CHAPTER – III

RESEARCH METHODOLOGY

The extensive review of the literature on the various concepts of branding and research developments in the service industries provided a base to examine the concept of Emotional Attachment as a mediator and also to test the relationship between Service Encounter Satisfaction and Service Quality. A research methodology was finalised to answer the research questions raised in the study.

This chapter is divided into the following sections:

Section 3.1 Discusses the conceptual model developed in the proposed study.
Section 3.2 Lists the specific research hypotheses to be tested in the proposed study.
Section 3.3 Describes the sources from which the data was collected.
Section 3.4 Explains the research instruments selected to measure the variables included in the model.
Section 3.5 Discusses the pilot study.
Section 3.6 Presents the mode of data collection and sampling methods.
Section 3.7 Brings forth the types of statistical techniques adopted to test hypotheses.
3.1 CONCEPTUAL MODEL

The review of literature was the basis for developing a conceptual model to meet the research questions.

The proposed model encompasses Service Encounter Satisfaction and Service Quality as the independent variables. It is clear from the definitions of Service Quality and Service Encounter Satisfaction that consumers generally evaluate any service based on these two factors. Theoretically it is understood that there is a close association between these two factors. As stated earlier Bitner (1990) has also confirmed the relationship between Service Encounter Satisfaction and Perceived Service Quality and has stated that empirical research to substantiate this relationship is lacking. So it is proposed to combine both these variables and name it as “Service Evaluation Index”. The association between these two variables has been statistically tested in this research.

Each dimension of the independent variables separately or as a composite has the capacity to create one or more emotions indicated as the factors of Emotional Attachment. These factors of Emotional Attachment as a composite or individually can create an emotional bond. It makes the consumer to connect themselves with the service firm on an emotional level, which could lead to brand loyalty. This Brand Loyalty (on the lines of Emotional Branding) is named as “Emotional Brand” in this model. The Emotional Brand would be the dependent variable. It has been proposed to
identify the role of *Emotional Attachment* as a mediator of the relationships between Service Evaluation Index and Emotional Brand.

The schema of the model has been given here for reference.

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**Emotional Branding**

**Service Evaluation Index**

A

**Service Encounter Satisfaction**

1. Employee response to service delivery system failures
2. Employee response to customer needs and requests
3. Unprompted and unsolicited employee actions

**SERVPERF**

1. Tangibility
2. Reliability
3. Responsiveness
4. Assurance
5. Empathy

**Emotional attachment**

1. Affection
2. Connection
3. Passion

**Emotional Brand**

D
3.2 RESEARCH HYPOTHESES

Based on the review of literature, the following main and supportive hypotheses were formulated to meet the research questions.

H1 : Service Encounter Satisfaction will have a factor structure of more than one independent dimension.

H1.1: Employee Response to Service Delivery System Failures will form an independent factor of Service Encounter Satisfaction.

H1.2: Employee Response to Customer Needs and Requests will form an independent factor of Service Encounter Satisfaction.

H1.3: Unprompted and Unsolicited Employee Actions will form an independent factor of Service Encounter Satisfaction.

H2 : Service Performance will have a factor structure of more than one independent dimension.

H2.1: Tangibility will form an independent factor of Service Performance.

H2.2: Reliability will form an independent factor of Service Performance.
H2.3: Responsiveness will form an independent factor of Service Performance.

H2.4: Assurance will form an independent factor of Service Performance.

H2.5: Empathy will form an independent factor of Service Performance.

H3: Service Encounter Satisfaction will be positively associated with Service Performance.

H4: Service Performance will be positively associated with Service Encounter Satisfaction.

H5: Emotional Attachment will have a factor structure of more than one independent dimension.

H5.1: Affection will form an independent factor of Emotional Attachment.

H5.2: Connection will form an independent factor of Emotional Attachment.

H5.3: Passion will form an independent factor of Emotional Attachment.
H6 : Service Encounter Satisfaction as a composite, as well its dimensions will be positively associated with Emotional Attachment.

H7 : Service Encounter Satisfaction as a composite, as well its dimensions will be positively associated with Emotional Brand.

H8 : Service Performance as a composite, as well its dimensions will be positively associated with Emotional Attachment.

H9 : Service Performance as a composite, as well its dimensions will be positively associated with Emotional Brand.

H10 : Service Encounter Satisfaction and Service Performance as a composite will be positively associated with Emotional Attachment.

H11 : Service Encounter Satisfaction and Service Performance as a composite will be positively associated with Emotional Brand.

H12 : Emotional Attachment as a composite, as well its dimensions will be positively associated with Emotional Brand.

H13 : Emotional Attachment will have a positive role as a mediator of the relationship between Service Encounter Satisfaction and Emotional Brand.
H14 : Emotional Attachment will have a positive role as a mediator of the relationship between Service Performance and Emotional Brand.

H15 : Emotional Attachment will have a positive role as a mediator of the relationship between Service Evaluation Index and Emotional Brand.

H16 : The mean Emotional Attachment scores and Emotional Brand scores for interaction of Bank Type and Age will differ significantly.

H17 : The mean Emotional Attachment scores and Emotional Brand scores for interaction of Bank Type and Gender will differ significantly.

H18 : The mean Emotional Attachment scores and Emotional Brand scores for interaction of Bank Type and Educational Level will differ significantly.

H19 : The mean Emotional Attachment scores and Emotional Brand scores for interaction of Bank Type and Occupation will differ significantly.
H20 : The mean Emotional Attachment scores and Emotional Brand scores for interaction of Bank Type and Income per Month will differ significantly.

H21 : The mean Emotional Attachment scores and Emotional Brand scores for interaction of Bank Type and Years of Association will differ significantly.

H22 : Service Encounter Satisfaction as a composite will differ between Nationalised Banks and Private Banks.

H23 : Service Performance as a composite will differ between Nationalised Banks and Private Banks.

H24 : Emotional Attachment as a composite will differ between Nationalised Banks and Private Banks.

H25 : Emotional Brand will differ between Nationalised Banks and Private Banks.
3.3 DATA SOURCES

The primary requisite of any research study is to test the hypotheses. A survey type of questionnaire was adopted to accommodate the wide ranging hypotheses formulated.

This empirical study was done with specific reference to banks in India. Both Nationalised Banks and Private Banks have been taken into consideration in this study. As the population was the bank customers of Nationalised Banks and Private Banks operating in India, these banks were considered to be the sources of data for this empirical study. Since it is not possible to include all the banks in India, only few banks were taken into consideration.

The test for mediator hypotheses requires the influence of emotions of bank customers. In order to have unbiased results, the respondents were chosen from different areas and care was taken to ensure that they were customers of various banks.

Even though the respondents were customers of various banks, the number of respondents from State Bank of India, Indian Bank, Canara Bank, ICICI, Bank of Baroda, and Tamilnad Mercantile Bank were found to be in higher numbers. Hence the details about these banks have been discussed.
3.3.1 STATE BANK OF INDIA (SBI)

The origin of State Bank of India goes back to the first decade of nineteenth century with the establishment of Bank of Calcutta in Calcutta on 2nd June 1806. It was the first joint-stock bank of British India sponsored by the government of Bengal. Then Bank of Bombay (in 1840) and Bank of Madras (in 1843) followed. These three banks remained at the apex of modern banking in India till their amalgamation as the Imperial Bank of India on 27 January 1921. The new bank took on the triple role of a commercial bank, a banker’s bank and a banker to the government. The lofty traditions of banking which the imperial bank consistently maintained and the high standard of integrity it observed in its depositors that no other bank in India could perhaps then equal. All these enabled the Imperial Bank to acquire a pre-eminent position in the Indian banking industry and also secure a vital place in the country’s economic life. In 1955 State Bank of India was formed by integrating Imperial Bank and other state-associate banks to serve the rural areas.

State Bank of India has been ranked as the third best service brand of the year 2007 by Economic Times. The services of SBI include Personal Banking, Agricultural / Rural Banking, Corporate Banking, International Banking, Government Business, Loans for Small Scale Business, Internet services, ATM services, Credit cards, Mutual Funds, Insurance, etc. The international presence of the bank is clearly spelt through its branches at U.S.A., Bahrain, China, Japan, Mauritius and Indonesia.
3.3.2 INDIAN BANK

Indian is a premiere bank owned by the Government of India. It was established in 15\textsuperscript{th} August 1907 as a part of the swadeshi movement. It has over 1500 branches spread all over India. The overseas branches at Singapore and Colombo including a foreign currency banking unit at Colombo and 240 overseas correspondent banks in 70 countries speak of the international presence of the bank. The services of the bank include personal banking, merchant banking, rural banking, ‘anywhere banking’, core banking solutions, internet banking, tele-banking, international banking, credit cards, ATMs, IB gold coin, NRI services, etc. It has entered into a strategic tie-up with HDFC Standard Life Insurance Company Ltd.

3.3.3 CANARA BANK

Canara bank was founded as ‘Canara Bank Hindu Permanent Fund’ in 1906 by late Ammembal Subba Rao Pai which turned into a limited company as ‘Canara Bank Ltd.’ in 1910 and became Canara Bank in 1969 after nationalisation.

Canara Bank has launched a new brand identity initiative on 29\textsuperscript{th} December 2007. The slogan “It’s easy to change for those you love. We are changing for you” is a part of this new identity. The bank has narrated the Brand story in its website. (www.canarabank.com)
“The new brand identity for Canara Bank is based on the idea of a bond and is a representation of the close ties between the Bank and its many stakeholders – from customers and employees to investors, institutions and society at large. With its rich heritage of banking expertise, dedicated customer service and corporate social responsibility, Canara Bank is a powerful enabler who helps its stakeholders achieve their goals. The two seamlessly connected links capture the essence of this partnership.

The services of the bank include personal banking, corporate banking, mutual funds, Venture capital, NRI services, ATMs, credit cards, internet banking, etc.

3.3.4 ICICI BANK

ICICI bank was originally promoted in 1994 as wholly-owned subsidiary of ICICI Ltd, an Indian financial institution. ICICI was formed in 1955 at the initiative of the World Bank, the Government of India and representatives of the Indian industry. The objective was to create a development financial institution for providing medium-term and long-term project financing to Indian business. In 1990 ICICI entered into diversified financial services. In 1999 ICICI was the first Indian company and Indian bank from non-Japan Asia to be listed on the New York Stock Exchange (NYSE).

The bank has a network of about 955 branches. It offers a wide range of financial services to corporate and retail customers - which include investment banking, life and non-life insurance, venture capital and asset management, NRI services, internet banking, phone banking, etc.
The bank has its presence in 17 countries namely U.K., U.S.A., Russia, Canada, Singapore, Bahrain, Hong Kong, Sri Lanka, Qatar, Dubai, U.A.E., China, South Africa, Bangladesh, Thailand, Malaysia, Indonesia and Belgium.

3.3.5 BANK OF BARODA

The Bank of Baroda was founded on 20\textsuperscript{th} July 1908 by Maharaja Sayajirao Gaekwad in Baroda. It has taken a long journey across 23 countries. It has over 2896 branches all over India. The bank’s branches at Australia, Bahamas, Belgium, Botswana, China, Fiji Islands, Ghana, Guyana, Hong Kong, Kenya, Mauritius, Malaysia, Seychelles, South Africa, U.A.E., U.S.A., U.K., Singapore, Thailand, Sultanate of Oman, Zambia, Tanzania, Uganda, Trinidad and Tobago speaks clearly of its global presence and the growth since these hundred years.

The bank has developed a new corporate brand identity. According to the bank sources the new logo is a unique representation of a universal symbol. It comprises dual “B” letterforms that hold the rays of the rising sun. They call this the Baroda Sun. They claim that the new corporate identity is much more than a cosmetic change. They recognize it as a signal to prepare themselves for new business paradigms in a globalised world. They are at the same time confident to stay in touch with their heritage and enduring relationships on which their bank was founded. They hope to communicate both by adopting the symbol as simple and powerful as the Baroda Sun.
The services of the bank include personal banking, business banking, corporate banking, International banking, rural banking, NRI services, credit cards, ATMs, etc.

3.3.6 TAMILNAD MERCANTILE BANK LTD

The Tamilnad Mercantile bank was registered on May 11\textsuperscript{th} 1921 as the Nadar Bank Ltd. The bank has 196 branches all over India. All the branches are computerized and interconnected. It has tie-ups with IDBI Bank (55 locations) and HDFC Bank (98 locations) for issue and deposit of demand drafts and cheques at no extra cost which gives an effective branch network of 349.

According to the bank’s website “the bank is known for its personalised service. The team of management and staff members of the bank are having the practice of meeting people from various walks of life and hear their requirements on a regular basis.” The bank calls itself as “Totally Motivated Bank.”

The services of the bank include retail banking, business loans, international banking, ATMs, NRI services, deposits, etc.

The details of the banks discussed so far, give a bird’s eye view of their profile and banking services on offer.

3.4 RESEARCH INSTRUMENTS

The nature of this research necessitated the study to focus on the customers of various banks as they are the people who evaluate the services
offered by the banks. The following tools were identified, keeping in view
the objectives and the respondents to tap the independent, the mediator and
the dependent variable (Ref. Appendix A).

\subsection*{3.4.1 SERVICE ENCOUNTER SATISFACTION}

Generally Service Encounter is the service experienced from the
customer point of view. Bitner, Booms, Bernard and Tetreault (1990) have
categorised particular events and related behaviours of contact employees.
Through research the authors have collected 700 incidents from customers
of airlines, hotels and restaurants. The incidents were approximately half
satisfactory and half dissatisfactory. They have identified three major groups
of employee behaviours that account for satisfactory and dissatisfactory
incidents as

1. Employee Response to Service Delivery System Failures
2. Employee Response to Customer Needs and Requests
3. Unprompted and Unsolicited Employee Actions

Within these three major groups they have further classified 12
categories of incidents. According to them, “the classification system that
emerged from the data can be used by managers of the industries studied and
may be applicable to other high-contact, transaction - based service
industries as well. The classification system is abstract enough to generalise
across several industries, but sufficiently detailed to suggest an overall
management approach to improving customer satisfaction in service encounters.”

Also, the above categories have been tested for robustness and validity across different industries (Grembler and Bitner 1992).

The instrument contains twelve questions related to Service Encounter Satisfaction. Interval scale of 7-point rating which ranges between Dissatisfactory (1) to Satisfactory (7) has been used to measure Service Encounter Satisfaction.

3.4.2 SERVICE QUALITY

Service quality is generally measured by the most popular tool namely SERVQUAL developed by Parasuraman et al. (1988). SERVQUAL constitutes 22 items under five factors viz. Tangibility, Reliability, Responsiveness, Assurance and Empathy. Here service quality is measured as difference between perception and expectations. Each dimension is given a specific weightage. The 22 items have to be measured twice, once for assessing perception and the next time for expectations, bringing the total number of items to 44.

Though the SERVQUAL instrument is used widely, Cronin and Taylor (1992 & 1994) have identified a performance based measure of service quality, SERVPERF. According to them the performance – based scale SERVPERF is efficient in comparison with the SERVQUAL scale; it
reduces by 50% the number of items that must be measured (44 items to 22 items). Also, they suggest that the performance – based measures provide a more construct – valid explication of service quality because of content validity.

Although the debates on both SERVQUAL and SERVPERF are still going on, SERVPERF is used in this research and this is strongly supported by other recent research (Johns & Howard 1998, Angur, Natarajan & Jahera 1999; Fogarty, Catts & Forlin 2000; Thongsamak 2001; Lee & Hwan 2005; Carrilat, Jaramillo & Mulki 2007).

The Service Performance instrument includes twenty two questions to measure service quality. Interval scale of 7- point rating which ranges between Strongly Disagree (1) to Strongly Agree (7) has been used.

3.4.3 EMOTIONAL ATTACHMENT

Based on the premise that consumers are able to articulate the nature of their emotional attachment to brands, emotion items thought to potentially indicate attachment (Thomson, Deborah and Park 2005) were identified. This is the only research that has identified and specified the domains of a construct that reflects the strength of consumers’ Emotional Attachment to Brands. Their study has also confirmed the reliability and internal consistency of the scales. According to them, “we suggest that emotional scale is valid because it predicts these outcomes in a manner consistent with attachment theory and that it is useful because it explains its variance
beyond attitude, involvement and satisfaction.” Hence, the same constructs have been used in this research to measure Emotional Attachment.

The instrument consists of ten emotional components to measure Emotional Attachment. Interval scale of 7 – point rating which ranges between *Not at all (1)* to *Very Well (7)* has been used.

### 3.4.4 EMOTIONAL BRAND

The evaluation of Emotional Brand is done based on the metric developed by Sirgy, Johar, Samli and Clairborne (1991). The items in their research showed high reliability. Their multiattribute attitude model has been shown to be highly predictive of consumer behaviour. Their items used to measure store loyalty were slightly modified and adopted in this research study to measure Emotional Brand.

The instrument contains six questions to measure Brand Loyalty which has been termed Emotional Brand on the lines of Emotional Branding. It has been measured using an Interval scale of 7- point rating which ranges between *Very Weak (1)* to *Very Strong (7)*.

### 3.5 PILOT STUDY

The selected tools were pre-tested prior to it being used in the main study. A pilot survey was conducted. The sample size was 42 and the survey was done within Tiruchirapalli city (a medium sized city in South India).
The questionnaires were framed to test the model and tested with respect to the Banking industry.

The respondents were selected based on convenient sampling. The data collected was subjected to statistical analysis. The results of reliability analysis confirmed the internal consistency of the scales adopted. The regression analysis and the statistical significance gave the desired results to continue with the main study.

A working paper titled “Emotional Branding: The Indian Scenario” was generated out of this pilot study and has been presented in the International Colloquium on Business and Management conference in Bangkok between 19 and 22nd November 2007 and has been published in the official proceedings of the conference with ISBN 978-1-60530-424-3. Suitable modifications have been implemented in the further research based on the feedback received during the presentation.

3.6 DATA COLLECTION PROCEDURE

As this study is related to the evaluation of services by the customers’ of the banks operating in India, the population for the study is all the bank customers in India. The exact number of customers or the total population of the study is unknown. So a population of two crores has been taken into consideration. The sample size was calculated for the above population.
3.6.1 MINIMUM SAMPLE SIZE

Sample size was calculated using the formula (Kothari 2004) given below.

\[ n = \frac{Z^2 \cdot p \cdot q}{e^2} \]

where

- \( Z \) is the level of confidence
- \( p \) is the true proportion of success
- \( e \) is the error permitted

As the population size is unknown, it is assumed to be 2 crores.

- \( Z \) is assumed to be 1.96 for 95% confidence interval
- \( e \) is assumed to be 0.05
- \( p \) is assumed to be 0.5

The sample size has been calculated as 384.

3.6.2 SAMPLING METHOD

Due to time as a constraint only two cities in (Tiruchirapalli and Madurai) Tamilnadu state and Pondicherry adjoining Tamilnadu have been selected for the study. Mid-level cities alone have been included in the study. Metropolitan cities or rural parts have not been included for the study.

Both Nationalised Banks and Private Banks have been selected for the study. The samples have been selected by simple random sampling. The
samples have been selected from the general public and it has included customers of different banks. Attempt was not made to select only specific bank customers, because the objective of the study was to identify the role of emotions in customers of banks in general, and not to restrict to any specific banks for this study. Sample profile is given in Appendix B. Questionnaires were used for the survey.

Each questionnaire was provided with a request to the respondents to complete the same for the purpose of academic research. The questionnaire ended with a Thank You note for responding patiently to all the questions.

Personal details of the respondent were included in the first part. The questions regarding age, gender, education level, occupation and income per month were included in this part. Questions related to the type of bank (Nationalised or Private), Name of the Bank and Number of Years of Association with the Bank were also included in this section. Questions on Age, Income and Years of Association and Name of the Bank were of open-ended type. Nominal scales were used for other questions.

Five hundred questionnaires were distributed for the survey. Out of 500 questionnaires 392 duly completed questionnaires were received and they were taken for analysis.
3.7 ANALYTICAL PROCEDURE

Statistical Package for Social Sciences SPSS package 15.0 version was used for statistical analysis (Kinnear & Gray 2007).

The Hypothesis 1, Hypothesis 2 and Hypothesis 5 relate to structural properties and were tested on the aggregated data.

To test the structures of Service Encounter Satisfaction, Service Performance and Emotional Attachment principal component factoring with varimax rotation was performed prior following the Scree test (Cattel 1966) for determining the number of factors. Varimax rotation for orthogonality was effected.

Internal consistency of all the variables was examined by computing Cronbach’s alpha coefficient of reliability.

Hypothesis 3, Hypothesis 4 and Hypothesis 6 to Hypothesis 15 were tested using Multiple Regression (Miles and Shevlin 2001).

Hypothesis 16 to Hypothesis 21 were analysed using to Multivariate Analysis of Variance (Overall & Klett 1972).

Hypothesis 22 to Hypothesis 25, postulating the difference between Nationalised Banks and Private Banks were tested using T-test.