Chapter 3

RESEARCH METHODOLOGY

A structured questionnaire was used as research instrument in this survey based study. The procedure adopted for design and development of the questionnaire is described in this chapter. It is followed by a narration of the sampling and data collection methods, and data analysis procedure used in the present study. This chapter is organised as follows:

- Section 3.1 Questionnaire design and development,
- Section 3.2 Preliminary study,
- Section 3.3 Sampling method,
- Section 3.4 Data collection method, and
- Section 3.5 Data analysis procedure.

3.1 QUESTIONNAIRE DESIGN AND DEVELOPMENT:

Keeping in mind the objectives of present study, following scales and measures were used in the structured questionnaire: Overall Satisfaction scale, Repurchase Intention scale, Word-of-Mouth Intention scale, Complaining Behaviour scale, Attribute satisfaction scale, and Respondent related information measures. The Overall Satisfaction scale, the Repurchase Intention scale, and the Word-of-Mouth Intention scale were reported in literature and were suitably adapted for use in the present study. The Complaining Behaviour scale, the Attribute satisfaction scale, and measures for recording respondent related information for classification of data were originally developed for use in this study. Details pertaining to the scales and measures used in the questionnaire are as follows:
3.1.1 Overall Satisfaction of clients with services of their ad agency:

To measure the degree of clients' overall satisfaction with services of their advertising agency, a twelve-item Likert-type summated rating scale was used. Respondents were requested to indicate the degree of their agreement with each of the twelve scale items using a seven-point rating scale, with points ranging from *Strongly Disagree* (1) to *Strongly Agree* (7). This scale was originally developed by Westbrook and Oliver (1981) and was used along with four other measures of customer satisfaction for studying satisfaction with cars and with calculators. Results so obtained were compared in a multitrait multimethod matrix. Westbrook and Oliver found that in comparison with other measures of satisfaction, the Likert version produced greatest dispersion of individual scores while maintaining a symmetrical distribution. It also showed a strong evidence of construct validity by converging with like constructs and discriminating between unlike constructs. In terms of internal consistency, the Cronbach's alpha for the scale was found to be 0.93 and 0.96 for two different samples. The overall satisfaction scale developed by Westbrook and Oliver was suitably adapted for use in the present study relating to advertising services.

This scale has also been used to assess customer satisfaction with cars (Oliver and Swan, 1989b), customer satisfaction with expensive and complex purchases, and with frequently purchased inexpensive products (Mano and Oliver, 1993), and customer satisfaction with automobiles and educational courses (Oliver, 1993). The Cronbach's alpha of reliability for the scale was reported to be 0.94 by Oliver and Swan (1989a), 0.98 and 0.92 for two different samples by Oliver (1993), and 0.95 by Mano and Oliver (1993).
3.1.2 Repurchase Intention of clients regarding services of their ad agency:

To assess the repurchase intention of clients, a three-item semantic differential scale with seven segments was used. Subjects were asked to rate the probability of selecting their current advertising agency if an ad agency were to be appointed today. Responses were recorded on a three-item semantic differential scale with the following bipolar adjectives: Likely/Unlikely; Probable/Improbable; and Possible/Impossible. This scale was developed by Fishbein and Ajzen (1975) and was used by Gotlieb et al. (1994) in a study of the relationship between consumer satisfaction and perceived quality. Cronbach's alpha of reliability for the scale was reported to be 0.98. Bearden and Teel (1983), Oliver and Swan (1989a), Bitner (1990), and Boulding et al. (1993) have also used similar scales and have found them to be highly reliable. The Repurchase Intention scale of Fishbein and Ajzen was suitably adapted for use in the present study concerning advertising services.

3.1.3 Word-of-Mouth Intention of clients regarding services of their ad agency:

A similar three-item semantic differential scale with seven segments was used in this study to assess the word-of-mouth intention of clients. Subjects were asked to rate the likelihood of recommending the name of their ad agency to friends in other organisations with similar needs of advertising services. Responses were recorded on a three-item semantic differential scale having the following bipolar adjectives: Likely/Unlikely; Probable/Improbable; and Possible/Impossible. This scale was developed by Boulding et al. (1993) and the Cronbach's alpha of reliability for the scale was reported to be 0.92. Richins (1983), Bitner (1990), Woodside et al. (1992), and Patterson (1993) have also used similar scales and have reported high alpha values for the same. The Word-of-Mouth intention scale of Boulding et al. was suitably adapted for use in this study concerning advertising services.
All three scales mentioned above were reported in the literature and were suitably adapted for use in this study. Scales and measures originally developed for the present study are as follows:

3.1.4 Complaining Behaviour of clients regarding services of their ad agency:

An index of client's Complaining Behaviour was developed for use in this study on the basis of research by Day and Landon (1977), Day and Bodur (1978), Day (1980), Westbrook (1980), Bearden and Teel (1983), and Richins (1983). This index represents the extent of client's complaining behaviour considering the frequency and range of complaining activity undertaken by the client in preceding one year. The operational measure of client's complaining behaviour consisted of a scale with five items given below:

- Complained to client-service personnel/account-team members;
- Complained to account supervisor/manager;
- Complained to agency's senior management;
- Complained to industry association or professional body like the Advertising Agencies Association of India or the Indian Society of Advertisers; and
- Took some legal action.

The scale items were arranged according to increasing intensity of client complaining behaviour. Respondents were requested to indicate how often they or their colleagues had complained about services of their advertising agency in the preceding one year for each of the five scale items. A five-point rating scale with points ranging from Never (1) to Five or more times (5) was used for the purpose. As suggested by Day (1980), Westbrook (1980), and Bearden and Teel (1983), opinion of experts was sought for assigning weights to the scale items for calculation of the index value. Weights of 1, 5, 25, 100, and 500 respectively were assigned to five items of the scale given above on the basis of opinion obtained from a panel of eleven experts drawn from advertising agencies and client-organisations. The index of
Complaining Behaviour was computed for every respondent by adding the weighted scores of five scale items.

3.1.5 Respondent related information for classification of data:

Studies by Chevalier and Catry (1976); Calantone and Drury (1979); Doyle, Corstjens, and Michell (1980); Michell (1984a); Michell (1984b); Wackman, Salmon, and Salmon (1986); Verbeke (1988); Michell (1986); Michell (1988); Buchanan and Michell (1991); Michell, Cataquet, and Hague (1992); Michell and Sanders (1995); and Henke (1995) provided the basis for development of measures to record the respondent related information. Following details were collected from the respondents for classification of data:

a. Number of ad agency/agencies employed by the client:

Respondents were requested to indicate the number of advertising agency/agencies whose services were being employed by their organisation for advertising and related services. This was an open ended question. If an advertiser employed services of more than one ad agency, then a separate response was sought for each agency employed by the advertiser through whom the ad spend was not less than Rs. 50 lakhs during the previous financial year.

b. Type of ad agency employed by the client:

A multiple choice question was used to ascertain the type of advertising agency employed by the client. Respondents were requested to tick any one of the five options that best described their advertising agency. The five options are:

- Full-service agency, offering full-range of advertising service on 15% commission basis;

- Full-service agency, except for media, which is placed through media-independents;

- Full-service agency, but offering parts of advertising service to clients for fee (e.g. copy-writing);

- Direct client-coordination using both media and creative consultancies; and
\* In-house, full-service advertising service department/agency offering full-range of service.

In case the agency employed by client was of *any other* type, an option with space was provided for the respondent to specify type of their advertising agency.

c. **Relative size of client's account at the agency's branch:**

To ascertain the size of client's account relative to other accounts and clients handled by the agency from its local branch, a multiple choice question was used. Respondents were requested to tick any one of the five options that best described the relative size of their account at agency's local branch. The five options are:

\* Very small;

\* Small;

\* Neither small nor large;

\* Large; and

\* Very large.

d. **Method of agency compensation followed by the client:**

A multiple choice question was used to determine the method of agency compensation followed by the client. Respondents were requested to tick any one of the six options that best described the method of agency compensation followed by their organisation. The six options are:

\* **Standard** 15% commission on media tariff-card rates;

\* **Fixed-fee/flat-fee** negotiated at regular intervals;

\* **Combination** of commission and fee;

\* **Cost-plus** method;

\* **Time-charges** based fee/labour-based fee; and

\* **Performance** based compensation plan.
An option with space was also provided for the respondent to specify nature of agency compensation method followed in case it was of any other type.

e. Nature of ownership of the client-organisation:

In order to ascertain the nature of ownership of client-organisation, a multiple choice question was used. Respondents were requested to tick any one of the four options that best described nature of ownership of their organisation. The four options are:

- Publicly held limited company;
- Closely held/Private limited company;
- Majority government owned/managed company, and
- Government department.

In case the nature of ownership of client-organisation was of any other type, an option with space was provided for the respondent to specify nature of ownership of their organisation.

f. Domicile status of client-organisation:

A multiple choice question was used to determine the domicile status of client-organisation. Respondents were requested to tick any one of the four options that best described domicile status of their organisation. The four options are:

- Indian company;
- MNC company;
- Central-government owned or managed company/department, and
- State government owned or managed company/department.

An option with space was also provided for the respondent to specify nature of domicile status of their organisation if it was of any other type.
g. Nature of business of the client:

To ascertain the nature of business activity of client-organisation, a multiple choice question was used. Respondents were requested to tick any one of the six options that best described nature of business activity of their organisation. The six options are:

- Manufacturing/marketing consumer durable goods;
- Manufacturing/marketing consumer non-durable goods;
- Manufacturing/marketing industrial goods;
- Trading - wholesale;
- Trading - retail; and
- Services.

In case the nature of business activity of client-organisation was of any other type, an option with space was also provided for the respondent to specify nature of business activity of their organisation.

h. Length of unbroken relationship between agency and the client:

Respondents were requested through an open ended question to indicate the length of unbroken relationship (in years) between their organisation and the advertising agency employed.

i. Total sales revenue of the client-organisation:

Respondents were also requested to specify the total sales revenue (in Rupees Crore) of their organisation for the last financial year. This was an open ended question.

j. Total ad expenditure of the client-organisation:

An open ended question was used to ascertain the total advertising expenditure/spend (in Rupees Crore) of respondent's organisation for the last financial year.
k. Sales revenue of client's brand/s handled by the agency:

Respondents were requested through an open ended question to specify the total sales revenue (in Rupees Crore) for the last financial year of their products/brands being handled by the advertising agency.

l. Ad expenditure on client's brand/s handled by the agency:

Respondents were also requested to indicate the total advertising expenditure/spend (in Rupees Crore) for the last financial year on their products/brands being advertised through the advertising agency. This was an open ended question.

3.1.6 Client Satisfaction with advertising service attributes:

For the present study, 38 distinct advertising service attributes that lead to overall satisfaction of clients with services of their ad agency were identified. Respondent's satisfaction for each of the 38 attributes was measured using a seven-point rating scale, with points ranging from extremely dissatisfied (1) to extremely satisfied (7). Procedure adopted for the identification of 38 advertising service attributes included in this study is as follows:

In order to ascertain the underlying reasons of client satisfaction with advertising services, *Critical Incident Technique* was used as per the procedure developed by Flanagan (1954). This technique has been applied successfully by White and Locke (1981), Nyquist *et al.* (1985), Bitner *et al.* (1990), Brown and Mitchell (1993), Kelley *et al.* (1993), and Bitner *et al.* (1994). Fifteen client-organisations were selected randomly from a list of one hundred and forty-five client-organisations as described in section 3.3 of this thesis. Senior managers and executives in-charge of advertising function in selected client-organisations were interviewed by this researcher using the *Critical Incident Technique*. They were asked the following open-ended questions and their responses were recorded. The questions are:
• Can you recall any particularly satisfying experience with services of your advertising agency during the past one year? (Probe)

• If yes, What did the agency personnel do which led to this satisfying experience? (Probe)

• What specific feature of the service of your ad agency led to this satisfying experience? (Probe)

• What resulted that made you feel that it was satisfying? (Probe)

Responses to the above questions were sorted and grouped according to similarities of reported experiences. The groups were labelled on the basis of homogeneity of responses comprising them. A total of 29 critical satisfactory incidents were collected from thirteen of the fifteen respondents. 74 distinct advertising service attributes that lead to satisfaction of clients with services of their ad agency were identified from the 29 critical satisfactory incidents. Furthermore, on the basis of an extensive review of literature, 142 distinct advertising service attributes that lead to client satisfaction with advertising services were also identified (refer Chapter 2). Thus, a total of 216 distinct advertising service attributes that lead to client satisfaction with advertising services were identified for this study.

A panel of eleven experts drawn from ad agencies and client-organisations was used to further short-list about 100 advertising service attributes from 216 attributes identified as above for inclusion in the preliminary study. Members of the expert-panel were requested to rate the importance of each of the 216 attributes in determining satisfaction of clients using a five-point rating scale, with points ranging from Unimportant (1) to Critical (5). If an attribute was rated as critical by an expert, four points were awarded to it. Similarly, three points were awarded if it was rated as very important; two points were awarded if it was rated as moderately important; and one point was awarded if it was rated as slightly important. No points were awarded to the attribute if it was rated as unimportant. The cumulative score of points so
awarded by eleven experts was computed for every attribute. Out of a total of 216 advertising service attributes, 99 attributes with the highest cumulative score were retained for the survey. A preliminary study was conducted for selecting 35 to 40 service attributes for the main study from among the 99 attributes short-listed as above.

3.2 PRELIMINARY STUDY:

3.2.1 Data Collection:

In the preliminary study, respondents were requested to indicate their level of satisfaction with each of the 99 advertising service attributes arranged in the questionnaire in a random order. A seven-point rating scale with points ranging from extremely dissatisfied (1) to extremely satisfied (7) was used for the purpose. (List of 99 advertising service attributes included in the preliminary study is given in Appendix-B of the thesis.) The questionnaire also sought to assess respondents' Overall Satisfaction with services of their ad agency, their Repurchase Intention, Word-of-Mouth intention, and Complaining Behaviour besides ascertaining respondent related information for classification. The questionnaire was administered personally by the researcher to senior managers and executives in-charge of advertising function in client-organisations. The respondents were selected randomly from a list of one hundred and forty-five client-organisations as described in section 3.3 of this thesis. For ascertaining the name and designation of senior manager/executive in-charge of advertising function, telephone calls were made to the marketing/advertising department of selected client-organisations. Subsequently, the senior-manager/executive in-charge of advertising function in each organisation was contacted over the telephone. After a brief introduction about the purpose and objectives of this study, appointment for a meeting was sought from him/her. In case the senior manager/executive in charge of advertising was not available or
was unable to give an appointment, he/she was contacted once again over the telephone after a gap of one week and the above process repeated. If appointment for a meeting was given, the questionnaire was administered personally to the senior manager/executive during the meeting in a face-to-face interview. On an average, it took about forty-five minutes to administer the questionnaire of preliminary study to respondents. Thirty responses, each pertaining to an agency employed, were collected from twenty-six advertisers during the preliminary study.

3.2.2 Data Analysis:

For identifying the underlying dimensions of clients' Overall Satisfaction, responses to twelve-items of the Overall Satisfaction scale were factor analysed using Principal Components method. This resulted in extraction of a single factor with eigenvalue of greater than 1.00 and the factor explained 73% of total variance. As responses to twelve items of the Overall Satisfaction scale were found to be uni-dimensional, they were added to form a new variable, namely Overall Satisfaction. Given the large number of advertising service attributes (99 items), a full factor analysis of the same inclusive of all items was not likely to provide meaningful factors/groupings of the attributes (Ruekert and Churchill, 1984; and Brown and Mitchell, 1993). As a result, a two-step procedure given below was used to analyse responses to the 99 advertising service attributes and to further short-list about 35 to 40 service attributes for inclusion in the main study.

a. Significance of Correlation:

To identify and retain only significant attributes in the factor analysis, correlation of each of the 99 advertising service attribute with Overall Satisfaction was computed. As suggested by Ruekert and Churchill (1984) and Parasuraman et al. (1988), only those attributes whose correlation with the Overall Satisfaction was significant at 0.010 level were retained in the
present study. This resulted in selection of 60 advertising service attributes out of 99 attributes.

b. Factor Analysis:

Significant degree of intercorrelation was found to exist among the 60 items selected as above. In order to identify the underlying dimensions among them, they were factor analysed using Principal Components method with Varimax rotation. This method of factor analysis and rotation was chosen as it makes the groupings most interpretable (Harman, 1967; Kim and Mueller, 1978; Norusis, 1990d). The factor analysis extracted eight factors with eigenvalue of more than 1.00 explaining 86.2% of the total variance. For ensuring conceptual clarity and purity of dimensions of the scale, attributes that satisfied two criteria mentioned below were only retained for further analysis as suggested by Churchill (1979), Michell (1986) and Teas and Wong (1991). The criteria for selection are:

1. the highest factor loading of an attribute on any rotated factor should not be less than 0.60; and

2. difference between the highest factor loading and the second highest factor loading of an attribute on rotated factors should not be less than 0.10.

Application of the above criteria to results of factor analysis led to short-listing of 38 advertising service attributes out of a total of 60 attributes. The short-listed attributes were included in the main-study and were arranged in the questionnaire in a random order.

3.3 SAMPLING METHOD:

Sampling method used for the present study is similar to that used by Wackman, Salmon, and Salmon (1986), Gagnard and Swartz (1988), Rhea and Massey (1989), and Henke (1995). The present study was undertaken with reference to advertising commissioned for marketing of products/services and for corporate image building as they comprise a majority of the total
Advertisements for the purpose of legal and financial announcements, recruitment of personnel, and tenders were excluded from the scope of this study. Because of constraints of time and finance, advertisers having their marketing head-office or office in-charge of advertising function in or around Chennai were only included in this study. Moreover, in order to eliminate small and infrequent advertisers, like shop-keepers and traders from the purview of this study, advertisers with ad spend of less than Rs. 50 lakhs per annum were excluded from the scope of this study. Thus, advertisers satisfying two conditions given below were only covered in the present study. They are:

1. the advertiser should have ad expenditure of not less than Rs. 50 lakhs through one agency during the previous financial year; and

2. advertiser's marketing head-office or office in-charge of advertising function should be located in or around Chennai.

A comprehensive list of one hundred and eighty advertisers satisfying the two conditions given above was prepared using various published lists of corporate sales and advertising data. These include:

* Infa Press and Advertisers Year Book (1995);
* Indian Newspaper Society Press Handbook (1994);
* Advertising & Marketing Big Spenders (1996);
* Advertising & Marketing Seventh agency report (1996);
* Ind-Global Directory of top 100 Southern India companies (1996);
* Business India Super 100 companies (1996);
* Economic Times top 500 Indian corporate giants (1996);
* Business Today top 500 companies (1996);
* Financial Express top 1100 corporations (1996); and
* Economic Times top 205 Public Sector Companies (1994).
This list of one hundred and eighty advertisers was further refined on the basis of consultation and discussion with account managers and senior account executives of twenty large and medium ad agencies in Chennai, selected from the directory of members of the Advertising Club, Madras. On the basis of feedback received from the agency personnel, additions and deletions were made to the above list and a final list containing names of one hundred and forty-five advertisers was prepared. Response to the questionnaire was sought from all the one hundred and forty-five advertisers identified as above. If an advertiser's budget was spread across more than one agency, then a separate response was sought for each agency employed by the advertiser through whom the ad spend was not less than Rs. 50 lakhs during the previous financial year.

3.4 DATA COLLECTION METHOD:

Studies by Wackman, Salmon, and Salmon (1986), Michell (1986), Gagnard and Swartz (1988), Rhea and Massey (1989), and Henke (1995) provided the necessary framework for formulation of data collection method used in this study. Primary data for the present study was collected through face-to-face personal interviews with respondents. Telephone calls were made to the marketing/advertising department of one hundred and forty-five short-listed advertisers for ascertaining the name and designation of senior manager or executive in-charge of advertising function. Subsequently, the senior-manager/executive in-charge of advertising in each organisation was contacted over the telephone. After a brief introduction about the purpose and objectives of this study, appointment for a meeting was sought from him/her. In case the senior-manager/executive was not available or was unable to give an appointment, he/she was contacted once again over the telephone after a gap of fifteen days and the above process repeated. If appointment for a meeting was given, the questionnaire was administered
personally by the researcher to senior manager/executive in-charge of advertising function in the client-organisation. On an average, it took about thirty minutes to administer the questionnaire of main study to respondents. (Questionnaire used for the main study is given in Appendix-A of the thesis)

One hundred and twenty-seven valid responses, each pertaining to an agency employed by the client, were collected from one hundred advertisers during the main study. After taking into consideration thirty responses collected during the preliminary-study, a total of one hundred and fifty-seven valid responses were collected from one hundred and twenty client-organisations during the present study. As a result, the response rate for this study works out to 82.76%. Analysis of non-respondents showed no significant bias in terms of client characteristics.

3.5 DATA ANALYSIS PROCEDURE:
Analysis of the survey-research data comprising of one hundred and fifty-seven valid responses was carried out using SPSS/PC+ (Ver. 4.0.1) and SPSS for Windows (Ver. 6.1.2) software packages (Norusis, 1990a-d; and Cramer, 1994).

3.5.1 Analysis of Overall Satisfaction:
In order to ascertain the underlying dimensions in clients' overall satisfaction, responses to twelve items of the Overall Satisfaction scale were factor analysed using Principal Components method. This resulted in extraction of a single factor with eigenvalue of more than 1.00 and the factor explained 70% of total variance. Factor loadings of the twelve scale items ranged from 0.91 to 0.71 (refer section 4.4 of this thesis for results and discussion on the factor analysis of Overall Satisfaction scale). The Cronbach's alpha of reliability for this
scale was found to be 0.96. High value of Cronbach's alpha obtained in this study indicates good internal consistency among items of the scale (Parasuraman et al., 1988). As responses to twelve items of the Overall Satisfaction scale were found to be uni-dimensional, they were added to form a new variable, namely Overall Satisfaction (OS).

### 3.5.2 Analysis of Consequences of Satisfaction:

Principal Components factor analysis of responses to three items of the Repurchase Intention scale was performed to ascertain the underlying dimensions in clients' Repurchase Intention. This resulted in extraction of a single factor with eigenvalue of greater than 1.00 and the factor explained 97.1% of total variance. Factor loadings of three items of the Repurchase Intention scale ranged from 0.99 to 0.98. The Cronbach's alpha of reliability for the scale was found to be 0.98. Similarly, Principal Components factor analysis of responses to three items of the Word-of-Mouth Intention scale was also performed to ascertain the underlying dimensions in clients' Word-of-Mouth Intention. Factor analysis extracted a single factor with eigenvalue of greater than 1.00 and the factor explained 97.3% of total variance. Factor loadings of three items of the Word-of-Mouth Intention scale ranged from 0.99 to 0.98. The Cronbach's alpha of reliability for the scale was found to be 0.99 (refer section 4.3 of this thesis for results and discussion on the reliability of scales and section 4.5 for results of factor analysis). As responses to items of the Repurchase Intention scale and the Word-of-Mouth Intention scale were found to be uni-dimensional, they were added to form two new variables, namely: Repurchase Intention (RI), and Word-of-Mouth Intention (WOM).

Examination of responses to five items of the Complaining Behaviour scale indicated that none of the one hundred and fifty-seven respondents had complained to industry association or professional body (item no. 4 of the scale) or had taken any legal action against their ad
agency (item no. 5 of the scale) during the preceding one year. As there was absence of any variation in responses to these two items of the Complaining Behaviour scale, they were dropped from further analysis. Factor analysis of responses to remaining three items of the scale resulted in extraction of a single factor with eigenvalue of more than 1.00 and the factor explained 75.4% of total variance in clients' Complaining Behaviour. Factor loadings of three items of the scale ranged from 0.94 to 0.81. Cronbach's alpha of reliability for the scale was found to be 0.84. In order to calculate the index of client's complaining behaviour, items of the scale were multiplied with their respective weights of 1, 5, and 25. A new variable called Index Of Client's Complaining Behaviour (CB) was formed by adding weighted scores of the three items as responses to these items were found to be uni-dimensional.

Four newly formed variables, namely Overall Satisfaction (OS), Repurchase Intention (RI), Word-of-Mouth Intention (WOM), and Index of Client's Complaining Behaviour (CB) were analysed using frequency tables and descriptive statistics (refer section 4.2 of this thesis for descriptive statistics). The relationship of clients' Overall Satisfaction (OS) with three consequences of satisfaction, namely clients' Repurchase Intention (RI), their Word-of-Mouth Intention (WOM), and Index of their Complaining Behaviour (CB) was studied using the Pearson's co-efficient of correlation (refer section 4.5 for results and discussion on factor and correlation analysis of consequences of client satisfaction).

3.5.3 Analysis of Clients' Satisfaction with Ad Service Attributes:

To determine the component structure of advertising service attributes and to group them on the basis of underlying dimensions, clients' response to the 38 advertising service attributes were factor analysed using Principal Components method with Varimax rotation. Principle Components method of factor analysis was chosen in order to form linear combinations of the
scale items. Various orthogonal methods of factor rotation such as Varimax, Quartimax, and Equamax were also examined. While all methods proved reasonably consistent, Varimax was chosen as the method of factor rotation for this study as it proved to be the most interpretable (Harman, 1967; Kim and Mueller, 1978; and Norusis, 1990d). Factor analysis of responses to the 38 attributes resulted in extraction of six factors with eigenvalue of more than 1.00 and they explained 72.7% of the total variance. As suggested by Churchill (1979), Michell (1986), Brown and Swartz (1989), and Teas and Wong (1991), if the highest factor loading of an attribute on any rotated factor was less than 0.60, it was dropped from further analysis in order to ensure conceptual clarity of the scale items. This resulted in elimination of 16 advertising service attributes out of a total of 38. The remaining 22 advertising service attributes were included in the final analysis (refer section 4.6 of this thesis for results and discussion on the factor analysis of thirty-eight advertising service attributes).

Twenty-two advertising service attributes, selected as above, were classified into six groups on the basis of their highest factor loading. The groups/factors were named according to attributes composing them. Names of the six factors so arrived at and list of items composing them are as follows:

a. Creativity Factor (7 attributes):

1. Creative ability of agency personnel.
2. Quality of creative ideas and plans.
3. Quality of creative development and execution.
4. Image strength / image effectiveness of advertising campaigns produced by the agency.
5. Sales promotion ideas and capabilities.
6. Quality of advertising production/execution.
7. Creative and marketing philosophy of the agency.
b. Efficiency Factor (4 attributes):

1. Giving realistic cost estimates to the client.
2. Agency's responsiveness to ideas and suggestions from the client.
3. Quality of media space and time bought by the agency for clients.
4. Agency's ability to work within specified brief and strategy agreed upon.

c. Interpersonal Relations Factor (3 attributes):

1. Warmness of day-to-day working relationship between client and agency personnel.
2. Inter-personal compatibility between client and agency personnel.
3. Synergy between client and agency personnel.

d. Public Relations Factor (3 attributes):

1. Agency's clout with the media.
2. Experience of the agency in handling advertising of a wide range of products and brands.
3. Socialisation skills of agency personnel.

e. Research Factor (3 attributes):

1. Agency's ability to measure effectiveness of its advertising campaigns.
2. Quality of advertising research.
3. Productivity of advertising expenditure/spend.

f. Leadership Factor (2 attributes):

1. Quality of leadership at the agency.
2. Extent of participation by agency's higher management in client-servicing.

As an additional structural validation procedure, Principal Components factor analysis of responses to items in each of the six factors were carried out. This resulted in extraction of a single factor solution for items of all the six factors. Factor analysis of seven items of the Creativity factor resulted in extraction of a single factor with eigenvalue of more than 1.00 and the factor explained 74.3% of the total variance. The loading of seven items on the factor ranged from 0.94 to 0.81. Similarly, factor analysis of four items of the Efficiency factor also resulted in extraction of a single factor with eigenvalue of more than 1.00 and the factor explained 66.5% of the total variance. Factor loading of the four items ranged from 0.83 to
Factor analysis of three items of the Interpersonal Relations factor resulted in extraction of a single factor with eigenvalue of more than 1.00 and the extracted factor explained 79.0% of total variance. Factor loadings of the three items ranged from 0.91 to 0.86. Factor analysis of three items of the Public Relations skill factor resulted in extraction of a single factor with eigenvalue of more than 1.00 and the factor explained 68.9% of total variance. Factor loadings of all the three items were found to be 0.83. Factor analysis of three items of the Research factor resulted in extraction of a single factor with eigenvalue of more than 1.00 and the factor explained 73.4% of total variance. Factor loading of the three items ranged from 0.88 to 0.82. And finally, Factor analysis of two items of the Leadership factor resulted in extraction of a single factor with eigenvalue of more than 1.00 and the factor explained 88.7% of total variance. Loadings of both the items on Leadership factor were found to be 0.94. The Cronbach's alpha of reliability for items of the six factors were found to be 0.94, 0.83, 0.87, 0.77, 0.82, and 0.87 respectively, thereby indicating good internal consistency among items of the scale. As responses to items in all six factors were found to be uni-dimensional, they were added to form six new variables, namely: Creativity, Efficiency, Interpersonal Relations, Public Relations skill, Research, and Leadership.

3.5.4 Multiple Regression Analysis:

In order to predict clients' Overall Satisfaction as a function of their satisfaction with advertising service attributes, a step-wise regression analysis was performed using clients' Overall Satisfaction (OS) as the dependent variable and Creativity, Efficiency, Interpersonal Relations, Public Relations skill, Research, and Leadership as independent variables. Summated scores of response to the scale items were used as independent variables to facilitate replication and industry application (Brown and Swartz, 1989; Bitner, 1990; Wee and Cheong, 1991; and Pollay and Mittal, 1993). As suggested by Lewis-Beck (1980),
following tests were carried out prior to the regression analysis to diagnose the existence of multicollinearity among the independent variables:

1. **Bivariate correlation** among six independent variables was examined using the Pearson's coefficient of correlation. It was found that the highest correlation among any two independent variable was 0.65 between Creativity and Efficiency. According to Lewis-Beck (1980), the problem of multicollinearity exists only if the bivariate correlation coefficient among any two independent variables is 0.80 or above. As none of the correlation coefficients were equal to or greater than 0.80, the effect of multicollinearity on the results of multiple regression analysis was not significant (*matrix of inter-correlation among independent variables is given in section 4.7 of the thesis*).

2. Each independent variable was regressed on all the other independent variables. The highest $R^2$ that was obtained was 0.54, when Creativity was regressed over the remaining five independent variables. As the largest coefficient of multiple determination ($R^2 = 0.54$) was a good distance away from 1.00, the effect of multicollinearity on results of regression analysis was not significant (Lewis-Beck, 1980).

After ascertaining that multicollinearity among six independent variables was not a problem, a stepwise multiple regression analysis was performed using clients' *Overall Satisfaction* (OS) as the dependent variable and Creativity, Efficiency, Interpersonal Relations, Public Relations skill, Research, and Leadership as independent variables. Stepwise method of regression analysis was employed in this study in order to choose the smallest set of predictors that explain most of the variance in the criterion (Cramer, 1994). In the stepwise method, if there are independent variables already in the equation, then variable with the largest probability of $F$ is removed from the equation if this value is larger than specified probability of $F$ to remove
from equation (POUT). The equation is recomputed omitting the removed variable and the evaluation process is repeated until no more independent variables can be removed. Then, the independent variable not in the equation with the smallest probability of $F$ is entered if this value is smaller than specified probability of $F$ to enter the equation (PIN). Then, all variables in the equation are again examined for removal. This process continues until no variable in the equation needs to be removed and no variable not in the equation is eligible for entry (Lewis-Beck, 1980; Norusis, 1990a; Norusis, 1990b). The PIN and POUT values specified for the stepwise multiple regression analysis in this study were 0.05 and 0.10 respectively (refer section 4.7 of this thesis for results and discussion on the multiple regression analysis).

3.5.5 T-tests and one-way ANOVA analysis:

T-tests and one-way ANOVA analysis with Scheffe's range procedure were used in this study to ascertain if there are any significant differences in the degree of clients' Overall Satisfaction (OS), their Repurchase Intention (RI), their Word-of-Mouth Intention (WOM), and Index of their Complaining Behaviour (CB) because of client and relationship characteristics. Scheffe's test of multiple comparison of means was employed in this study as it requires larger differences between means for significance than most of the other methods (Norusis, 1990a). As a result, Scheffe's test is more conservative and it minimises the probability of type I error (Cramer, 1994).

The twelve classification variables used in the present study are: number of ad agency/agencies employed by the client, type of ad agency employed by the client, relative size of client's account at the agency's branch, method of agency compensation followed by the client, nature of ownership of the client organisation, domicile status of the client organisation, nature of business of the client, length of unbroken relationship between agency and the client, total
sales revenue of the client organisation, total ad expenditure of the client organisation, sales revenue of client's brand/s handled by the agency, and ad expenditure on client's brand/s handled by the agency. Studies by Chevalier and Catry (1976); Calantone and Drury (1979); Doyle, Corstjens, and Michell (1980); Michell (1984a); Michell (1984b); Michell (1986); Wackman, Salmon, and Salmon (1986); Verbeke (1988); Michell (1988); Buchanan and Michell (1991); Michell, Cataquet, and Hague (1992); Michell and Sanders (1995); Henke (1995); and Spreng et al. (1996) provided the basis for t-tests and one-way ANOVA analysis used in the present study. On the basis of frequency distribution of the classification variables and findings of similar studies cited above, one hundred and fifty-seven respondents were classified into sub-groups for t-tests and one-way ANOVA analysis. For the following variables, respondents were classified into two sub-groups:

- **Number of ad agencies employed by the respondent's organisation**
  *(One agency; More than one agency)*

- **Type of ad agency employed by the respondent's organisation**
  *(Full range of service; Others)*

- **Method of agency compensation followed by the respondent's organisation**
  *(Standard 15% commission; Others)*

Similarly, respondents were classified into three sub-groups for the following classification variables:

- **Relative size of respondent's account at the agency's local branch**
  *(Small & medium; Large; Very large)*

- **Nature of ownership of the respondent's organisation**
  *(Public company; Private company; Government org./dept.)*

- **Domicile status of the respondent's organisation**
  *(Indian company; Multi-national company; Government org./dept.)*

- **Length of unbroken relationship between respondent's organisation and the agency**
  *(2 years or less; 2.1 to 5.0 years; More than 5 years)*
For one classification variable, namely the nature of business, respondents were classified into four sub-groups as given below:

- **Nature of business of the respondent's organisation**
  - (Manufacturing/marketing consumer durable goods; Manufacturing/marketing consumer non-durable goods; Manufacturing/marketing industrial goods; Services).

Descriptive statistics, reliability measures of the scales used in this study, results of correlation analysis, factor analysis, multiple regression analysis, and t-tests and one-way ANOVA analysis are discussed in detail in the following chapter, and the findings of this study are considered in the light of studies reported in literature.
CHAPTER 4

RESULTS AND DISCUSSION