximum possible knowledge related to the study, both the data sources have been duly and optimally used.
a) **Primary data** - Primary data from parents and children was collected using the survey approach through structured questionnaires which covered various issues to meet the objectives of the study. Questionnaires were prepared in English and Gujarati languages both to cover the majority of Gujarati speaking population as well as the non-local respondents of the state.

b) **Secondary sources** - A few books and book reviews related to the topic have produced significantly in developing the shape of the thesis. The book ‘*Brandchild*’ by Martin Lindstrom and Patricia Seybold, based on its research orientation has provided a valuable perspective in the kids’ personal life and their preferences. Another book referred to is ‘*Child Development*’ by Laura Berk (2006), recommended for elementary understanding of various child psychology theories. Apart from these, reviews of books related to marketing to children like James McNeal’s ‘*Kids as Customers*’ lend few interesting facts for this study. Various research articles from leading journals, business magazines and newspapers offer diverse dimensions to this study. These data sources include *Journal of Consumer Marketing*, *Journal of Advertising*, *Journal of Consumer Psychology*, *Journal of Marketing Research*, *Journal of Consumer Research*, *The Sociological Quarterly*, *Advances in Consumer Research*, *Journal of Business Research*, *American Psychologist*, *Journal of Public Policy and Marketing*, *Journal of Consumer Behaviour*, *Asia Pacific Journal of Marketing and Logistics*, *International Journal of Advertising* and *Marketing* to children, *The Marketing Review*, *Journal of Communication, Advertising and Society*, *Global Business Review*, *Business Today* and *Times of India*. Various web sources further added provided important reviews of articles and books as required. Library resources at Indian institute of Management, Ahmadabad provided access to many online journals and digital sources of information.

### 6.2.3 Sampling Design

A sampling plan basically entails the sample selection criteria, sampling unit, sampling technique, sample size, element and respondent definition for the survey.
**a) Time period** - The survey for parents and children was conducted over a time period of seven months starting from June, 2009 to December, 2009.

**b) The Population** - The existing urban population of the four cities of Gujarat namely Ahmedabad, Vadodara, Surat and Rajkot form the sampling frame of research. The word ‘urban’ here emphasizes that children at least have a television set in the household with some media exposure and go to a school.

**c) Sampling unit** - Sampling unit is parent-child dyad from any urban household in any of the above mentioned cities of Gujarat. The word ‘urban’ here emphasizes that children at least have a television set in the household with some media exposure and go to a school.

**d) Choice of Respondents** - Children were considered as the qualifying criteria for the dyad selection. The household is considered for the survey if it had one child in the age range of eight to sixteen years. If this condition was met, both the mother and the child were requested to participate in the survey on voluntary basis. However, only if both the mother and child completed their individual survey forms, the dyad was considered to be included in the sample. Children falling in the other age brackets were excluded from the study.

**e) Rationale behind selection of children in the age group – 8-16 years**

Since the word ‘children’ is subjective, an age group had to be determined for the purpose of the study. For the survey, children across the age group of 8-16 (inclusive of the extreme age groups) were selected. It was reviewed in most of the literary sources that the word ‘pester power’ usually encompasses the tweenagers and the teen agers.
Also, according to the Piagetean model, this age group falls under ‘the concrete operational’ and the ‘formal operational’ stages (discussed in detail in Chapter three) and hence their responses and the degree of interrogation can be enhanced. The book ‘Brandchild’ also specifies the research findings about the children in the age category of 8-14 years (Lindstrom and Seybold, 2004).

The reason the age groups selected is 8-16 years is that according to the Indian education system, on an average the eldest of this group would supposedly belong to the tenth standard. Hence, many of their consumption patterns might be similar to the tween agers. Moreover, it was anticipated that this age group would also be able to understand many of the issues addressed and hence would impart good insights on the subject studied. However, quite often it became difficult for the interviewers to directly get responses from the 8-10 years for reasons of inabilities on the part of children to understand the issues and respond and also because of the fickle mindedness of this age group in terms of social desirability of the responses given.

**f) Rationale behind the selection of the mother as the subject**

The choice of respondents has been restricted to the mother-child dyad for several reasons. At this stage, the rationale behind the selection of the mother and the purposeful exclusion of the father from the survey may be warranted. Several reasons justify the motive behind the choice of the mother for the study. First, it has been expressed by many researchers in the previous studies - both nationally and internationally that such detailed questionnaires related to child’s routine activities and purchase behavior entail many issues that may be better understood (and hence better answered) by the mother. It is empirically established that a mother relatively is more close to the child and hence has more to contribute to the child’s development. Besides, interviewers could conveniently contact mothers for reasons of availability and accessibility. Moreover, it was anticipated that if both the parents participated in the survey, the differences in their responses would create operational difficulties for
drawing further inferences. Thus, based on earlier empirical studies and logical reasoning, mothers became the obvious choice and the representative for parental judgement on the subject of study.

**g) Sampling techniques**

The sampling procedure used is Quota sampling combined with judgemental sampling. This was done to collect a large sample across the four cities of Gujarat. Though probability sampling techniques would assure high level of randomness, they were not found feasible for varied reasons - like non-availability of the list of children, difficulty of operation, and time and budget constraints. Quota for each city was set individually based on the concentration of urban population and its contribution to the total population of Gujarat. Judgemental sampling helped to include various variables like age, gender, income level, social class, family structure, family size, medium of education and working parent status.

**h) Sample size**

Sample size determination is often an important decision as it affects various issues related to generalization and other computational concerns. Based on experts’ guidance, past researches in the same field, time and budget constraints in accessing these households, population distribution in the cities of Gujarat and other readings from major books on statistics and market research, a sample size of 700 households was considered adequate initially. A set of two parallel structured questionnaires with slight variations were developed for parents and children. The questionnaires were made available in both the languages (English and Gujarati) to the respondents as per their requirement. Out of these, 609 sets of questionnaires were returned corresponding to 87% response rate. After due editing and scrutiny, only 557 of them were found to be useful. Hence the effective sample size may be taken as 557 for both parents and children.
i) Sample composition

Primarily the sample was selected from four cities namely, Ahmedabad, Surat, Rajkot and Vadodara in Gujarat as shown in table 6.1. These cities have considerable urban population and heterogeneity of sub-culture and demographics. They also provide a diversity of socio-economic variables like income, social class, family structure, etc.

<table>
<thead>
<tr>
<th>Cities of Gujarat</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahmedabad</td>
<td>280</td>
<td>50.3</td>
</tr>
<tr>
<td>Vadodara</td>
<td>121</td>
<td>21.7</td>
</tr>
<tr>
<td>Surat</td>
<td>110</td>
<td>19.7</td>
</tr>
<tr>
<td>Rajkot</td>
<td>46</td>
<td>8.3</td>
</tr>
<tr>
<td>Total</td>
<td>557</td>
<td>100</td>
</tr>
</tbody>
</table>

(Source : Developed by the Researcher)

6.2.4 Research Instrument Development

Research instrument development basically covers the rationale behind choosing the research instrument and the considerations behind its design.

a.) Choice of the Research Instrument

Eminent researchers recommend using non-structured techniques of data gathering from children, but survey on major literary sources show that questionnaires have been used in many similar studies. Moreover, questionnaires often award standardization amongst different interviewers as has been used for the current study. As the sample size is considerably large, operational difficulty was anticipated in using other survey approaches like observation.

Observation studies are quite often rated as the best tool to study the behavior mechanisms of young children. But this was not chosen as the viable option for several
logical and practical concerns. First, according to the research objectives, a wide array of activities had to examined like the child’s request strategies, parents’ (mothers’) responses to the same, child’s influence due to peer pressure and media exposure, child’s spending on different festivals and occasions, location of the child’s requests, child’s out-of-home activities, and satisfaction with the pocket money allowance. It was not possible to study such diverse objectives encompassing past and current behvaiour in the direct observation set-up. Such studies are more helpful for discrete objectives like children’s understanding of advertising intent (Khatibi, Haque, and Ismail, 2004; Reid, 1979) or grocery shopping behavior in retail outlets (Drenten, Peters, and Thomas, 2008; Mohankumar, P.K.Sinha, and Krishna, 2003). Since descriptive research is chosen as the research approach, experimental designs were not seen as useful for obvious reasons. For this purpose, questionnaires were designed and even translated in Gujarati language looking at the general profile of the respondents in Gujarat. The interviewers gave options for selection of the language from English or Gujarati to the subjects and then interviewed parents and children. In many cases, children studying in English medium schools used questionnaires in English language while their mothers filled the questionnaires in Gujarati as requested by them.

b.) Questionnaire design

Many books on research give guidance and particular emphasis on the ordering of the questions in a prescribed manner suggesting that the demographic details should be placed at the end of the questionnaire, but this was not followed in the current study purposefully. Since the respondents here are children in the age group of 8 to 16 years, it was essential to make them feel comfortable for better and more effective probing. It was seen during the pre-testing stage of the questionnaire that children were often hesitant in giving behavior specific information in their earlier stage of contact. Beginning with demographic details helped them to settle with the interviewer and also served as the ice-breaking stage of the dialogue.
Two parallel questionnaires with slightly different questions were developed for parents and children to gain insight on the subject of interest covering various variables. Previous research has already shown that children often tend to overestimate their relative influence while parents tend to underestimate it (Belch, Belch, Ceresino, 1985; Foxman, Tansuhaj and Ekstrom, 1999). Hence, it is suggested that multi-item and multi-respondent measures be used to improve the reliability and validity of children’s influence.

As the Child-mother dyad was selected, to find the paired differences in the variables of interest, a few common questions were asked in both the sets of questionnaires.

Several questions were incorporated in the questionnaire for parents (specifically mothers) like frequency of external visits, child’s satisfaction with pocket money, sources of product related information, child’s influence in the purchase decision and use of request strategies, the resultant pester power and other behavioural and cognitive aspects related to parent-child relationship. This was followed by ranking of the media influences, decision making information, location of the request made and finally the parental response to child’s requests.

Questionnaire for children was also designed on the same reasoning starting with personal details. Common questions in both the questionnaires helped to cross check the validity of the information and for editing. However, children were not asked the family income question. In addition, they were asked behavioural questions in respect of their preference for various family members and their friends to study some dimensions of their relations with various reference groups. Questionnaire for children was relatively less detailed than that for parents considering the limited ability of the child to answer and understand.
c.) Rationale behind Selection Of The Six Products For the Study

Past research studies include various products where children’s influence is increasing. These products, as specified earlier in the literature review, include mainly the child-major and family-major products. After elaborate contemplation, it was decided to restrict this study to six products (Toys, Chocolates/Biscuits, Stationery items, Computer, Television, and Car) assuming these products would include high involvement and low involvement products, Impulse category and Durables, Variety seekers and value seekers. The first three of the above mentioned products fall in the category of child-major products whereas the others are largely of family use. Out of the wide array of products available for children indulgence, toys/games, stationery items and chocolates/biscuits have popularity among children of all age groups. Besides, they can show independent or assisted purchase behavior for the same. The durables including computer, television and car are high involvement products which have varied influence levels from children depending on the family and the personality characteristics of the child. Thus these six products were finalized for the study because they exhibit differences in price values, sources of availability, promotional strategies, frequency of buying and repeat purchase tendencies and different involvement levels in the purchase decision.

Both the sets of questionnaires asked for the child’s influence in the purchase of these six products. Such repetition was made to find the paired differences between their responses. The respondents were asked to rate the importance of child’s influence in purchasing of these products over a 5-point importance scale ranging from ‘very important to not at all important’. An option of “Can’t Say” was given to the households not owning either a computer or a car assuming that the families belonged to diverse socio-economic backgrounds.
6.2.5 Measurement Scales

Different measurement scales have been used to give the questionnaires the variety to overcome the boredom level of the respondent and also to allow the researcher to probe for as much information as needed for the study.

a) Likert type scale (Attitude/behaviour measures)

Various statements, included to study the attitudes and behavior dimensions of parents and the child, have been measured through the 5-point Likert type scale. It has been suggested when the due conditions for designing the Likert scale have not been followed, it is more desirable to call the scale Likert-type scale rather than Likert scale (http://core.ecu.edu/psyc/wuenschl/stathelp/Likert.htm). It ranges from 1 for ‘Strongly Disagree’ through 5 for ‘Strongly Agree’.

Request strategies used by the child to persuade parents to fulfill her demand has been measured on the frequency scale of ‘Never, Rarely, Sometimes, Very often and Always’ which have been coded as 1,2,3,4 and 5 respectively. The same is also true for the Response strategies of parents to the child’s requests which are measured in the questionnaire for parents.

b) Ordinal scale

Ordinal scales of ranking have been used to rank the influence of various advertising media like TV, Radio, Newspaper, Magazines, internet, outdoor and Movies to gauge the growing impact of various media on children. The same has also been used to rank various occasions like Diwali, Christmas, Birthdays, Children’s Day, Friendship Day, etc to find during which occasions does the child’s demands increases considerably. Ordinal scale of ‘high, medium and low’ has also been used to show the influence of the child in various decision areas like where, when and what kind of products to buy. It is also used in both the questionnaires to find the frequency at which the child goes out for grocery
shopping, mall visits, social visits, eating out or on leisure trips. This helps us to know the lifestyle and psychographic patterns in various households selected for the sample study.

Table 6.2 shows the list of variables and their measurement scales along with how they appear in the questionnaires for parents and children. It also depicts how common questions are sequenced in both the questionnaires.

Table 6.2 : List of variables and their details

<table>
<thead>
<tr>
<th>Variables</th>
<th>Type of variable</th>
<th>Questions</th>
<th>Questionnaire</th>
<th>Measurement scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of the child</td>
<td>Independent</td>
<td>Personal details</td>
<td>Both</td>
<td>Ratio</td>
</tr>
<tr>
<td>Gender</td>
<td>Independent</td>
<td>Personal details</td>
<td>Both</td>
<td>Categorical</td>
</tr>
<tr>
<td>Birth order</td>
<td>Independent</td>
<td>Personal details</td>
<td>Both</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Medium of Instruction at school</td>
<td>Independent</td>
<td>Personal details</td>
<td>Both</td>
<td>Categorical</td>
</tr>
<tr>
<td>Number of children in the family</td>
<td>Independent</td>
<td>Personal details</td>
<td>Both</td>
<td>Ratio</td>
</tr>
<tr>
<td>Family structure</td>
<td>Independent</td>
<td>Personal details</td>
<td>Both</td>
<td>Categorical</td>
</tr>
<tr>
<td>Total Family income</td>
<td>Independent</td>
<td>Personal details</td>
<td>Both</td>
<td>Interval</td>
</tr>
<tr>
<td>Working status of parents</td>
<td>Independent</td>
<td>Personal details</td>
<td>Both</td>
<td>Categorical</td>
</tr>
<tr>
<td>Child’s contact with parents</td>
<td>Independent</td>
<td>Q-1, Q-2</td>
<td>Parents, Children</td>
<td>Categorical</td>
</tr>
<tr>
<td>Out-of-home trips</td>
<td>Independent</td>
<td>Q-2, Q-3</td>
<td>Parents, Children</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Satisfaction with pocket money</td>
<td>Dependent</td>
<td>Q-5</td>
<td>Both</td>
<td>Interval</td>
</tr>
<tr>
<td>Products generally bought with the pocket money</td>
<td>-</td>
<td>Q-6, Q-8</td>
<td>Parents, Children</td>
<td>Categorical</td>
</tr>
<tr>
<td>Child’s relative influence in purchase decisions</td>
<td>Dependent</td>
<td>Q-7, Q-12</td>
<td>Parents, Children</td>
<td>Interval</td>
</tr>
<tr>
<td>Pestering frequency</td>
<td>Dependent</td>
<td>Q-8, Q-11</td>
<td>Parents, Children</td>
<td>Interval</td>
</tr>
</tbody>
</table>
### Request strategies by the child

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Q-9</th>
<th>Both</th>
<th>Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude /Behavioural measures</td>
<td>-</td>
<td>Q-10 Q-13</td>
<td>Parents Children</td>
<td>Interval</td>
</tr>
<tr>
<td>Occasions for children demands</td>
<td>-</td>
<td>Q-11 Q-10</td>
<td>Parents Children</td>
<td>Categorical</td>
</tr>
<tr>
<td>Media influence</td>
<td>-</td>
<td>Q-12 Q-6</td>
<td>Parents Children</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Influence on Decision Areas</td>
<td></td>
<td>Q-13</td>
<td>Parents</td>
<td>Ordinal</td>
</tr>
<tr>
<td>Location of requests</td>
<td></td>
<td>Q-14</td>
<td>Parents</td>
<td>Categorical</td>
</tr>
<tr>
<td>Parents’ response strategies</td>
<td></td>
<td>Q-15</td>
<td>Parents</td>
<td>Interval</td>
</tr>
<tr>
<td>Child’s situational preference for family/ friends</td>
<td>-</td>
<td>Q-7</td>
<td>Children</td>
<td>Categorical</td>
</tr>
</tbody>
</table>

(Source: Developed by the Researcher)

#### 6.2.6 Fieldwork and Data Collection

a.) Method of contact

The mother-child dyad was contacted on the same day by trained interviewers. These interviewers were the students of marketing who had considerable knowledge of data collection through structured questionnaires. Training session was held for these students to familiarize them with the use of the designed research instruments for this study. They were well acquainted with the research objectives of the study and were efficient enough to probe for the most reliable answers. This help was sought to collect a large sample of data from cities different like Ahmedabad, Surat, Rajkot and Vadodara in the scheduled time span. They were also given due training for the use of various scaling techniques included in the designed questionnaire. They contacted mother-child dyads at their homes at convenient timings so that the responses could be elicited in the best possible way and in the most natural and comfortable settings. Also, the interviewer got the questionnaires filled by the mother and the child one after the other so that there was no scope of spill-over effect of responses of one party on another.
Most households were highly co-operative after given due knowledge of the purpose of the study, though 13% of them did not respond. However, no reward or incentive was given for the respondents and the response was gathered on mutual co-operation. The same was true for the interviewers also.

b.) Social Desirability

Social desirability is the tendency of the respondents to give answers that are socially acceptable, whether or not they are true (Malhotra, 2005). Researchers in their studies related to examining parental behavior and other socialization variables have already set a caveat for the social desirability issue (Carlson and Grossbart, 1988; Robertson, 1979). Hence care was taken that parents and children felt comfortable with the interviewer and gave most authentic responses. The interviewers entered into a dialogue with the respondents to probe more effectively when needed.

6.2.7 Data Analysis Plan

The unit of analysis is selected as the parent-child dyad (parent includes the mother only). The structured framework of the personal interviews through the questionnaires gives immense scope for using statistical tools for both descriptive and inferential results. SPSS (Statistical Package for Social Science) has been used for quantitative analysis of the data. Several univariate, bi-variate and multi-variate analysis tools have been used as deemed important and relevant by the researcher. Past literature has been used as a basis to understand various possible relationships between the variables.

Various measurement scales used like the Ordinal, Interval and Ratio scales provide for the use of different statistical tools. For responses elicited from parents and children on common variables, paired mean difference tests were run. Independent t-tests were performed to find gender differences for purchase influence on six products, child’s
influence strategy, parents’ response strategy and attitudinal measures. Analysis of Variance was used for the same variables to find age-based differences amongst children of three age groups: 8-10 years, 11-13 years and 14-16 years old. Factor analysis was conducted on the attitudinal and behavioural measures. Other non-parametric tests were run where the measurement scale of the variable did not support the conditions for use of parametric tests.

6.3 Operationalisation Of Constructs

For the current study, several constructs have been developed based on the conceptual model as mentioned in the previous chapter. A brief on the operational definitions of these constructs helps to examine various variables in the manner intended by the researcher.

6.3.1 Child’s Influence Strategy

Child’s influence strategies are denoted by several request strategies found to have relevance from past studies. These are studied in both the sets of questionnaires to find out both child’s perceptions and parent’s perception of the child’s purchase attempts which is measured on a 5-point Likert-type scale ranging from ‘Never’ through ‘Always’.

6.3.2 Parents’ Response Strategies

Several studies show the relationship between family communication patterns, parenting style and their response strategies to the child’s purchase attempts. For this study, both the questionnaires try to measure these responses over a 5-point Likert-type scale ranging from ‘Never’ through ‘Always’.

6.3.3 Child’s Influence in Purchase Decisions

Six product categories have been selected to restrict the scope of study to understanding child’s relative influence in purchase decisions. For this, three family-
major (television, car and computer) and three child-major products (toys, chocolates/biscuits, stationery items) have been chosen. Parents’ perception and the child’s perception about her relative influence in purchase decision making have been studied through structured questions on a 5-point importance scale ranging from ‘Very Important’ through ‘Not at all Important’.

**6.3.4 Decision Areas**

Past literature shows that children have varied level of influential power over different stages of decision making for purchases of products. Children influence in selecting the type of the product variant to buy. Other areas where the child’s influence prevails are ‘from where to buy’ and ‘when to buy’. The relative influence over the above three decision areas is measured through an ordinal scale of ‘high, moderate and low’.

**6.3.5 Pester Power**

The strong influential capacity of children to make their parents yield into their demands for various products has been explained as ‘pester power’. While there could be several concepts to measure this variable, the questionnaire helps to gauge this through a simple 5-point scale of ranging from ‘Always through Never’ finding the frequency at which the child pesters parents to buy most of the products of his choice.

**SUMMARY**

This chapter on research methodology describes various methodological steps involved in the research process. An overview about the research design, data collection sources and methods, sampling procedure and data analysis plan helps to understand the research approach used. An effective sample size of 557 mother-child dyads from the
four cities of Ahmedabad, Vadodara, Rajkot and Surat was used for the study. Both children and their mothers were included as subjects to derive better and more reliable conclusions from the study. Six products consisting of child-major and family-major products were incorporated in the research design. Major issues while designing the questionnaires are duly discussed wherever necessary. Besides, operationalisation of constructs further lends ease in understanding the derivations of a few variables. A brief on different variables of interest and their appearance in the parents’ and children’s questionnaires provides direction for the next chapter on data analysis and results.

REFERENCES


**WEB SOURCE**

http://core.ecu.edu/psyc/wuenschk/stathtelp/Likert.htm (Retrieved as on January 11, 2011)