
CHAPTER 3

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CHAPTER 3

Research Plan

This chapter provides an outline of methodology to be used in the research, the conceptual frameworks used in our approach to define the constructs. The discussion initiates with explanation of exploratory, descriptive and causal research approaches which is further extended to qualitative and quantitative approaches and identify our study in the category. It further proceeds to selection of appropriate research strategy, discussion on data sampling, data collection and method of data analysis. It concludes with reliability, validity and triangulation of data.

3.1 Introduction

The purpose of this thesis is to identify the critical factors of children's attitudes towards advertising as perceived by parents. The objective of the researcher here is to learn about the attitudes of the children towards television advertising. The researcher explicitly wants to learn if this attitude towards Television advertising creates pester power among children and how does that affect the buying behaviour of the parents. A review of literature about the impact of television advertising on children have been investigated broadly within three research aspects — children attitude towards advertising literature, the pester power literature and the impact on the buying behaviour of parents literature.

3.2 Problem Statement

In this study there are four significant problems:

1. Finding the critical constructs which influence the attitude of children towards TV advertisements.
2. Identifying the relations among the constructs.
3. Finding out whether attitude of children towards TV advertisements causes pester power.
4. Finding out whether Pester power of children influences Buying behaviour of parents.

3.3 Research Objectives

Based on the problem identified the following research objectives were set:

1. To study and identify the performance indicators which influence the attitude of children towards TV advertisements.
2. Classify the indicators and build a model based on them.
3. Analyzing and synthesizing the parental perception of children's attitude towards TV advertisements and how that impacts parental buying behaviour.

3.4 Research Issues

1. There is an increased importance on children being used in advertisements by the marketer
2. Marketers are studying children's minds and are utilising that knowledge to sell them products

3. Children are spending long hours watching TV rather than playing games, pursuing hobbies or reading.
4. Parents are not able to control the amount of TV their children watch
5. Children are exposed to too much of advertising
6. TV advertising teaches children to persuade their parents to buy products that they really do not need.
7. Children's inability to understand the persuasive agenda of TV advertisements and become easy targets to sell
8. There is an increasing thrust on custom making products for children, since companies are seeing a big consumer class in children.
9. The marketers are trying to make the most of the worldly aspirations and pestering power of new-age children.
10. The marketers are building brand preferences amongst children at an early age.
11. Children are taking to adult products world over from sunglasses to specialised crib mattresses as well as projectors and sound systems.
12. Most of the Television advertisements are either focussed on children or use children in their promotional campaigns as a technique to sell products to children.
13. TV advertisements is believed to create certain effects on children by making children ask for more advertised products which often turns into nagging.
14. It has been observed that if parents do not purchase their kids the TV advertised product it often leads to parent child conflict.
15. "Television advertising is cited as manipulative, arousing desires which would not otherwise be salient, promoting materialism, and stifling creativity, imposing stress and strain on low-income parents, and disrupting parent-child relationships" ([7] Burr and Burr, 1976; [5] Buijzen and Valkenburg, 2003; [45] Spungin, 2004.

3.5 Scope of Study

Since decades marketers have been trying to find ways to reach their customers and the most effective way to reach them is to reach them through their children. Marketers reach children through television advertising due to its visual effect which makes a better impact on kids. It is observed that kids are susceptible to the influence of TV commercials. Earlier, marketers used to target parents but now they directly advertise to children in order to influence the parents. At the same time, parents today are willing to buy more for their kids because of changing trends such as smaller family size, dual incomes which means that families have more disposable income. Today children have more authority on saying what they want and are therefore more vocal about their needs. Now a days most of the Television advertisements are either focussed on children or use children in their promotional campaigns as a technique to sell most of the products to parents. Therefore, it becomes evidently difficult to include all product categories advertised on TV targeted to children. This study aims to identify the critical constructs which influence the attitude of children towards TV advertisements. It further identifies whether attitude of children towards TV advertisements causes pester power, and whether Pester power of children influences Buying behaviour of parents. The specific product categories for the purpose of this research has been limited to FMCG products like (Soaps, Hair Oil, Cooking Oil, Shampoo, Creams, Biscuits, Toothpastes and Chocolates), which are targeted at general family including children. The rationale is that these not only capture most of advertising but also use children in the promotion campaign to influence their parents. We also have limited our study to parents who have been living in Delhi, Gurgaon, Faridabad and Noida since the past five years.

3.6 Research Model

This study is executed by conceiving a research model of finding the critical constructs which influence the attitude of children towards TV advertisements. Thereafter, the

relationship among the constructs was identified. The research also aimed at identifying the impact of Children's attitude towards TV advertisements by increasing the pester power among kids. Finally, the research aimed to find out whether Pester power of children influences the Buying behaviour of parents.

3.6.1 Research Questions

The aim of the research is to develop a framework for evaluating the attitude of children towards television advertisements as perceived by parents and how that influences their buying behaviour.

This research problem was divided into specific research questions:

Q1. What are the factors that influence the attitude of children towards TV advertisements?

Q2. To what extent are these factors interrelated?

Q3. Does the attitude of children towards TV advertisements contribute to the pester power of children?

Q4. Does the pester power of children significantly contribute to the overall buying behaviour of parents?

3.6.2 Conceptual framework

Several metrics have been developed to measure the attitude towards advertisements. [11] Derbaix and Pecheux (2003) “developed a new scale to assess children's attitude towards television advertisements”. Credibility and entertainment aspect was developed as two major factors to measure attitude. Credibility was further reinforced by Ashill and Yavas (2005) who also developed believability as a predictor to attitude towards advertisements “The significance of entertaining ability of the advertisements, i.e. hedonic/pleasure derived from watching the advertisements as being one of the significant factors affecting the attitude

towards advertisements” has been recently stressed by [59] Petrovici and Marinov (2007), though [18] Goldberg and Gorn (1978), [45] Rolandelli (1989) and [63] Collins (1990) and [16] Ghani and Zain's (2004) identification of humour for liking an advertisement also alludes to the entertaining ability of the advertisement.

This study is exploratory in nature and is not based on any single previously proposed model; rather we have tried to propose a scale ourselves which can evaluate attitude of children towards television advertisements and how it affects the buying behaviour of parents.

In this study, impact of television on children is defined through attitude of children towards television advertisements which leads to Pester power of children and then leads to change in the buying behaviour of the parents. Attitude of children is represented by four factors: Entertainment, Information, Credibility and Liking. Table 3.1 gives a gist of existing literature for the contributing factors.

Dimensions	Implication	Authors
Entertainment	Entertainment parameter tries to encompass the humour and engaging capabilities provided by a TV advertisement which is liked by children	Goldberg and Gorn (1978); (Rolandelli, 1989; Ross et al, 1984); (Ward 1972); (Bartholomew and O'Donohoe's, 2003); (Blosser and Roberts, 1985); (Collins, 1990);(Maher <i>et al.</i> , 2006).
Information	This parameter plays a very important role as it makes children aware of the brands and helping	(Peter and Olson, 1994);(Wilcox, 2004); (Kunkel,

	them learn how to use them	2004); (Mark, 8); Calfee and Ringold (1994) (Freidmann & Zimmer, 1988); (Kwan, & Eze, 2012). Taylor, Bonner & Dolezal (2002)
Credibility	It is the believability and the truthfulness which creates attitudes towards Television advertising	(Chan and Mc Neal, 2002); (Rieken and Yavas,1990); (Pollay and Mittal,1993); (Fishbein, 1963); (Dillon & Kumar, 1985); (Fishbein, 1967); (Fishbein & Ajzen, 1974); (Fishbein & Raven, 1962); (Derbaix and Pecheux, 2003); (Ashill and Yavas, 2005)
Liking	Attitude of children towards TV advertisements depends on the extent to which a child likes Television advertising and views it favorably or unfavourably	(Rossiter, 1979); (Fischer et al, 1991); (Scammon and Christopher, 1981); (Chan, 2000).
Pester Power	This dimension discusses how children's attitude towards TV advertising leads to pester power.	(Evra, 1990); (Andguladze, 2007); (Wartella and Alexander,1979); (Mc Neal and Ji, 1999).
Buying Behaviour of	The buying behaviour of parents is influenced by the pester power used	(Nichols and Cullen, 2004); (Goldstein, 1994); (McNeal,

Parents	by the children.	1999); (John, 1999); (Geary, 1999);(Hawkins et al., 2001); Blackwell et al. (2001)
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Table 3.1: Dimensions for the proposed model

Figure 3.2 gives a total framework supported by the existing conceptual studies in conjunction with different scales posited by researchers. The relative relation and the inter relation of the factors are depicted in detail in the figure. Therefore, our proposed model is adapted from the literature review and is presented below.

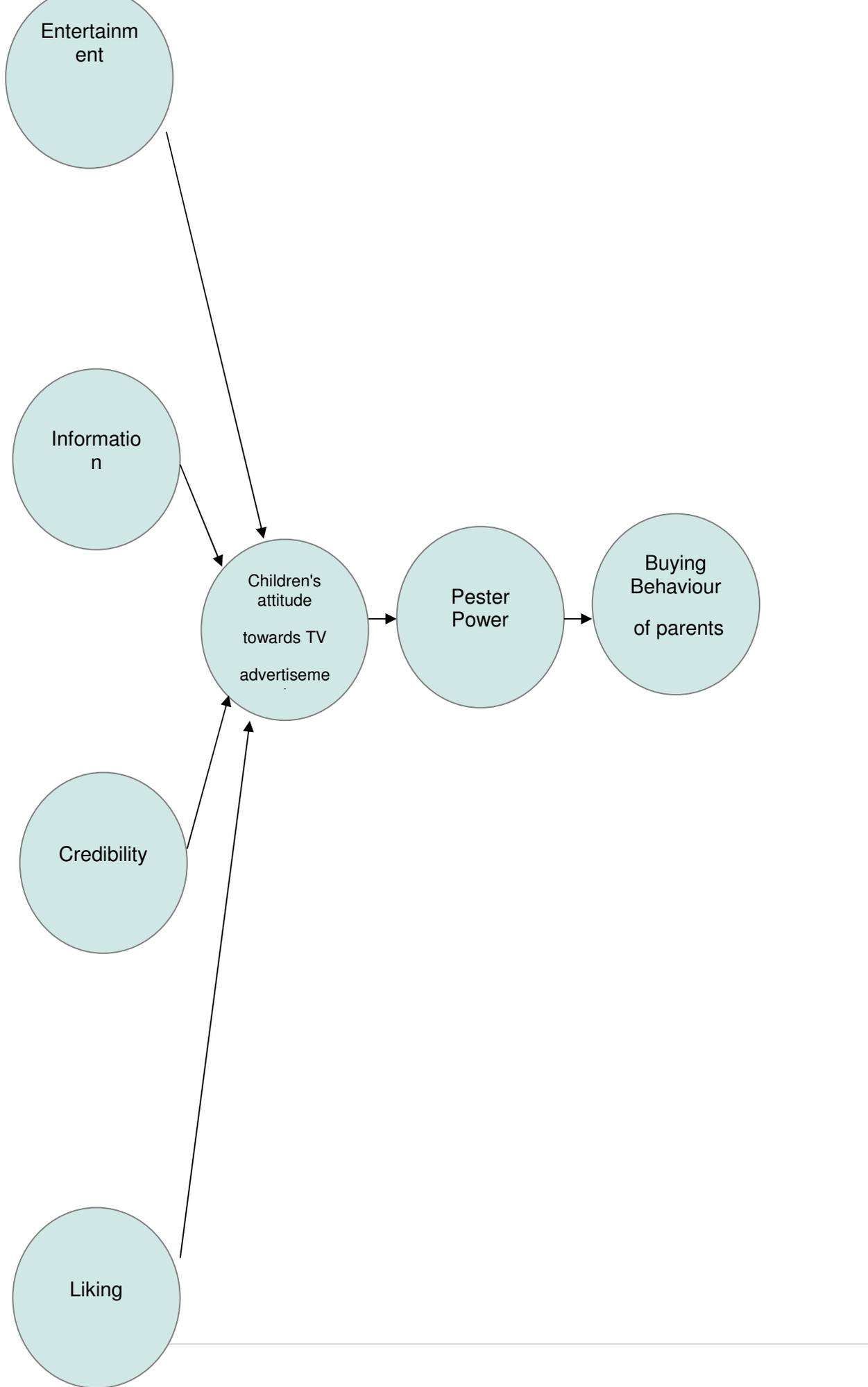


Figure 3.2 Conceptual Framework. Impact of Television advertisements on children and how it influences buying behaviour of parents: The Research Model

3.7 Overview of Research methodology

3.7.1 Discussion on demographic characteristics of the sample

A demographic analysis of the sample population was done to understand how different demographic factors like age of child, gender, education and occupation of parents influence the buying behaviour of parents.

The chart below (Figure 3.7.1) shows the gender distribution within the respondent set.

The procedure of distributing the questionnaires has already been discussed in the research design. It was mentioned that a total of 440 questionnaires were distributed through online and offline modes to potential respondents. Numbers of male and female candidates were not predetermined as the distribution was done arbitrarily. Of the total responses submitted, 400 responses were considered to be valid. Among these 284 respondents were females, and 116 respondents were male. So, there are more female respondents than male respondents

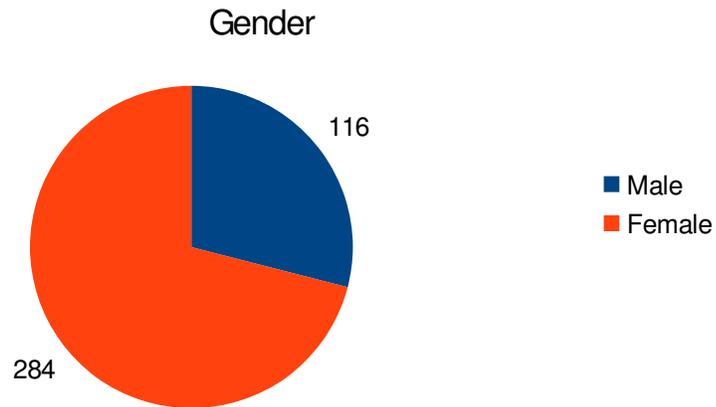


Figure 3.7.1: Gender Distribution of respondents

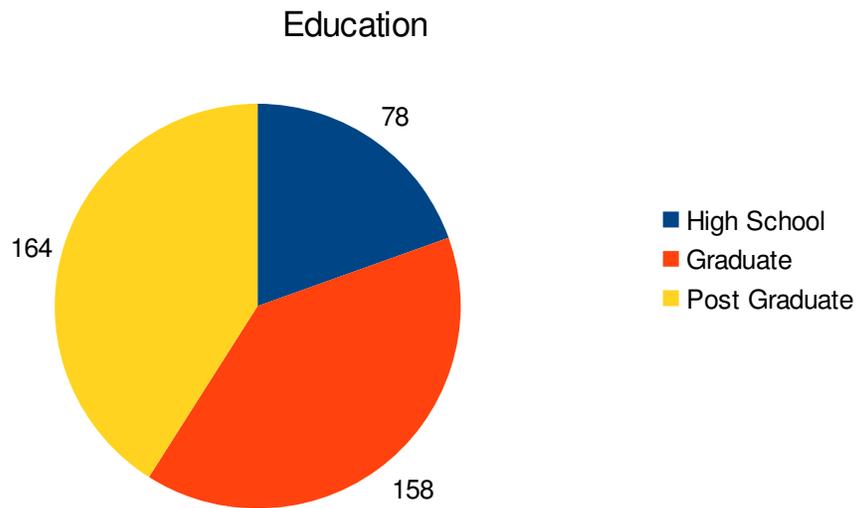


Figure 3.7.2: Education Distribution

Figure 3.7.2 depicts categorization of respondents based on education. It is observed that most of the respondents are post graduates as per their education and the next close is the graduates in numbers. This can be explained as most of the respondents in urban area now a day are well educated. Both males and females respondents are well versed with the impact of the television advertisements on their child.

Another plot was made of occupation distribution of respondents is shown in figure 3.7.3

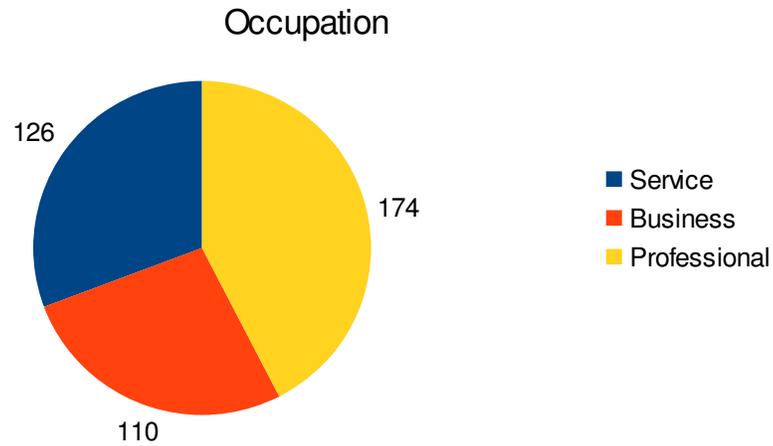


Figure 3.7.3: Occupation Distribution

The above plot reflects that the respondents are largely professionals. It can be seen that professionals usually do not have much time to be shared with their children unlike housewives, therefore, there is probability of giving in to the requests of children more in this context.

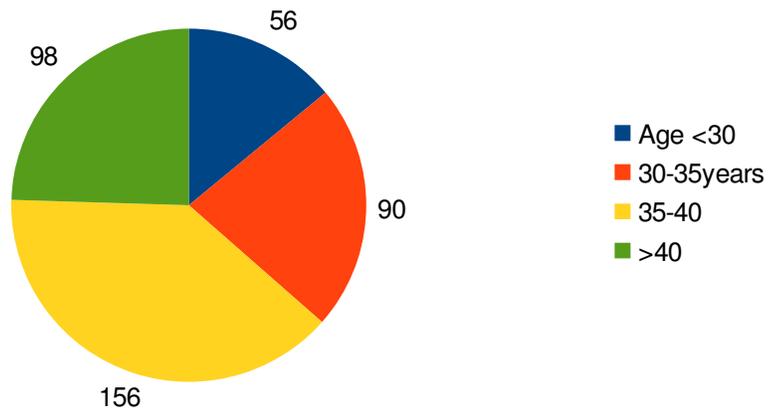


Figure 3.7.4: Age Distribution of parents

The above plot 3.7.4 reflects that most of the parents are falling in the age group of 35-40 years, thereby showing that they are young professionals who do not have much time to be with their children and are more inclined towards their own profession.

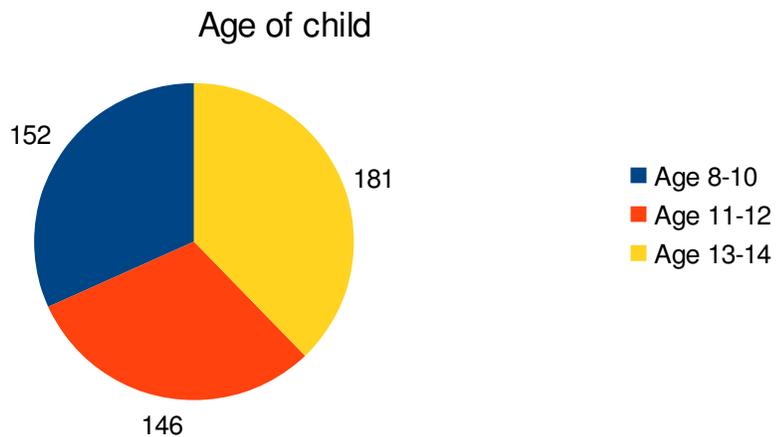


Figure 3.7.5: Age Distribution of children

From the above plot 3.7.5, it can be seen that most of the children fall in the age group of 13-14, which means that they are the tween agers. As earlier stated in the Literature review, these tweenagers are very important for the marketer. “First, these children are believed to be capable of developing psychological constructs, making comparisons and forming

impression” (Selman 1988). The tweens are neither kids nor teens yet, but are concerned about their self image. They give into persuasion easily. Marketers have also found that this segment has a lot of potential as they like to have choices. They influence parents by nagging or pestering (McNeal, 1999). Due to all these reasons marketers around the globe are targeting this segment.

Since we have got only a small fraction of the respondents, thus the distribution might not have depicted the actual situation in India. The respondents are just a representation of a huge population though we have tried to reduce biases as much as possible.

3.7.2 Research Design

This research aims to find the success factors of children's attitude towards television advertisements. A model was developed based on the extant literature and theories which helped to formulate four hypotheses. Since most of the variables were selected from marketing theories, a preliminary exploratory study was conducted to check the applicability of the variables in context of children. As exploratory studies lay the foundation for descriptive study, to prove the hypotheses, descriptive research was employed. This research also studies the causal effect of children's attitude towards television advertisements on children's pester power and how it influences the buying behaviour of the parents. It is not practically feasible to examine all variables that contribute to the children's attitude towards advertising, so the model is open for extension including variables which can exhibit high correlations.

3.7.3 Sampling

According to the Census of India 2011, there is more than 4 crore population in Delhi and NCR of Delhi. This population includes both male and females. Given the size of the population, it will not be practical to survey each member of the population in Delhi and

NCR. "A non-probability sample was selected for this project, as suggested by Leedy (1997), who states: "sampling is appropriate wherever large populations that have an outward resemblance of homogeneity are to be investigated" (p. 204)". A convenience sampling technique was used for the data collection. Ferber (1977) "identified some prerequisites in order to utilize the sample by a convenience sampling: first, subjects should be relevant to the topic of the study; second, student subjects can be utilized when a study is an exploratory research; and lastly, the sample size should be large enough for analytical purposes". Hair et. al. (2007) "defined convenience sampling which takes into account homogeneity of sample in sample frame and where sample unit is selected based on their ready availability". It is believed that the data collections in the current study have been satisfied with these three conditions. The study was designed to analyze exploratory factor analysis (EFA) and structural equation modeling (SEM) through two data collections. "First, for the sample size in EFA", Comfrey and Lee (1994) recommended that "the adequacy of sample size might be evaluated very roughly on the following scale: 50 - very poor; 100 - poor; 200 - fair; 300 - good; 500 - very good; 1000 or more - excellent" (p. 217)". "Some researchers suggested a minimum observation to item ratio of at least 5:1 in EFA" (Gorsuch, 1983; Hair et al., 1998; Hatcher, 1994). "However, such rules-of-thumb based on the subject to variable ratio (e.g., 1:5, 1:10, or 1:20) have been recently considered "not sufficiently sensitive to a variety of important characteristics of the data" (e.g., Barrett & Klein, 1981; Fabrigar et al., 1999, p. 274; MacCallum, Widaman, Zhang, & Hong, 1999; Velicer & Fava, 1998).

3.7.4 Defining the target population and sample frame

Hair et al. (2007) "define target population as "the complete group of objects or elements relevant to the research project". The sampling unit for the survey included (parents whose children are between 8-14 years of age). Since the research is how attitude of children towards TV ads influences buying behaviour of parents, the target population is defined as follows

The target population for the current study is defined in table 3.7.4:

Element	Parents whose i) Who have an income upto 15 lacs per annum ii) Who have an education between High school to Post Graduate iii) Children are in the age group of 8-14 years
Sampling unit	i) Parents who have children in the age group of 8-14 years and watch TV advertisements
Extent	Parents in Delhi and NCR
Time	September – December, 2010/ March –July ,2013

Table 3.7.4: Target population defined

Trochim (2006) “defines sampling frame as the listing of the accessible population from which you'll draw your sample”. The researcher approached the parents through emails, mall intercepts, social networking system and personally distributed the questionnaire to people. Around 440 questionnaires were distributed for this survey. Only 400 questionnaires were considered as the rest were not completely filled by the respondents.

A survey data is subjected to both sampling and non sampling errors. Sampling errors can occur as a result of drawing a probability sample rather than conducting a census of the whole population. Non-sampling errors, on the other hand are mainly associated to data collection and processing procedures. Sampling error can be checked by measuring the standard deviation of the sample to ensure that the variation of the sample from the population is within the limits. Common among the non-sampling errors are ineligibility error that is including elements that do not belong in the frame, duplication that is containing duplicate elements, non response error that is the variation of views between non respondents and respondents, time period bias that is data collection happens in an unrepresentative time period (National Statistical Service, Handbook: Chap 6). The first possibility was handled by requesting potential respondents those who have children between 8-14 years of age, to proceed with the survey, thus targeting only the respective parents. To tackle the duplication errors, email addresses were entered and each response was checked individually preventing the chance of repetition. To handle the time period bias a year's time period was chosen to collect response as the age of the children segment would increase after that. Thus in this study significant attention was given to minimize the procedural flaws within the sample frame selected.

3.8 Questionnaire development

The measures used in this research were primarily adapted from different marketing communication and attitude of children towards advertising literature. As the first step, domain of each construct was defined. Some were adapted directly from the extant literature, some were renamed and some were developed from the exploratory qualitative study that was conducted as a pilot study. “The empirical study using exploratory factor analysis was done following the guidelines of scale development procedures” proposed by Churchill (1979). The research is divided into three steps 1) Conceptualization 2) design and 3) normalization.

3.8.1 Qualitative interview

A qualitative pilot study was conducted with experts in marketing, advertising, research scholars to ascertain the pertinence of items selected in the specific research context and to have a fair judgment that all the aspects of television advertising and other measures had been included. Changes were made in the scale items based on the experts' opinion, with addition of a few new items, changing of wordings in some and deletion of repetitive and irrelevant items. The questionnaire was again reviewed for approval.

The interviews were conducted in two phases. The first phase interviews were conducted with seven experts of marketing and advertising to understand the view of a parent and incorporate the variables pertaining to a respondents view. Two experts were marketing consultants, two were from the industries associated with marketing of FMCG goods, two were from research organization working on advertising research and one was from the marketing department of a University. This pilot study was necessary as most of the items were selected from researches done on attitudes of children towards advertising and pester power and were needed to be checked with the applicability of the items in the context of how parents get impacted by this. Thus the purpose of the initial phase can be summarized as:

- (i) To ensure important aspects of children's attitude towards advertising from parents' perspective are included in the model.
- (ii) To determine that all variables included are relevant to the context of children's attitude and how it creates pester power as most of them are derived from existing scales given for measuring children's attitude and measuring pester power.
- (iii) To confirm that each question is properly framed without any positive or negative overtones and understandable by the respondents.

- (iv) To ensure that there is no question which is repetitive or open ended and can create confusion among the respondents.
- (v) Additional variables pertain to the context of advertising.

The second phase of the interviews was conducted with 10 parents consisting 6 males and 4 females respondents with minimum graduation level of education. They were asked to review the initial list of items. As per their suggestions, items were added or eliminated. Some of the questions were rephrased to make them interesting and understandable for respondents. The aim of this phase interview is summarized as:

- (i) To confirm that item scales are understandable within the context of children's attitude towards advertising and pester power.
- (ii) To ensure the items actually represent the main variable in this context.

Initial questionnaire had thirty items which were selected from previous studies which were grouped seven logically coherent sections. After the qualitative interview with the users and the experts in marketing, six items were deleted and two items were added.

3.8.2 Summary of Interview

The interviews were for qualitative study and were unstructured. All interviewees were parents who had children between 8-14 years of age and had exposures to Television advertising. They unanimously agreed that these TV advertisements were liked by their children created pester power to influence their parents. They agreed that Television advertisements play an important role in the consumer socialization process of children by making them aware of brands and helping them learn their use.

However, it was found that respondents whose children were between 8-10 years of age liked more the entertainment aspect of the television advertisements and the respondents

whose children were between 10-14 years of age liked more the information and credibility of the television advertisements.

It was observed that the parents had seen that children tend to favour entertaining advertisements. They liked the up tempo music and cartoon characters shown in the advertisements. So, Entertainment was considered as a contributory factor for children's attitude towards Television advertising. Since it was found that television advertisements provide relevant information to the children, it was the next significant point raised by the respondents. It was found that children find TV advertisements believable and feel that they can never lie to them. So credibility of TV advertisements was considered as a factor for determining children's attitude towards television advertisements. Children seem to have an immense liking for the TV ads as they find TV ads are for fun and like most of the ads. It was found that children like Television advertisements with specific reference to food advertisements. The children preferred these advertisements as they were interesting and funny. So, Liking was a new factor that was considered in the research. The inclusions of other variables in the model were checked with the users in the interviews, and were tested further in the quantitative study.

3.8.3 Pre-testing questionnaire

Once the measurement items were developed, the questionnaire was assessed by three people at University School of Management studies, IP University. The respondents were two Professors and a research scholar from the television advertisements research group, one Assistant professor from Marketing department and one Professor from the Marketing department.

To ensure representation of a 'real world environment the pre-testing process helped us to consider the opinions of the respondents on the following points:

- (i) Clarity of questions in the questionnaire.

- (ii) Average time needed by a respondent to complete the questionnaire (the questionnaire should not be long).
- (iii) To check if any variable is repeated or unnecessary.
- (iv) To check if the questions are asked in an understandable manner without any ambiguity.

Based on the respondents' suggestion some questions were reframed and small changes in the order of the questions were made (Ref: Appendix I).

3.8.4 Pilot test

“Pilot test is an important component of data collection process as it “. . . a small-scale trial run of all the procedures planned for use in the main study”” (Monette, Sullivan and DeJong 2002, pg. 9). Pilot testing of the instrument being used (i.e. questionnaire) for research purposes has obvious benefits like 1) providing scope to test hypotheses; 2) checking statistical and analytical procedures; 3) a chance to reduce problems and mistakes in the study. Thus a pilot test was conducted before proceeding for the final model to confirm the relevance and completeness of each item in the instrument (i.e. questionnaire).

“Sample chosen for the pilot test is a small subset of respondents and may range from 20 to 100” (Monette et al., 2002, pg: 98; Cooper & Schindler, 2003). Thirty questionnaires were distributed among employees of IILM having children between 8-14 years of age. After a week 30 respondents were collected. All respondents were familiar with Television advertisements targeted to kids. (Ref: Appendix II)

SPSS 16 was used to do factor analysis using principal axis factoring method on the data collected which yielded six factors. The fourth and fifth factor did not show high loading

(>0.4) for the items and those items were dropped. Reliability of the scale was verified by calculating the Cronbach's alpha value which was found to be 0.77. Based on the poor factor score and comments received from respondents in the pilot test, three items were removed. The final scale had twelve items grouped under four factors as explained below:

Items to measure Entertainment

Three items were selected to measure entertainment, which delineated what children like as a source of enjoyment and engages them. “These items were selected from the previous studies” done by Goldberg and Gorn (1978); Rollandi (1989); Ross et. al. (1984); Ward (1972); Bartholomew and O'Donohoe's (2003).

<i>Variables</i>	<i>Explanation</i>	<i>References</i>
<i>Ent_item1</i>	<i>Kids find TV ads entertaining and funny (they like humour, cartoon characters used in the advertising which makes them laugh)</i>	<i>Goldberg and Gorn (1978); Rollandi (1989); Ross et. al. (1984); Ward (1972); Bartholomew and O'Donohoe's (2003).</i>
<i>Ent_item2</i>	<i>Kids find TV ads enjoyable (they like up tempo music and jingles used in the advertising)</i>	
<i>Ent_item3</i>	<i>Kids find TV ads engaging (animated characters used in the advertising engages children)</i>	

Table 3.4: *Items for Entertainment*

Items to measure Information

Three items were decided based on the previous literature to understand how kids feel about TV advertisements as a relevant source of product information. “Providing information is a chief legitimizing function of advertising cited by its advocates and also one major reason consumers give for why they approve advertising” (Pollay & Mittal, 1993). “Perceived

informativeness is a significant predictor of attitude toward advertising in various media” (e.g., Ducoffe, 1995, 1996; Mittal, 1994, Pollay & Mittal, 1993; Tsang et al., 2004; Zhou & Bao, 2002). Burns (2003), “however, found that the relationship between perceived informativeness and attitude is significant for some formats but not others, indicating the possible moderating effect of advertising format on the belief-attitude relationship and the necessity of analyzing it within the context of specific formats”. “As the perceived informativeness has been found to be a significant predictor of attitude toward pop-up advertisements before (Burns, 2003), and as information value is an often-cited merit for sponsored links by advertising practitioners (Ramsey, 2004), perceived informativeness was hypothesized as a salient belief for both formats”. “The measures were adapted and changed as per the context from previous studies” done by Yang, Cai, Zhou and Zhou (2005); Kim, Kim & Lennon (2006); Kumar, Mukherji, Butt and Persaud (2007).

<i>Variables</i>	<i>Explanation</i>	<i>References</i>
<i>Inf_item1</i>	<i>Kids feel TV ads provide relevant product information</i>	<i>(Pollay & Mittal, 1993); (Ducoffe, 1995, 1996); (Mittal, 1994); (Tsang et al., 2004); (Zhou & Bao, 2002); (Burns, 2003); (Ramsey, 2004); (Parasuraman et al, 1988); (Yang, Cai, Zhou and Zhou, 2005); (Kim, Kim & Lennon, 2006); (Kumar, Mukherji, Butt and Persaud 2007).</i>
<i>Inf_item2</i>	<i>Kids feel TV ads are useful</i>	
<i>Inf_item3</i>	<i>Kids feel TV ads are informative (keeps them upto date with information)</i>	

Table 3.5: *Items for Information*

Items to measure Credibility

Three items were selected to measure credibility/believability which combines ‘truth’ and ‘believe’ dimensions used by Rossiter (1977); (Rieken and Yavas1990)

<i>Variables</i>	<i>Explanation</i>	<i>References</i>
<i>Cred_item1</i>	<i>Kids find TV ads credible (they find TV advertisements believable)</i>	<i>Rossiter(1977), (Rieken and Yavas1990)</i>
<i>Cred_item2</i>	<i>Kids find TV ads trustworthy (they feel TV advertisements never lie to them)</i>	
<i>Cred_item3</i>	<i>Kids find TV ads honest</i>	

Table 3.6: *Items for Credibility*

Items to measure Liking

Two items were decided to measure liking towards TV advertisements. “They were decided on from studies done by (Rossiter, 1979); (Fischer et al, 1991); (Scammon and Christopher, 1981); (Chan, 2000)”.

<i>Variables</i>	<i>Explanation</i>	<i>References</i>
<i>Lik_item1</i>	<i>Kids pay more attention to TV advertisements</i>	<i>(Rossiter, 1979); (Fischer et al, 1991); (Scammon and Christopher, 1981); (Chan, 2000);(Mohammed A Razzaque, 2009)</i>
<i>Lik_item2</i>	<i>Kids feel good while viewing advertisements</i>	
<i>Lik_item3</i>	<i>Kids like to have products advertised on TV</i>	

Table 3.7: Items for Liking

Questions in the questionnaire were designed to evaluate each item on a five-point Likert-type scale. The grading was done with 1 denoting “strongly agree” ending up to 5 denoting “strongly disagree”. We avoided using seven point Likert scale as increasing the number of scale points can result in non-response bias and respondent fatigue besides increase the cost of administration. Lehmann and Hulbert (1972) “opinionate that for individual scale analysis and a long questionnaire, using a 5point scale is sufficient to obtain an accurate measurement”.

3.9 Data collection

3.9.1 Data Collection Methods

The researcher approached the citizens through emails, mall intercepts, social networking system and personally distributed the questionnaire to people.

“Online data collection is becoming popular” (Money et al., 2003; p. 141). “Online surveys are easy to administer, low in cost, has global reach, and exhibit the ability to capture and analyze data quickly but have disadvantages of complex design, include loss of anonymity and are limited to computer users” (Hair et al., 2007).

The questionnaire was distributed through emails to known contacts and snowball sampling was used to reach out to maximum people. Additionally hard copies of questionnaire were also distributed in malls and to known contacts. The respondents were given liberty to maintain their anonymity. 1000 emails were sent, so that necessary number of responses could be obtained.

The survey was open for four months. During this time, 400 valid responses were received from the parents. No reminder or follow up emails were sent to non respondents primarily because the completed responses collected were sufficient for testing the model.

3.10 Data analysis

Different statistical methods can be used to make sense of collected data sets. According to Hair et al. (2007), “two steps are involved in quantitative data analyses: 1) descriptive statistics to obtain a descriptive overview of data in hand, and 2) using statistical tests for hypothesis testing”. For this study, we have conducted the following statistical analysis to make sense of the data.

3.10.1 Confirmatory factor analysis and structural equation modeling

Structural equation modeling was chosen as a major analysis technique for this study, and the AMOS 18 software package was used to accomplish structural equation modeling. In a structural equation model, it is important to test multiple interrelated dependence relationships in a single model. “Here, interrelated means that the dependent variable in one equation can be the independent variable in another equation” (Hair et al., 1998). “Structural equation modeling (SEM) has become an increasingly popular tool for researchers to assess and modify theoretical models” (Gefen et al., 2000). “It has the ability to estimate simultaneously several multiple regressions that may be interdependent” (Blaikie, 2003). Thus, it is a tool to address a network of interrelated predictor variables.

3.10.2 Confirming the Measurement Model (CFA)

Confirmatory factor analysis is used to identify small number of factors which can explain a variable. In this study a factor structure was specified and CFA was used to determine factor structure. After CFA, full structural model has been developed in this study with all constructs.

Overall model fit: “During evaluation of both measurement and structural models, the researcher must assess overall fits for the model in order to judge whether the model sufficiently represents the set of causal relationships. “This is done through assessing

goodness of fit measures. Three types of goodness of fit measures are used” (Hair et al., 1998):

Type of measure	Level of acceptable fit
Absolute fit measures:	
Goodness-of-fit index (GFI)	>.90
Root mean square error of approximation (RMSEA)	Marginal fit <0.090 Acceptable <0.080, Good fit <0.050,
Incremental fit measures:	
Tucker –Lewis index (TLI)	> 0.90
Adjusted goodness-of-fit index (AGFI)	> 0.80
Comparative fit index (CFI)	>0.90

Incremental fit index (IFI)	>0.90
Parsimonious fit measures:	
Normed chi-square (CMIN/DF)	Lower limit: 1.0 upper limit 2.0/3.0 or 5.0

Table 3.8: Goodness of fit measures for structural equation modeling

Measurement model fit:

Once the overall model has been accepted, each of the constructs can be evaluated separately by

- 1) examining the indicator loadings for statistical significance, and
- 2) estimating the reliability coefficients (composite reliability) of the measures.

“This provides an examination of the convergent and discriminant validity of the research instruments” (Hair et al., 1998).

Structural model /path model

“A structural model represents the theory with a set of structural equations and is usually depicted with a visual diagram” (Hair et al., 2006, p.845). When a measurement model is specified, it is possible to build a path/structural model in order to evaluate hypothesized relationships. Using SEM to test the theoretical model, the researcher must consider two issues:

- The overall and relative model fit

- The size, direction of the relationship, and significance of the relation as estimated in the model

In the present study, following the assessment of the measurement model, the structural model is developed to test the hypotheses that consist of all the factors tested in the measurement model.

3.10.3 Reliability analysis

“Reliability is an assessment of the degree of consistency between multiple measurements of a variable” (Hair et al., 1998, p. 117). Reliability tells us about how consistent the research findings are.

Another test of reliability can be determined on the basis of composite reliability. For every latent variable, composite reliability must be calculated manually. “For composite reliability, the guideline is that the value should be higher than .70” (Janssens et al., 2008). The formula for composite reliability is as follows:

Composite reliability = $(\text{standardized loadings})^2 / \{(\text{standardized loadings})^2 + \text{sum of indicator measurement errors}\}$.

To assess scale reliability in this present research, Cronbach’s alpha and the calculation of composite reliability are used.

3.10.4 Validity analyses

“Validity is the extent to which a construct measures what it is supposed to measure” (Hair et al., 2007). The following approaches can be used to assess measurement validity:

Content validity

The content or face validity of a scale asks whether the scale items are truly measuring what they are supposed to measure. “While it is a systematic assessment of such, nevertheless by definition it is a subjective assessment” (Hair et al, 2007).

Convergent validity

“Convergent validity indicates the degree to which two different indicators of a latent variable confirm one another” (Janssens et al., 2008, p. 306). Several ways are available to measure convergent validity.

Construct validity

Construct validity is concerned with measurement accuracy, and this addresses the extent to which the items used to measure the theory-based latent variable actually reflect such a variable. “Establishing construct validity (through statistical measures) of the item measures used within samples can strengthen the representativeness of the actual true scores existing in the population” (Hair et al., 2006). “Convergent validity and discriminant validity tests need to be performed for assessment of construct validity” (Hair et al. 2007).

Discriminant validity

“Discriminant validity procedure was developed by” Fornell & Larcker (1981). To calculate Discriminant validity, they compared the squared correlation between two constructs with the variance extracted between those two constructs. The square of the correlation between the two constructs should be smaller than their corresponding AVE.

3.11 Concluding Remarks

The research work was thoroughly designed and data tabulated in SPSS 16. The next chapter deals with the data and analysis for children's attitude towards Television advertising and how that impacts the buying behaviour of parents. A model was validated and then triangulated by the data collected from parents.