CHAPTER FOUR

METHODOLOGY
Chapter IV
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4.1 Statement of the Problem
The present study under the title, ‘The Learning Organization Dimensions of Public And Private Sector Banks As Perceived By The Bank Officers’ was proposed to designate the dimensions of content concept related to the construct of selected domains of the ‘learning organization dimension’ of banks. Accordingly, the study had attempted to identify and specify the relevant component variables all pertaining to the composite or multivariate construct related to the status of learning organization dimensions as per perception of the officers of different public and private sector banks. Hence, this was a comparative analysis on domains of learning organization of the different types of the banks (public / nationalised and private).

In this study, as hypothetical components of ‘learning organization’ were not possible to control, they were approached only by the method of inferences from functionally related variables, either quantitatively or qualitatively, in relation to the variation of the banks (public and private sector).

Secondly, in order to assess the characteristic features of learning organization, the study had concentrated on analysis of nature of relationship or association between perceived ‘dimension of learning organization’ of the bank (public and private) and the pattern of ‘selected independent variables – organizational and person related attributes’ of the officers of the banks. For analysis of organizational attributes, the study had limited its observation on two components namely ‘Organizational Climate’ and ‘Team Cohesiveness’ of the banks. Similarly, for assessment of person related attributes of the bank officers, the study had focused on three job-related attributes namely ‘Innovative Work Behaviour’, ‘Commitment’ and ‘Learning Behaviour Styles’ of the bank employees. This part of the study was a correlational research as the variables were not directly manipulated by the researcher. Here, the researcher observed and assessed the variables in the natural course of events and then applied appropriate statistical method to ascertain a relationship.
Thirdly, as the study was intended to unearth the facilitating and inhibitory factors related to learning organization (public and private sector bank) and types of banks, hence, an attempt had been made to compare the nature and characteristic disposition of the selected ‘Organizational and Person related attributes’ as reported by the two groups of bank officers with respect to their perception of level of learning organization dimensions (high and low) of banks. Thus, this was a comparative analysis between two groups of officers with perception of existence of high learning organization dimensions and low learning organization dimensions in different banks, for five selected components (Organizational Climate, Team Cohesiveness, Innovative Work Behaviour, Commitment and Learning Behaviour Styles).

To identify the specificity of the pattern of the facilitating and inhibitory factors of learning organizations banks (public sector and public sector), a comparative analysis were made on five selected independent variables in terms of level of learning organization.

Here, the inferences on the selected facilitating and inhibitory factors (organizational variables and person related attributes) of the learning organization dimensions were approached only by the ex post facto method of observation in terms of the dimension of learning organization.

To generalize the ideas, the study had considered different banks from public and private sectors of West Bengal, as well as both male and female officers of these banks as sample of the study.

On the basis of above design, following steps had been considered for the progress of the study:

**Step 1:** Selection of the contents relevant to the component domains of learning organization dimensions, and local adaptation of a standard scale viz, Learning Organization Profile (LOP) developed by Pareek (2002).

**Step 2:** To identify the comparative status of different domains of learning organization dimensions in terms of types of bank (public and private sector bank).
Step 3: To study the interrelationship among the 'level of learning organization dimensions' and selected 'organizational and personal variables' of the bank officers.

Step 4: To identify the facilitating and inhibitory organizational and personal variables of the bank officers for learning organization dimensions (through comparison of scores or organizational and personal variables of the bank officers with perception of high and that of with low level of learning organization dimensions).

Step 5: To identify the specificity of the facilitating and inhibitory organizational and personal variables of the bank officers in terms of public and private sector banks.

4.2. Description of Concepts Used as Variables

4.2.1 Dependent Variables:
This variable related components / items were traceable and identifiable components in the tests considered with learning organization profile used in the present investigation and which could yield measures or scores against the responses given by the sample(s) concerned. A brief description of the dependent variable was given below:

4.2.1.1 Learning Organization:
The present study has defined learning organization dimensions of the banks as the officers’ perceived process of acquiring, retaining and using learning input for the development and enhancement of the capacity of banks and such dimensions were conceptualized as a set of characteristics of the banks. Based on the views of Gravin (1993), Senge (1990) and McGill et al (1972), Pareek (2002) considered eight components for learning organization dimensions. Regarding assessment of learning organization dimensions in bank, the present study has accepted the components namely Holistic Frame, Strategic Thinking, Shared Vision, Empowerment, Information Flow, Emotional Maturity, Synergy and Learning Mechanism and Source, (Virnay et al, 1992; Marquardt, 1996; Mc Dougall & Beattie, 1996; Rampersad, 2002; Pareek,2002; Lynton & Pareek, 2006) as measured variables of the learning organization dimensions of the banks (details of the components were presented in Appendix B, Table B1).
4.2.2 Independent Variables (Organizational and Personal Variables):

Perception of learning organization dimension is generally mediated a moderated by demographic background (age, education, position, work experience, etc), psychological predisposition and situational variables (type of organization, functions of organization, demand of external environment as well as opportunity at external environment). Accordingly organizational variables (organizational climate and team effectiveness) and personal variables (innovative work behaviour, organizational commitment and learning behaviour styles) were considered as measured independent variables of the study.

4.2.2.1 Organizational Variables:

Organizational variables were considered here only those unique components which have direct relationship with the learning organization (Pareek, 2002) in terms of level of effectiveness, strength and weakness, favourable and unfavourable conditions of the banking system. Accordingly study had considered following two components are relevant measured variable of organizational attribute.

4.2.2.1 (a) Organizational Climate:

Organizational climate was conceptualized as asset of employees perceived description of relevant components namely, appraisal and recognition, functional coordination, effective discipline policy, participative decision making, professional growth, professional interaction, role clarity, customer orientation, supportive leadership style, and security and stability (Field and Abelson, 1982; Glick, 1985, 1988; James et al 1988; James and Jones, 1976; Litwin and Stringer, 1968; Luthans, 1995; Payne, et al, 1976; Schneider, 1983). In this study, it was a cognitive interpretation of the bank officers about organizational climate of the bank (James et al, 1988). Details of the components were presented in Appendix B, Table B2.

4.2.2.1 (b) Team Cohesiveness:

Team cohesiveness has been measured for effectiveness of team. Here the components (McGregor, 1960 and Likert, 1961) Team effectiveness assessment Measure (TEAM) as proposed by Pareek, 2002 was considered as measured variables. On the basis of their concepts seven components, which were represented team effectiveness: cohesion,
confrontation and collaboration, task clarity, autonomy, support and accountability were considered as measured variables of this study. Details of the components were presented in Appendix B, Table B3.

4.2.2.2 Personal Variables:

Personal variables of the bank officers were considered as those variables which were related to better and effective functioning, long term survival of organization (Garret, 1987; Senge, 1990; Nonaka & Takeuchi, 1991; Watkinson & Marsick, 1993; Mehata, 2008) and functions Ginsberg, 1990; Nonaka & Takeuchi, 1991; Watkinson & Marsick, 1993), organizational fitness (peddler et al, 1991; McGill et al, 1992; Garvin, 1993; French & Bell, 1997). In this context study has considered following measured variables as components of personal variables of bank officers:

4.2.2.2 (a) Innovative Work Behaviour:

Innovative work behaviour of the bank employees was defined as the self reported level of three different behavioural tasks, namely idea generation, idea promotion, and idea realization. These job related components were recognized as important personal level factors related to innovation in the workplace (Amabile et al, 1996; Kanter, 1988; Scott and Bruce, 1994; Woodman et al, 1993).

Here idea generation was considered as those variables which were related in the pattern of activities by the employees for novel and useful ideas, critical thinking, searching for new methods and techniques etc in the bank.

The idea promotion of the study was concerned only those variables which were related to the social activities of the officer for acquiring approval, awareness and support for innovation.

Idea realization has considered the nature of participation and application of innovative ideas by the bank officers.

These three factors were considered to combine additively as the measures of innovative work behaviour. Details of the components were presented in Appendix B, Table B4.
4.2.2.2 (b) Organizational Commitment

Commitment of the bank employees was defined as the self-reported relative strength of an individual employee's identification with the involvement in a particular banking system or organizational activities of the bank. It was considered as a central component for a learning organization (Klein and Sorra, 1996) and most important ingredient for employees support for change initiative (Armenakis et al, 1999; Coetsee, 1999; Conner and Patterson, 1982). For measurement of commitment, study has considered both normative and instrumental commitment concepts related to organizational commitment. These two components were considered as relevant measured variable of the organizational commitment of bank employees.

Here, the ‘normative commitment’ has represented the ‘internalization’ and ‘identification’ where the internalization refers to congruence between the employees and organizational values of the bank, and identification referred as the level of attachment based on a desire for affiliation with the banking organization. The instrumental commitment represented the level of compliance or the instrumental attachment of the employees undertaken for specific results. Details of the components were indicated in Appendix B, Table B5.

4.2.2.2 (c) Learning Behaviour Styles

Development of learning organization is essentially a learner-centered activity and depends on the nature of the learning pattern of the individual (Brown, 1989; Collins et al 1989; Ford, Miller 2003; Large et al 1994). During the course of work there are three basic ways an employee as a learner can interact with each other as they learn; individualistic, competitive and as well as cooperative (Johnson and Johnson, 1991; Deutsch, 1962). In cooperative learning situations, participants perceive that they can reach their learning goals only if the other in the learning group also does so. In competitive situation, individuals work against each other to achieve a goal and each individual perceives that when one person achieves his or her goal, all others with whom he or she is competitively linked fail to achieve their goals. When a situation is structured individualistically, there is no correlation among participants' goal attainments. Each individual perceives that he or she can reach his or her goal regardless of whether other individuals attain or do not attain their goals (Johnson and Johnson, 1989). In this study the mentioned attributes of three learning behaviour pattern
(Hamidah et al, 2009; O'Faithaigh, 2000; Kraft, 1976; Deng and Tsacle, 2006; Yazici, 2005; Kennedy et al, 2003; Kim and Allen, 2002; Lou et al, 2001; Lehtinen, 1997; Saddler-Smith, 1997; Slavin, 1980) were considered for assessment of the effect of learning pattern of the member of the learning organization. Details of the components were indicated in Appendix B.

4.3 Tools for Hypothesis Testing:

4.3.1 Tools Adopted Locally (Four):

(a) Local Adaptation of Inventory for Learning Organization Profile (Pareek, 2002)

Learning Organization Profile (LOP), Survey developed by Pareek (2002), helps in preparing the profile of an organization; indicating how much it is a learning organization. The profile is in terms of eight aspects of a learning organization. LOP survey has 48 items, six items on each aspects (Appendix A, A2). Three items on each aspect are stated in positive and three in negative terms. The respondents were required to rate each item on a five point scale to indicate how much the item was true about his / her organization. Each item was then fitted with an equidistant 'Likert Type' 5 point scale along with the dimension illustrated below bearing logical weightage 4-0 as:

4 – if it is fully true about your organization.
3 – if it describes the organization fairly well.
2 – if it is difficult to say whether it is true about your organization (sometimes you feel it is, sometimes you feel it is not).
1 – if it is somewhat true about your organization.
0 – if it is not true at all about your organization.

In order to select the items for schedule following aspects were seriously checked by author.

a. Un-prejudiced nature of the item.
b. Clarity of expression and simple nature of construction in English language.
c. Free of over-lapping of enquiry items, as far as practicable.
In order to adopt the scale locally the scale was administered on 100 bank officers selected from different banks (public and private sectors). The data thus collected were computed to identify statistically valid items. The responses on items were processed for 'item component correlation' and 'component enquiry areas – total score correlation'.

For testing the consistency of items of the scale the item-total correlation were computed (indicated in Result and Interpretation, chapter Five) on the basis of the response of bank employees for 48 items. Considering the 'item-total correlation' all 48 statistically valid items were finally retained to use the scale for further probing. The 'item total correlation' of the inventory ranged from .421 - .951 for Holistic Frame, .421 - .821, Strategic Thrust .483 - .786, Shared Vision .430 - .846, Empowerment .517 - .899, Information Flow, .503 - .951, Internality, .533-.836, Learning Mechanism and Source .643 - .821, Synergy .591-.921.

At this stage, on the basis of valid items, the reliability of the scale was estimated by the techniques Split half Reliability by Spearman Brown, and Cronbach’s Alpha (indicated in chapter five in Result and Interpretation). The reliability coefficient range for the three subscales Spearman Brown, r=.877, Cronbach’s Alpha r=.937 and Split half, r=.893 were found to be high. The interenquiry area (Holistic Frame, Strategic Thrust, Shared Vision, Empowerment, Information Flow, Internality, Learning Mechanism and Source and Synergy ) correlation has indicated very high construct validity for the said scale.

The scale has 48 items (Appendix A, Table A2) and the maximum possible score was 24 and the minimum was 0 for each of the eight enquiry areas of the scale. The higher the score the more was the degree of proneness towards the conducive learning organization.
(b) Local Adaptation of Organizational Climate Scale:

On the basis of previous researches (Ambile, 1998; Argyris 1958; Frese, et al 1996; James et al, 1992, Litwin and Stringer, 1968; Nystrom, 1990) Organizational Climate Scale, was developed by Gupta and Ray (2005). It consisted with 27 items covering relevant 10 component areas (appraisal and recognition, functional coordination, effective discipline policy, participative decision making, professional growth, professional interaction, role clarity, customer orientation, supportive leadership style, and security and stability) were selected to measure bank climate for development and maintenance of learning organization. Each item was fitted with an equidistant 'Likert Type' 5 point scale along with the dimension of 'strongly agree' to strongly disagree' bearing logical weightage 5-1 as illustrated below.

**Strongly agree  Agree  Neither agree nor disagree  Disagree  Strongly disagree**

5  4  3  2  1

The above weightage of a particular scaled response would be expected to reveal the nature of organizational climate of the bank.

In order to select the items for schedule following aspects were seriously checked by author.

  e. Un-prejudiced nature of the item.
  f. Clarity of expression and simple nature of construction in English language.
  g. Free of over-lapping of enquiry items, as far as practicable.
  h. No difficulty to link up with the operational definition of any particular area of enquiry.

In order to adopt the scale locally the scale was administered on 100 bank officers selected from different banks (public and private sectors). The data thus collected were computed to identify statistically valid items. The responses on items were processed for 'item component correlation' and 'component enquiry areas — total score correlation'.

For testing the consistency of items of the scale the item-total correlation were computed (indicated in Result and Interpretation, chapter Five) on the basis of the

At this stage, on the basis of valid items, the reliability of the scale was estimated by the techniques Split half Reliability by Spearman Brown, and Cronbach's Alpha (indicated in chapter five in Result and Interpretation). The reliability coefficient range for the three subscales Spearman Brown, r=.967, Cronbach's Alpha r=.965 and Split half, r=.963 were found to be high. The interenquiry area (Appraisal and Recognition, Functional Coordination, Effective Discipline Policy, Participative Decision Making, Professional Growth, Professional Interaction, Role Clarity, Customer Orientation, Supportive Leadership Style, and Security and Stability) correlation has indicated very high construct validity for the said scale.

The scale has 20 items (Appendix A, Table A4) and the maximum possible score was 100 and the minimum was 20 for each of the ten enquiry areas of the scale. The higher the score the more was the degree of proneness towards the conducive organizational climate.

(c) Local Adaptation of Team Cohesiveness Scale:

Team cohesiveness scale (Pareek, 2002), indicating effectiveness of team in organization through its cohesiveness, has 28 items, four items on each component (Appendix A, A3). The respondent is required to rate each item on a five point scale to indicate how much the item is true about his / her organization. Each item was then fitted with an equidistant 'Likert Type ' 5 point scale along with the dimension illustrated below bearing logical weightage 4-0 as:
4 – This is highly characteristic of the group, and / or this always happens.
3 – This is fairly characteristic of the group, and / or this frequently happens.
2 – This slightly characteristic of the group, and / or this sometimes happens.
1 – This is very true about this group, and / or this occasionally happens.
0 – This is not at all true about this group, and / or it almost never happens.

In order to select the items for schedule following aspects were seriously checked by author.

a. Un-prejudiced nature of the item.
b. Clarity of expression and simple nature of construction in English language.
c. Free of over-lapping of enquiry items, as far as practicable.
d. No difficulty to link up with the operational definition of any particular area of enquiry.

In order to adopt the scale locally the scale was administered on 100 bank officers selected from different banks (public and private sectors). The data thus collected were computed to identify statistically valid items. The responses on items were processed for ‘item component correlation’ and ‘component enquiry areas – total score correlation’.

For testing the consistency of items of the scale the item-total correlation were computed (indicated in Result and Interpretation, chapter Five) on the basis of the response of bank employees for 28 items. Considering the ‘item-total correlation’ all 28 statistically valid items were finally retained to use the scale for further probing.


At this stage, on the basis of valid items, the reliability of the scale was estimated by the techniques Split half Reliability by Spearman Brown, and Cronbach’s Alpha (indicated in chapter five in Result and Interpretation). The reliability coefficient range for the three subscales Spearman Brown, r=.870, Cronbach’s Alpha r=.908 and Split half, r=.872 were found to be high. The interenquiry area (Cohesion, Confrontation, Collaboration, Task Clarity, Autonomy, Support, Accountability ) correlation has indicated very high construct validity for the said scale.
The scale has 28 items (Appendix A, Table A4) and the maximum possible score was 16 and the minimum was 0 for each of the eight enquiry areas of the scale. The higher the score the more was the degree of proneness towards the cohesiveness of team in learning organization.

(d) Local Adaptation of Organizational Commitment Scale:

Organizational Commitment (OCOM) Scale developed by O'Reilly and Chatman (1986) was adopted to assess internalization, identification, and compliance. The scale consisted of 12 items (Appendix A, A4) covering three components. The respondent is required to rate each item on a five point scale to indicate how much the item is true about his / her organization Each item was fitted with an equidistant 'Likert Type ' 5 point scale along with the dimension of 'strongly agree' to strongly disagree' bearing logical weightage 5-1 as illustrated below.

Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree

5 4 3 2 1

The above weightage of a particular scaled response would be expected to reveal the nature of commitment of the bank officers.

In order to select the items for schedule following aspects were seriously checked by author.

e. Un-prejudiced nature of the item.
f. Clarity of expression and simple nature of construction in English language.
g. Free of over-lapping of enquiry items, as far as practicable.
h. No difficulty to link up with the operational definition of any particular area of enquiry.

In order to adopt the scale locally the scale was administered on 100 bank officers selected from different banks (public and private sectors). The data thus collected were computed to identify statistically valid items. The responses on items were processed for 'item component correlation' and 'component enquiry areas – total score correlation'.
For testing the consistency of items of the scale the item-total correlation were computed (indicated in Result and Interpretation, chapter Five) on the basis of the response of bank employees for 12 items. Considering the 'item-total correlation' all 12 statistically valid items were finally retained to use the scale for further probing. The 'item total correlation' of the inventory ranged from .440 - .860 for Internalization .450 - .642, Identification .444 - .860, Compliance .440 - .711.

At this stage, on the basis of valid items, the reliability of the scale was estimated by the techniques Split half Reliability by Spearman Brown, and Cronbach's Alpha (indicated in chapter five in Result and Interpretation). The reliability coefficient range for the three subscales Spearman Brown, \( r=.466 \), Cronbach's Alpha \( r=.470 \) and Split half, \( r=.472 \) were found to be high. The interenquiry area (Internalization, Identification, and Compliance) correlation has indicated very high construct validity for the said scale.

The scale has 12 items (Appendix A, Table A6) and the maximum possible score was 20 and the minimum was 4 for each of the eight enquiry areas of the scale. The higher the score the more was the degree of proneness towards the commitment of officers of the banks for modifying their bank as learning organization.

4.3.2 Tools Developed (Three):

(a) General Information Schedule:

Altogether the schedule had 7 items. This involved questions furnishing information about personal demographic (age, sex, qualification) and job demographic (designation, types of job, span of services and types of bank) (Appendix A, Format A1)

(b) Innovative Work Behaviour Scale:

Considering the concept of Janseen (2000) nine items measuring device for individual innovative work behaviour in the work place, an attempt had been made by the present
investigator to develop the said measures for banking situation and accordingly the number of items of the scale have been extended from 9 to 18 through certain steps as mentioned below.

At first, following Janssen (2000) and Kanter (1988) ideas, the extended version of the scale had considered only three components namely idea generation, idea promotion, and idea realization. Initially 36 items were identified covering three components areas (12 for each of the components). Secondly, these 36 items were placed before 5 experts (Professors of Psychology department of Calcutta University, Professors of Business Management of Calcutta University and Jadavpur University and Senior bank officials). As per their suggestions necessary modification were made and finally a questionnaire containing a pool of 33 items were found befitting to structure the proposed inventory. The respondents were required to rate each item on a seven point scale to indicate how often do he / she perform each of the following work behaviour. Each item was then fitted with an equidistant 7 point scale along with the dimension illustrated below bearing logical weightage 7-1 as:

1 – Never
2 – Sporadically (few times in a year)
3 – Sometimes (once in a month)
4 – Regularly (a few times a month)
5 – Often (once a week)
6 – Very often (a few times a week)
7 – Always (daily)

The scale was then administered to 100 bank officers selected from different banks (public and private sectors). The data thus collected were computed to identify statistically valid items.

For testing the consistency of items of the scale the item-total correlation were computed (indicated in Result and Interpretation, chapter Five) on the basis of the response of bank employees for 30 items. Considering the ‘item-total correlation’ only 18 statistically valid items were finally retained to use the scale for further probing.
At this stage, on the basis of valid items, the reliability of the scale was estimated by the techniques Split half Reliability by Spearman Brown, and Cronbach’s Alpha (indicated in chapter five in Result and Interpretation). The reliability coefficient range for the three subscales Spearman Brown, \( r = .845 \), Cronbach’s Alpha \( r = .812 \), and Split half \( r = .762 \) were found to be high. The interenquiry area (idea generation, idea promotion, and idea realization) correlation has indicated very high construct validity for the said scale. The item total correlation of the scale ranged from \( .455 - .904 \). For the components Idea Generation: \( .455 - .763 \), Idea Promotion: \( .744 - .904 \), Idea Realization: \( .510 - .842 \) were yield.

The scale had 18 items (Appendix A, Table A) and the maximum possible score was 42 and the minimum was 7 for each of the three enquiry areas of the scale. The higher the score the more was the degree of proneness towards the conducive organizational climate.

(c) Learning Behaviour Styles Inventory (LBSI):

In order to develop learning behaviour styles inventory for bank employees a pool of 60 items covering relevant to 3 component areas (cooperation, competitive and individualistic) were selected on the basis of previous researchers (Johnson and Johnson 1991).

Out of the said pool of enquiry items only 48 items on the three domains cooperation, competitive and individualistic types were retained in consultation with a board of experts (7 psychologists, 4 executives and 5 bank employees) for framing a questionnaire on learning behaviour styles.

In the second phase the said draft questionnaire with notionally valid 48 items were then placed before the group of experts comprising customers, bank employees and other executives, who are directly or indirectly related with the learning behaviour styles in the bank system. They were requested to indicate which items were very high relevancies in measuring the learning behaviour styles of the bank employees. Thus, on the basis of their suggestion, necessary modifications were made on draft. Finally a questionnaire containing a pool of 27 items were found befitting to structure.
the proposed questionnaire. To frame the item structure of the scale few precautions (unprejudiced nature of the items, clarity of expression and simple nature of construction in English language, free of over-lapping of enquiry items, as far as practicable, no difficulty to link up the item with the operational definition of any particular area of enquiry) were seriously considered.

Each item was then fitted with an equidistant 'Likert Type ' 5 point scale along with the dimension of 'strongly agree' to strongly disagree' bearing logical weightage 5-1 as illustrated below.

<table>
<thead>
<tr>
<th>Strongly agree</th>
<th>agree</th>
<th>neither agree nor disagree</th>
<th>disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

The above weightage of a particular scaled response would be expected to reveal the nature of learning behaviour styles of the bank employees.

The learning behaviour Styles inventory thus developed in English language after the areas and items suggested by previous pioneer investigators were administered to 100 bank officers selected from different banks (public and private sectors). The data thus collected were computed to identify statistically valid items.

For testing the consistency of items of the scale the item-total correlation were computed (indicated in Result and Interpretation, chapter Five) on the basis of the response of bank employees for 27 items. Considering the 'item-total correlation' only 18 statistically valid items were finally retained to use the scale for further probing. The 'item total correlation' of the inventory ranged from .547 - .852, for Cooperative=.447 - .607, for Competitive =.532 - .801 and for Individualistic=.637 - .852.

At this stage, on the basis of valid items, the reliability of the inventory was estimated by the techniques Split half Reliability by Spearman Brown, and Cronbach’s Alpha (indicated in chapter five in Result and Interpretation). The reliability coefficient range for the three subscales Spearman Brown, r=.795, Cronbach’s Alpha r=.660 and Split half r=.795 were found to be high. The interenquiry area (Cooperative,
Competitive and Individualistic) correlation has indicated very high construct validity for the said inventory.

The inventory had 18 items (Appendix A, A7) and the maximum possible score was 30 and the minimum was 6 for each of the three enquiry areas of the inventory. The higher the score the more was the degree of proneness towards the particular learning behavior of the employees.

4.3 Sample Selection

In this study, sample was done in two stages:
   a) Selection of sample banks.
   b) Selection of officers

a) Banks:

To verify the research assumptions data were collected from a group of properly chosen cross section of bank employees (bank officers) as representative of different public as well as private sector banks of eastern region of India.

For this study among the public sector banks viz. The State Bank of India (SBI), United Bank of India (UBI), The Industrial Development Bank of India (IDBI) and Oriental Bank of Commerce (OBC) were considered. Among the private sector banks, The Bank of Rajasthan Ltd (BOR), ICICI Bank, Federal Bank and AXIS Bank Ltd were considered (Details are given in Appendix C List C1). Altogether, 23 branch offices including regional offices of public sector bank and 28 branch offices including regional offices of private sector banks were included in this study. For this study 51 offices were contacted for data collection purpose (List has been presented in Appendix C, list C2).

A brief profile of the selected bank had been presented in table 4.1A (for public sector banks) and in table 4.1B (for private sector banks).
Table 4.1A: General Profile of the Selected Public Sector Banks (Nationalised Banks) in India (as on 2009)

<table>
<thead>
<tr>
<th>Types of Information</th>
<th>Name of The Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State Bank of India</td>
</tr>
<tr>
<td>Year of Establishment</td>
<td>1995</td>
</tr>
<tr>
<td>Place / Head Quarter</td>
<td>Mumbai</td>
</tr>
<tr>
<td>No. of Branches</td>
<td>10000</td>
</tr>
<tr>
<td>Total Business</td>
<td>$445 billion</td>
</tr>
<tr>
<td>No of Employees</td>
<td>200,299</td>
</tr>
</tbody>
</table>

Table 4.1B: General Profile of the Selected Private Sector Banks in India (as on 2009)

<table>
<thead>
<tr>
<th>Types of Information</th>
<th>Name of The Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Bank of Rajasthan</td>
</tr>
<tr>
<td>Year of Establishment</td>
<td>1943</td>
</tr>
<tr>
<td>Place / Head Quarter</td>
<td>Udaipur</td>
</tr>
<tr>
<td>No. of Branches</td>
<td>463</td>
</tr>
<tr>
<td>Total Business</td>
<td>Merged with ICICI bank</td>
</tr>
<tr>
<td>No of Employees</td>
<td>5000</td>
</tr>
</tbody>
</table>
b) Bank Employees:

With the help of Regional Centers of Banks, Training Institute of Banks, and other agencies, personal contact and external auditors of the banks the list of names of bank officers (along with their office telephone number and personal mobile numbers) were selected from Eastern Region of India. A total of 460 bank officers (240 from public sector and 220 from private sector banks) with equiproportionate number of junior and senior cadre, were selected randomly, by matching and controlling of sample characters (age, sex, qualifications, years of service, experience, technical training attendance etc).

The nature of officer wise distribution had been presented in table 4.2

<table>
<thead>
<tr>
<th>Variables</th>
<th>Name of The Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State Bank of India</td>
</tr>
<tr>
<td>No of Officers</td>
<td>152</td>
</tr>
<tr>
<td>Selected</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.2A: Bank Wise Distribution of the Sample of Officers as Selected from the Public Sector / Nationalized Banks.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Name of The Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Bank of Rajasthan</td>
</tr>
<tr>
<td>No of Officers</td>
<td>40</td>
</tr>
<tr>
<td>Selected</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.2B: Bank Wise Distribution of the Samples of Officers Population as Selected from the Private Sector Banks
Based upon this preliminary selected sample (N=460) respective group of officers, were approached, and purpose of the study was explained to them to collect data without affecting normal work schedule of the banks. On the basis of the willingness to act as a respondent in investigation a pool of 360 interested bank officers were selected and they were checked against the following inclusion and exclusion criteria.

i) **Inclusion Criteria:**
   a. Age range between 25 to 60 years.
   b. Experience as bank officer at present bank is not less than 2 years.
   c. Resident of Eastern Region of India.

ii) **Exclusion criteria:**
   a. Record of any dispute with bank
   b. History of any gap in service other than maternity or medical service.
   c. History of any chronic physical disorder.
   d. Records of any undisciplined behaviour.
   e. History of change of service in different organization other than bank.

Through a careful checking to verify the research assumption finally 300 bank officers were selected (on the basis of little background information) from the said banks for collection of data.

From the above matched stratified sample 100 bank officers (50 from public sector and 50 from private sector) were utilized for construction and adaptation of test and 200 samples (100 from each sectors including equiproportionate rate of junior and senior grades) were used for collection of data. The bank wise distribution of the selected sample for test validation and for collection of data have been shown in table 4.3A and table 4.3B for public and private sector bank respectively.
Table 4.3A: Bank Wise Distribution of the Officers Population for Test Validation and Collection of Data as Selected from the Public Sector / Nationalized Banks.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Name of The Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>State Bank of India</td>
</tr>
<tr>
<td>No of Officers Selected Preliminary</td>
<td>152</td>
</tr>
<tr>
<td>No of Officers Selected Finally</td>
<td>102</td>
</tr>
<tr>
<td>No of Officers Selected for Test Validation</td>
<td>34</td>
</tr>
<tr>
<td>No of Officers Selected for Collection of Data</td>
<td>68</td>
</tr>
</tbody>
</table>

Table 4.3B: Bank Wise Distribution of the Officers Population for Test Validation and Collection of Data as Selected from the Private Sector Banks.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Name of The Banks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The Bank of Rajasthan</td>
</tr>
<tr>
<td>No of Officers Selected Preliminary</td>
<td>40</td>
</tr>
<tr>
<td>No of Officers Selected Finally</td>
<td>40</td>
</tr>
<tr>
<td>No of Officers Selected Test Validation</td>
<td>13</td>
</tr>
<tr>
<td>No of Officers Selected for Collection of Data</td>
<td>27</td>
</tr>
</tbody>
</table>
The general characteristics and matching criteria of sample - age and span of service etc as assessed through responses of general background information has been presented in table 4.4. The matching criteria of the sample were tested by one way ANOVA and presented in result and interpretation (chapter Five, table 5.23)

Table 4.4: Indicating the General Characteristics and Matching Criteria of the Sample of Public Sector / Nationalized and Private Sector Banks (in terms of general background information).

<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Types of Information</th>
<th>Public Sector (Nationalised)</th>
<th>Private Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Age Range</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>25-29</td>
<td>30</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>30-34</td>
<td>20</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>35-39</td>
<td>17</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>40-44</td>
<td>13</td>
<td>05</td>
</tr>
<tr>
<td></td>
<td>45-49</td>
<td>10</td>
<td>06</td>
</tr>
<tr>
<td></td>
<td>50-54</td>
<td>06</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>55-59</td>
<td>04</td>
<td>06</td>
</tr>
<tr>
<td>2.</td>
<td>Position</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Probationary Officer</td>
<td>24</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Senior Officer</td>
<td>08</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Executive</td>
<td>04</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Assistant Manager</td>
<td>28</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Deputy Manager</td>
<td>16</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>Manager</td>
<td>14</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>Senior Manager</td>
<td>06</td>
<td>09</td>
</tr>
<tr>
<td>3.</td>
<td>Span of Service</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>2-5</td>
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</tr>
<tr>
<td></td>
<td>6-10</td>
<td>15</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>11-15</td>
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<td>14</td>
</tr>
<tr>
<td></td>
<td>16-20</td>
<td>09</td>
<td>04</td>
</tr>
<tr>
<td></td>
<td>21-25</td>
<td>08</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>26-30</td>
<td>03</td>
<td>07</td>
</tr>
<tr>
<td></td>
<td>31-35</td>
<td>04</td>
<td></td>
</tr>
<tr>
<td></td>
<td>36-40</td>
<td>03</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Qualification</td>
<td></td>
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<tr>
<td></td>
<td>Graduate</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Post Graduate</td>
<td>37</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>Graduate + Professional Degree</td>
<td>28</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Post Graduate + Professional Degree</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Ph D</td>
<td>04</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Gender</td>
<td></td>
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<tr>
<td></td>
<td>Male</td>
<td>62</td>
<td>65</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>48</td>
<td>45</td>
</tr>
</tbody>
</table>
4.5 Procedure:

The study was cross sectional and carried out in two phases:

a. Pilot study
b. Main study for hypothesis testing.

a. Pilot Study:

Before the full scale study, pilot study was conducted on a group of 100 bank officers -

i) To finally formulate and standardize the contents of General Information Schedule Scale, Inventory for Learning Organization Profile, Team Cohesiveness Scale, Organizational Climate Scale, Innovative Work Behaviour Scale, Learning Behaviour Styles Inventory, Organizational Commitment Scale, and

ii) To get a prior understanding of the probable problems that may be encountered during full scale survey.

b. Data Collection for Final Study:

Finally, the data were collected from each sample by the investigator at the respective banks. First of all rapports were established with the subjects and proper instructions were given to them to administer the prescribed tools by following a programme schedule as prepared in consultation with them. The work was done with each sample through separate test sessions.

First Session:

To know the required profile of the subject General Information Schedule Scale was administered carefully, keeping in mind the variation of the sentiment of the respondents. When rapport was established with the respondents then Learning Organization Profile Scale (locally adopted by the present investigator) was administered to assess the perception of the respondent about the nature and dimension of the learning organization for their bank. These data were expected to bear sufficient merit through proper interpretation to understand the variation of learning organization dimension of banks as presented in hypotheses.
Second Session:
To unearth the nature and distribution of organizational variables (Organizational Climate and Team Cohesiveness) of the banks as perceived by the respective bank officers, Team Cohesiveness and Organizational Climate Scale were administered. The data were expected to bear sufficient merit for verification of the relevant hypotheses stated in chapter Three.

Third Session:
Innovative Work Behaviour Scale, Organizational Commitment (OCOM) Scale and Learning Behaviour Styles Inventory (LBSI) were administered on the bank officers (public and private sector) to identify the nature and characteristics of personal variables (innovative work behaviour, organizational commitment and learning behaviour styles) of the bank officers of public and private sector banks. The data obtained from the scales were expected to bear sufficient merit, helpful for verification of relevant hypotheses stated earlier in chapter Three.

The subjects were instructed to fill up the questionnaire as per the prescribed instructions. No time limit was enforced but requested with them to do as early as possible. And special care was asked to be taken so that they fill in each item, without omitting any. The data as collected from each subjects was scored and tabulated for further statistical treatment for verification of the hypotheses.

4.6 Statistical Treatment with the Data:
a. Treatment of Learning Organization Profile Scale Responses (chapter – Five, 5.2 A, Table 5.24 – Table 5.33)
The responses collected by the Learning Organizational Profile Scale were converted into scores. The summated rating scores of the item scores were grouped according to the area of different component criteria and composite criterion. The effectiveness and influences of a component variable was assessed from the mean value, and each of the 'mean value' was further treated as ascertaining their respective statistical independence after factorial design. In
order to study the nature and dimension of the learning organization profile in banks (public and private), the central tendency (mean, median) and the dispersion of the scores (standard deviation, skewness and kurtosis) were computed. Later to test the sample characteristics and normality of learning organization scores, chi square was calculated (Appendix E, Table E1)

After testing, the distribution pattern of learning organization profile scores were then set properly according to the separate sample groups (Table 5.25 – 5.28) for application of 't' test (as described under Result and Interpretation Table 5.29 and fig 5.1), for verification of the hypothesis H1.

b. Treatment of Organizational Variables (Organizational Climate and Team Cohesiveness) (Chapter – Five, 5.4 B)

In order to compare the differences between two sample groups, the responses on organizational scale scores of the bank officers were initially divided into two groups with perception of high and low level of learning organization profiles in terms of the median values of scores of learning organization, of informant bank officers.

Such two sets of data were then processed for two way – ANOVA in terms of sources of variation due to two independent variables – perception of learning organization profile (high and low) and types of banks (public and private) as well as their interaction effects. In order to treat the sources of variation due to types of banks (public and private) the responses were initially divided into two groups of bank officers in terms of the median values of learning organization profile scores in both sectors. Hence there were four sets of responses (2 levels of learning organization profile X 2 types of banking sectors). Latter, for each sector of banks, in order to maintain the homogeneity in the sample size, as well as their representative characteristics, 45 informant bank officers were considered for each sample group (high and low perceived learning organization profile). Hence there were altogether responses of 180 informant bank officers (4 sample groups X 45 bank officers) were utilized for two way analysis of variance (as described under Result and Interpretation Table 5.34 and 5.35), for verification of the hypotheses H2 and H3.
c. Treatment of Personal Variables (Innovative Work Behaviour, Organizational Commitment and Learning Behaviour Styles) (Chapter – Five, 5.4 C)

In order to compare the differences between two sample groups, the responses on organizational scale scores of the bank officers were initially divided into two groups with perception of high and low learning organization profiles in terms of the median values of scores of learning organization, of informant bank officers. Such two sets of data were then processed for two way – ANOVA in terms of sources of variation due to two independent variables – perception of learning organization profile (high and low) and sectors of banks (public and private) as well as their interaction effects. In order to treat the sources of variation due to sectors of banks (public and private) the responses were initially divided into two groups of bank officers in terms of the median values of learning organization profile scores in both sectors. Hence there were four sets of responses (2 levels of learning organization profile X 2 types of banking sectors). Latter, for each sector of banks, in order to maintain the homogeneity in the sample size, as well as their representative characteristics, 45 informant bank officers were considered for each sample group (high and low perceived learning organization profile). Hence there were altogether responses of 180 informant bank officers (4 sample groups X 45 bank officers) were utilized for two way analysis of variance (as described under Result and Interpretation Table 5.37 - 5.39), for verification of the hypotheses H₄, H₅ and H₆.

d. Relationship Among Independent Variables - Organizational Variables (Team Cohesiveness And Organizational Climate), Personal Variables (Innovative Work Behaviour, Organizational Commitment And Learning Behaviour Styles) And Dependent Variable (Learning Organization Profile) (Chapter – Five, 5.4 D)

To find out similarities and differences in association of independent variables with the profile of intercorrelation matrix for six measured variables (Learning Organization Profile, Organizational Climate, Team Cohesiveness, Innovative Work Behaviour, Organizational Commitment and Learning Behaviour
Styles) were prepared and depicted in table 5.41 to indicate the intercorrelation among the six variables.

The profile of intercorrelation matrix for six measured variables (Learning Organization Profile, Organizational Climate, Team Cohesiveness, Innovative Work Behaviour, Organizational Commitment and Learning Behaviour Styles) were also prepared for level of perception of learning organization profile (high and low) and depicted in table 5.42, 5.43 respectively to indicate the similarities and differences of intercorrelation among the six variables due to variation of level of Learning Organization Profile.

In order to verify the significance differences of correlation between sets of tests scores of Learning Organization Profile (High and Low) and organizational variables (Organizational Climate and Team Cohesiveness) and personal variables (Innovative Work Behaviour, Organizational Commitment and Learning Behaviour Styles) of the informant bank officers (N=200) statistical test of correlation (r) as well as significance differences of r's were computed and depicted through following tables (table 5.44 and 5.45) for verification of hypothesis H7.

e. Facilitating Components of Organizational and Personal Variables on Learning Organization Profile (Chapter – Five, 5.4 E)

On the basis of the correlation results of section 5.2D, the level of facilitating effects of the significant correlated Organizational (Appraisal & Recognition of Organizational Climate, Overall Team Cohesiveness and its components Supportive Leadership Styles and Accountability) and Personal Variables (Compliance of Organizational Commitment and Competitive Learning Styles of Learning Behaviour Styles) on Learning Organization Profile were determined by regression analysis, (Section 5.2 Ei, Table 5.47 – Table 5.49).

In accordance with the above methodology the findings were treated for interpretation and included in subsequent Chapter – Five.