

CHAPTER 3
RESEARCH
METHODOLOGY

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3.1 : Model Testing And Hypothesis

3.1.1 : Credibility Measurement Model

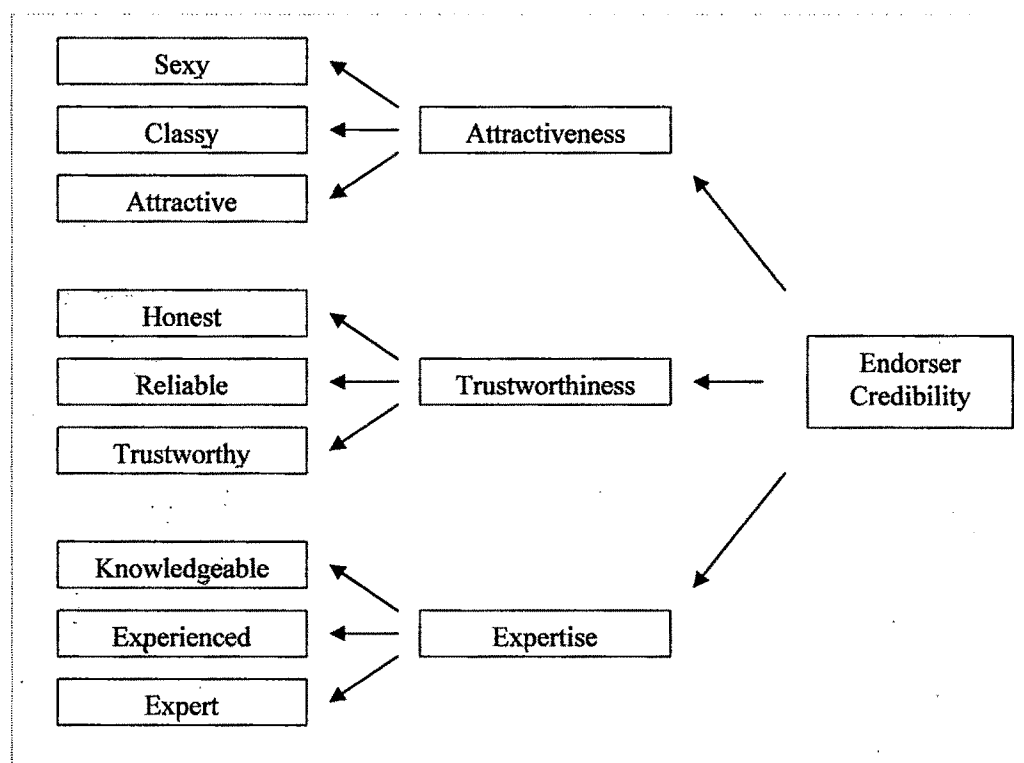


Fig. 8 Credibility Measurement Model

Anderson and Gerbing (1988)

As suggested by Anderson and Gerbing (1988), credibility measurement model should be tested before analyzing and testing the model of causal sequence. The relationships of three constructs: attractiveness, trustworthiness, and expertise to the higher order construct, credibility, was of particular interest. Hence, a measurement model consisting of these variables was first analyzed.

3.1.2 : Conceptual Model of Relationship between Endorser Credibility and Advertising Outcome Measures

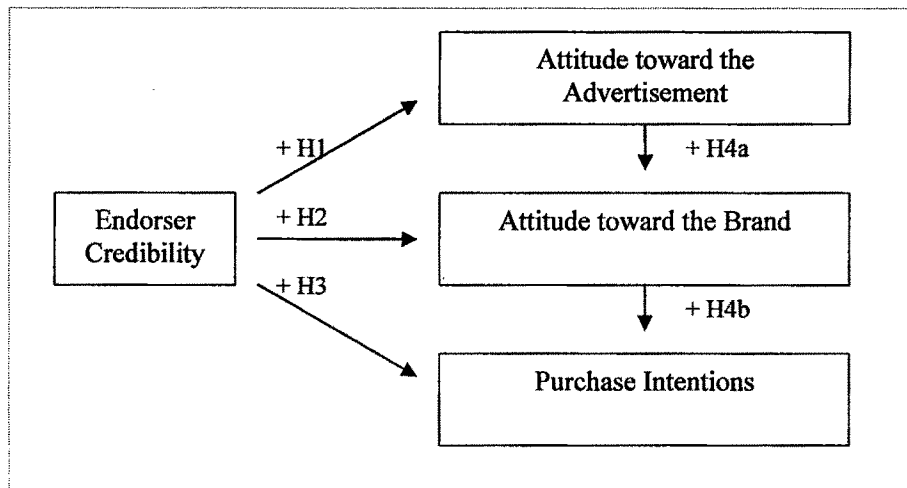


Fig.9 Conceptual Model of Relationship between Endorser Credibility and Advertising Outcome Measures

Model Testing Hypothesis

When we test a model of causal sequence of the influence of endorser credibility on the key advertising outcome variables, we expect the following relationships:

The below mentioned hypothesis posit relationships well known in the U.S. literature. An attempt is put to test a comprehensive set of hypothesis to illustrate all the expected relationships to be found in overall, simultaneous, causal sequence. The adequacy of the model and its' system of relationships is evaluated simultaneously (Bagozzi, 1980).

Following is the theoretical support for each of the hypothesis.

Extensive research has been conducted on the influence of endorser credibility on advertising effectiveness. A credible endorser can serve as an important antecedent in evaluations of advertisements and brands. Credible endorsers can produce more favorable attitudes toward the ad (Goldsmith, Latterty and Newell 2000; Latterty and Goldsmith 1999; Latterty, Goldsmith and Newell 2002), the brand (Latterty and Goldsmith 1999) and purchase intent (Latterty and Goldsmith 1999; Ohanian 1991). Thus, it is hypothesized that

- H1** : Endorser's perceived credibility is positively related to attitude-toward-the-advertisement.
- H2** : Endorser's perceived credibility is positively related to attitude-toward-the-brand.

H3 : Endorser's perceived credibility is positively related to purchase intentions.

A considerable amount of research has illustrated the sequential path of influence from attitude-toward-ad to attitude-toward-brand, which subsequently can impact purchase intent (Latterty, Goldsmith and Newell 2002; MacKenzie and Lutz 1989; MacKenzie, Lutz and Belch 1986; Mitchell and Olson 1981). These three variables comprise the main outcome variables in many studies of advertising effectiveness (Heath and Gaeth 1994; Kalwani and Silk 1982; MacKenzie and Lutz 1989). In addition, the Dual Mediation Hypothesis (Brown and Sta3Tnan 1992; MacKenzie, Lutz and Belch 1986) shows a consistent pattern of attitude-toward-the-ad > attitude-toward-the-brand > purchase intention, which forms the chain of dependent variables. This causal sequence of attitudes leading to purchase intentions is an increasingly important measure of ad effectiveness (see Deogun and Beatty 1998).

Based on the findings of these various studies, following hypothesis was put forth for Indian consumers.

H4a : Attitude - toward - advertisement is positively related to attitude - toward – the brand

H4b : Attitude - toward - brand is positively related to purchase intent.

H5 : Endorser's perceived attractiveness and trustworthiness both will have a significant impact on respondent's attitude toward the ad (**H5a**), and attitude toward the brand (**H5b**).

H6 : Endorser's perceived expertise will have a significant impact on respondents' purchase intent.

H7 : There is a significant difference in the overall impact of endorser's perceived credibility on male and female respondent's attitude toward the ad (**H8a**), attitude toward the brand (**H8b**), and purchase intent (**H8c**).

H8 : The overall impact of endorser's perceived credibility on respondents' attitude toward the ad, attitude toward the brand and, purchase intent, is significantly different across age groups.

3.2 : Design

This research was conducted to study the impact of celebrity endorsement advertising on Indian consumers. The survey approach was used to collect primary data. Primary data was collected by administering questionnaire to the respondents. The questionnaire contained endorser credibility scale, attitude scales, purchase intent scales and questions on other research objectives. The questionnaire for the study of commercial advertisements will assess both, film celebrities and cricketers, simultaneously. Four versions of questionnaires were developed – different only in the name of the celebrity and the brand endorsed by him/her. Every set of the questionnaire would be focusing upon two celebrities; a film and a sports celebrity. All questionnaires were administered in English only.

A preliminary investigation was undertaken for the selection of film and sports celebrities and also for the selection of the commercial advertisements. This investigation resulted into the selection of four film celebrities : Amitabh Bachhan, Shahrukh Khan, Aishwarya Rai, Priety Zinta, and four sports celebrities : Sachin Tendulkar, Yuvraj Singh, Mahendra Singh Dhoni, and Sania Mirza.

Some research objectives were analyzed based on the secondary data collected from published sources like, books, journals, magazines, newspapers, government publications, reports published by research agencies etc. An analysis of television advertisements was also undertaken to answer few other research questions. An analysis of few selected, past cases was undertaken to probe into the causes for the failure of endorsement advertising in India

3.2.1 : Selection of Celebrity Endorser Credibility Scale

Selection of the right celebrity depends upon the selection of valid instruments measuring the characteristics of a celebrity. Ohanian (1990) developed a measure of celebrity endorsers' credibility from two exploratory and two confirmatory American samples, each of which evaluated Madonna, John McEnroe, Linda Evans, or Tom Selleck. She proposed three components of celebrity endorser credibility scale: Attractiveness, Trustworthiness, and Expertise. Attractiveness was anchored by "attractive/unattractive," "classy/not classy," "beautiful/ugly," "elegant/plain," and "sexy/not sexy." The trustworthiness item was anchored by "dependable/undependable," "honest/dishonest," "reliable/unreliable," "sincere/insincere,"

and “trustworthy/untrustworthy.” Expertise was measured by “expert/not an expert,” “experienced/inexperienced,” “knowledgeable/unknowledgeable,” “qualified/unqualified,” and “skilled/unskilled.”

The original endorser credibility scale consisting of 15 items was modified by the researcher since it was found that six of the 15 items were not clearly understood by the respondents in the preliminary investigation. Items like elegant/plain, dependable/undependable, sincere/insincere, qualified/unqualified, and skilled/unskilled were found in a pilot pretest to be very confusing and difficult to evaluate. Also, the item beautiful/ugly was found to be inappropriate for the male celebrities. Hence, these items were excluded from the study. Thus, the modified scale consisted of nine items only.

3.2.2 : Selection of Attitude Scales and Purchase Intent Scales

Attitude toward the ad was measured on a seven-point semantic-differential scale anchored by “good/bad,” “favorable/unfavorable,” and “like/dislike” (MacKenzie and Lutz 1989).

Attitude toward the brand was measured on another seven-point bi-polar scale anchored with “good/bad,” “favorable/unfavorable,” and “positive/negative” (MacKenzie and Lutz 1989).

The purchase intentions of the respondents were measured by rating their agreements across statements like “the next time I need a chocolate bar/soft drink, I will consider the advertised brand in the ad.” And “the next time I need a chocolate bar/soft drink, I will buy the advertised brand in the ad.” The answers to these two items were given on a seven-point Likert type scale anchored by “strongly agree/strongly disagree.”

3.2.3 : Selection of Consumer Segments

This study tries to explore the impact of endorser’s perceived credibility on two demographic segments: Gender and age.

Demography is the study of the vital and measurable statistics of a population (Schiffman and Kanuk, 2004, p.8). Demographic variables include age, gender, marital status, family size, family life cycle, income, occupation, education, religion, race, generation, nationality and social class (Kotler, 2003, pp. 183-203). Demographics are used to describe a population in

terms of its size, distribution and structure. Size stands for the total number of individuals in the population. Distribution refers to the location of individuals in terms of geographical regions and rural, urban or suburban locations. Structure refers to the population in terms of age, income, education and occupation. Each of these factors influences the behavior of the consumer and contributes to the overall demand for various products and services (Hawkins et al., 1995, p.78). Demographic trends are highly reliable for the short and intermediate run (Kotler, 1997, p.155). A study of demographic variables is absolutely essential for marketers to formulate suitable and effective marketing strategies, to successfully market their products and services.

Gender

Product consumption can be linked with a person's gender. Men and women buy different products and have different needs (Bradley, 1995, pp. 132-133). Men and women tend to have different attitudinal and behavioral orientations based partly on genetic make up, and partly on socialization practices. Gender differentiation has long been applied in clothing, hairstyling, cosmetics, magazines etc. (Kotler, 2003, pp. 287-291). Gender differentiation has always been an important basis for market segmentation. Of course, in certain product categories, the thin line of difference between products for men and products for women is slowly and gradually on the verge of extinction. Now, marketing communication strategists are applying this gender differentiation for communicating their messages to their male and female audience. With reference to celebrity endorsement advertising, the impact of gender of celebrities on male and female respondents is researched leading to useful insights.

Age

Product needs and interests often vary with consumer's age (Schiffman and Kanuk, 2004, pp. 55-63). Product consumption can also be linked to age. It is an important basis for segmenting the consumer market. Food products, nutritional supplements, clothing, toys, etc. are segmented on the basis of mutually exclusive and easily recognizable age groups. For e.g., infants, children, teenagers, young adults, and so on (Statt, 1997, pp. 113-128). The consumption of certain products like soft drinks, hi-tech audio and video equipments, etc is heavily consumed by teenagers and young adults. An organization that markets its product to a specific age group must be alert to the changes in the group, as this provides varied marketing opportunities (Husted et al., 1989, pp. 124-170). Marketers need to be aware of how the population is changing with respect to age (Stanton et al., 1994, pp. 129-136).

3.2.4 : Questionnaire Design

Data will be collected using a questionnaire. A questionnaire was developed for the study of commercial advertisements. The questionnaire for the study of commercial advertisements will assess both, film celebrities and cricketers, simultaneously.

Four versions of questionnaires were developed – different only in the name of the celebrity and the brand endorsed by him/her. Every set of the questionnaire would be focusing upon two celebrities; a film and a sports celebrity. Thus, a single respondent would be answering questions for both; the film as well as the sports celebrity. All questionnaires were administered in English only. Each questionnaire contained six parts.

Versions of Questionnaire

Version 1 : Amitabh Bachhan and Sania Mirza

Version 2 : Priety Zinta and Sachin Tendulkar

Version 3 : Shahrukh Khan and Mahendra Singh Dhoni

Version 4 : Aishwarya Rai and Yuvraj Singh

Questionnaire Items

Part I

Question 1 to question 8 –

Focused upon the personal profile and some standard demographic information of the respondent.

Question 9 and question 10 –

Verified the familiarity of the respondent with the film and sports celebrity. A (black and white) close-up picture of a film and sports celebrity was printed. The respondents were supposed to identify the celebrity based on the picture shown and also identify the profession with which the celebrity was associated. At this stage, if the respondent failed to recognize the celebrity, he or she would be removed from the study conducted.

Part II

Question 11 to 13 –

Contained a modified version of the original, standardized, celebrity-credibility scale developed by Roobina Ohanian (1990, 1991). The original version of the 15 item, semantic differential scale was finally modified to a 9 item scale. The scale measured film star

credibility on three dimensions: Attractiveness, Trustworthiness and, Expertise. Further, each dimension had three items within. The words sexy/not sexy, classy/not classy, and attractive/not attractive anchored the items measuring attractiveness. The words honest/dishonest, reliable/unreliable, and trustworthy/untrustworthy anchored those measuring trustworthiness. Finally, the words knowledgeable/unknowledgeable, experienced/inexperienced, and expert/not an expert anchored the items measuring expertise dimension.

Part III

Question 14 to 17

Contained attitude toward the ad, attitude toward the brand, and the purchase intent scale of the film celebrity under the study.

Attitude toward the ad was measured on a three item, seven-point, semantic differential scale anchored by good/bad, favorable/unfavorable, and liked/disliked (MacKenzie and Lutz, 1989). Another three item, seven-point, bi-polar scale anchored good/bad, favorable/unfavorable, and positive/negative (MacKenzie and Lutz, 1989) measured attitude toward the brand. The purchase intentions of the respondents were measured by asking them "How likely they would be to consider the advertised brand the next time they purchased chocolates (or soft drink/shampoo/pen/mobile service provider/hair cream/soap/credit card)". Further, the respondents were also asked to rate their agreement across the statement "The next time I purchase a chocolate bar/soft drink, I will buy the advertised brand in the ad." The answers to both these items were to be given on a seven-point Likert type scale anchored by "extremely unlikely/extremely likely" and "strongly disagree/strongly agree."

Question 18 to 21

Some further questions related to the consumption of the products, the brands specified, and endorsement effects of the film celebrity were probed.

Part IV

Question 22 to 24

Contained a modified version of the standardized, celebrity-credibility scale developed by Roobina Ohanian (1990, 1991), as taken in Part II. Instead of rating the film celebrity as was done in Part II, now the same respondent was supposed to rate a sports celebrity credibility. Thus, a nine-item, semantic differential scale measuring endorser credibility on three

dimensions viz., attractiveness, trustworthiness and, expertise was straightaway taken from Part II.

Part V

Question 25 to 28

Contained similar attitude toward the ad, attitude toward the brand, and purchase intent scales as taken in Part III. The only difference is instead of rating the advertisement and the brand endorsed by a film celebrity, now the respondent has to rate the advertisement and the brand endorsed by the sports celebrity under the study.

Question 29 to 32

Probed in to the consumption of the products, the brands specified, and endorsement effects of the sports celebrity.

Part VI

Question 33 to 52

Contained some general questions on the understanding of the term 'celebrity, 'media consumption patterns, effects of advertisement exposure, recall of celebrity endorsed advertisements, recall of advertisements of the celebrities selected for the study, etc. Few more questions focused upon other research objectives of the study undertaken.

Part VII

Question 53 and Question 54

Q.53 contains a celebrity ratings data grid which attempts to rate the celebrities under the study on dimensions like credibility, familiarity and likeability. Further it tries to determine the direction and magnitude within every dimension. Q.54 is to determine the association of an advertisement / brand with a specific celebrity.

Questionnaire Pretest

A total of 60 undergraduates (including the higher secondary students) between the ages of 15 and 22 who have not participated in the previous pretests answered the questionnaires. (15 respondents answered each version of the questionnaire). Some minor changes were made in the words and the structure of sentences. The visual layout too was simplified. The instructions given at the beginning of each section/part were re-drafted in very simple and lucid manner.

3.3 : Preliminary Investigation

Selection of Film and Sports Celebrities

The list of celebrities to be included in this research was developed by randomly selecting 50 students (25 each from higher secondary level and from the undergraduate level). They were given three minutes to list down the names of film and sports celebrities

Selection of commercials - Stimulus material

To improve mundane reality (Cox and Locander 1987), it was decided to undertake a survey of teenagers and young adults by using the celebrity endorsed advertisements as the stimulus advertisements. Specific hypotheses were tested empirically for the impact of both type of endorser credibility on attitudes and purchase intentions, but the tests were in the context of a path analysis of the causal sequence instead of as mean differences as in an experiment.

Another group of 50 higher secondary and undergraduate level students between the ages of 15 and 22 who did not participate in generating the list of celebrities, were given three minutes to recall the advertisements (the first advertisement recalled for each celebrity) of the celebrities selected for the study. After the recall of the advertisements, advertisements endorsing gender-based products/brands were to be eliminated. Advertisements having multiple celebrities were also to be eliminated from the list, since the impact of a single celebrity endorser's perceived credibility on the dependent variables was to be studied. The objective behind doing this was to identify those products which were commonly used by both the gender, in their day-to-day life. From those remaining, advertisements of those products / brands (which were relevant and available to the targeted respondents in the survey) were to be selected.

Those commercials which were flashed long back (from the time of the data collection process) were not to be considered since it would lead to poor recall, thereby not serving the purpose of the study. Thus, the study was more of post-testing the celebrity endorsed advertisements and the impact of endorser's perceived credibility on consumer attitudes and purchase intent.

Media and channel selection

Teenagers and young adults are most exposed to television in their routine life. Hence, it was decided to study the impact of celebrity endorsed advertisements flashed on television.

Respondents who earlier participated in the selection of commercials were further asked to mention the channels most watched by them in their daily routine.

Manipulation Checks

- The first type of manipulation check was to assess the familiarity of the respondents with the film and sports celebrities selected for the study. Endorser manipulation check was performed through Chi-square test. The respondents were asked if they recognized the endorsers' picture. Those who recognized the endorser were further required to name the endorser and the profession to which he/she was associated. Those who failed to recognize either of the celebrity (film or sports celebrity in the questionnaire given to the respondent), were eliminated from the subsequent analysis.
- A second manipulation type was undertaken to verify that the product categories selected for the study did not elicit significant differences in the levels of product involvement. The original version of the five-item, semantic differential scale proposed by Zaichokowsky (1985) was first modified and then used to measure the levels of product involvement. Two items namely, "of no concern to me/of concern to me" and "doesn't matter/matters to me" were eliminated because of the resultant confusion while testing the original version of the scale in the preliminary investigation. Finally, product involvement was measured on a seven point, three-item, semantic differential scale anchored with items like "unimportant/important," "means nothing to me/means a lot to me," and "irrelevant/relevant."
- A third manipulation type was undertaken to eliminate the effect of brand name on the attitude toward the advertisements under the study. The respondents were asked how important a brand name was while purchasing the specified product category. Since the product categories selected for the study were having low involvement in terms of time and cost, brand name was assumed to less likely affect the attitude toward the advertisement and the purchase intent. Also, the products selected were frequently purchased products. Hence, it was assumed that in long run, brand name would not significantly affect the purchase decision of the respondent. Still, the verification was undertaken to remove the doubts regarding the same.
- Brand loyalty for the selected product categories was also assessed since the main objective of the research undertaken was to study the impact of endorsers' perceived credibility on the advertising measures.

3.4 : Main Study

3.4.1 : Procedure

The survey approach was used to collect primary data. Primary data was collected by administering questionnaire to the respondents. Every set of the questionnaire would be focusing upon two celebrities; a film and a sports celebrity. All questionnaires were administered in English only.

Some of the research objectives were analyzed based on the secondary data collected from published sources like, books, journals, magazines, newspapers, government publications, reports published by research agencies etc. An analysis of television advertisements was also undertaken to answer few other research questions. An analysis of few selected, past cases was undertaken to probe into the causes for the failure of endorsement advertising in India.

3.4.2 : The Location

The researcher decided to conduct the study in three main cities of the Gujarat state. The resultant choice was Ahmedabad, Baroda and, Surat. People residing in these cities follow metropolitan culture and live a good life style. Also, some of the reputed and convent educated schools and colleges/universities of the Gujarat state are located in these three cities. The kind of sampling unit that the researcher was looking for were available from these cities. Students belonging to these cities are more exposed to western culture and are living the life accordingly. Further, Ahmedabad and Surat being closer to the city of Baroda would add to the convenience of the researcher in the process of data collection.

3.4.3 : Sampling Unit (Participants) and Sampling method

An 'individual' was selected as a sampling unit for examining the influence of celebrity endorsement advertising. The subjects were chosen from prominent English medium, higher secondary schools and colleges / universities of Ahmedabad, Baroda, and Surat.

The impact of celebrity endorsement advertising was studied on two segments: teenagers and young adults. Male and female teenagers: 13 to 19 yrs of age (Dictionary meaning) and young adults: 20 yrs & above were selected as the sampling unit. The questionnaire was administered to the higher secondary students of schools; and undergraduate and post graduate students of colleges/universities.

Wolburg and Pokrywczynski (2001) emphasized that the youth market is one of the most coveted of all segments due to their: spending power, ability to be trendsetters, receptivity to new products, and tremendous potential for becoming lifetime customers. This group is

grown up in a consumer oriented society and hence is an easier target to market. They are also referred to as 'Generation Y' and they are more tuned into media. The teen segment in particular is considered as more viable to study in terms of media influences.

In order to be geographic-specific, Quota sampling technique was used. Convenience sampling method was used, which is generally used in mass media research. It is a non-probability sampling method, wherein the subjects are readily available for the study. The final sample, in every geographic region consisted of equal number of males and females. An attempt was also put to get equal number of males and females under both the segments i.e., Gender and age for every version of the questionnaire.

3.4.4 : Sample Size and Data Collection

A sample of 1200 respondents was arbitrarily decided for the study undertaken. The final sample of 1080 respondents is excluding the inappropriate surveys and missing data. In order to be geographic specific, quota sampling technique was used.

Table 5 Respondent's Classification based on Geographic Areas

Geographic Areas	Respondents
Ahmedabad	360
Baroda	360
Surat	360
Total	1080

Convenience and judgment were factors used behind the selection of the participants for the study. Convenience sampling is a non-probability sampling method, wherein the subjects are readily available for the study. A conscious effort was put to obtain a balanced and heterogeneous sample. A prior permission was taken from the Principal of the school or the Dean of the faculty before the process of data collection. A copy of the questionnaire to be administered was shown and/or given to the Principal/Dean, on special request. The schools and colleges/universities were randomly selected after the verification that the medium of instruction was English. Data was collected as per the day and time schedule specified by the Principal/Dean of the school/college/university. The questionnaire was administered to the students in the classroom itself.

Equal number of all the four versions of questionnaires was distributed to the respondents in a class. The researcher himself administered the questionnaire by briefing the respondents about

Selected Celebrity Endorsements in India and its impact on Consumer Segments

the survey undertaken. Instructions were read out loud and clear for every part of the questionnaire. Queries raised by respondents regarding the questionnaire were immediately handled and clarified to their satisfaction. The distribution of the questionnaires was done in such a manner that no two students sitting next to each other got a similar version of the questionnaire. Each respondent had an equal chance of receiving a questionnaire dealing with any two of the eight celebrities selected for the study.

3.4.5 : Time Frame Selection

The collection of primary data (i.e., administering of questionnaires) was immediately undertaken after the pre-test and finalization of the questionnaire. Data collection was undertaken around the month of April '2006.

Some of the research objectives defined for the study undertaken, required an analysis of television advertisements. Hence, a manual attempt was put to prepare a list of film and sports celebrity endorsed advertisements flashed during the prime time on prime channels. Celebrity endorsed advertisements flashed during the period from January'2006 to August'2008 were manually recorded. Advertisements flashed during the prime time (between 8 p.m to 11 p.m) were listed.

NOTE : Initials of Celebrities (used in Tables)

A.B	Amitabh Bachhan
S.M	Sania Mirza
P.Z	Priety Zinta
S.T	Sachin Tendulkar
S.R.K	Shahrukh Khan
M.S.D	Mahendra Singh Dhoni
A.R	Aishwarya Rai
Y.S	Yuvraj Singh