CHAPTER-III
RESEARCH METHODOLOGY

The performance of any organisation depends upon the capacity and contribution of its special class of employees called knowledge workers, whose effective utilization can result in better performance in almost all the functional areas (Drucker, 1998). The effective performance of the knowledge workers depends much upon how their potential is being nurtured by the organisation. It is the human resource development policy that is considered to be the major contributory factor to produce positive outcome for key stakeholders. According to Locke K (2001) HR values of the company includes concern for people, integrity, customer orientation, team work, continuous improvement and execution excellence that implies the role of HRD in value addition to the entire company’s productivity through people centred approach.

3.1 DEFINING THE RESEARCH PROBLEM
Human Resource Development- Its Impact on the Performance of Knowledge Workers

3.2 SCOPE OF STUDY
The present study is confined to Human Resource Development, a sub-domain of Human Resource Management. In the context of the present thesis, the construct of HRD has been elaborated from the stand point of various Human Resource Development dimensions/variables such as Training & Development, Performance Appraisal & Management, Career Planning and Rewards & Recognition. Within the domain of study, the variables identified in the study has tried to include all the items based on theoretical conceptualizations offered in the literature and prior work done in this field.

1. The present study has been conducted in Chandigarh, Panchkula and Mohali, popularly known as Tri-city, are physically integrated with each other. This conglomerate of Tri-city represents the Union Territory of Punjab and Haryana. Tri-city has adequate representation of banks’ branches that rationalise the selection of this operational area for the purpose of investigative
study. Moreover, the Zonal/Regional centres of the selected banks are also situated in Tri-city that justifies the representation of various levels of management in the sample. Furthermore, the training centres of these banks are located in Tri-city that helped in securing the requisite data and thereby rationalizing the selection of this operational area of study. Proximity factor is also one but not the prime reason for selecting this area of study.

2. The research has been carried out to study the HRD practices in the four banks, two in public sector and two in private sector, to present comprehensive and comparative analysis of HRD practices. The selected banks are:
   A) State Bank of India
   B) Punjab National Bank
   C) ICICI Bank
   D) HDFC Bank

3.3 SELECTION OF BANKS

The study is an attempt to evaluate the HRD practices in the selected public and private sector banks in the Tri-city and has focussed on the various components of Human Resource Development. A sample of four banks, two from public sector and two from private sector, was selected on the basis of survey report of “Ace Equity” and these banks have been found to be the top performing banks in their respective sectors i.e., Private and Public sectors. The researcher aimed to assess the contribution of HRD towards the excellent performance of these banks in the banking sector so that their correlation with the HRD system may become role model for the other banks. The selected banks are:
   1. State Bank of India
   2. Punjab National Bank
   3. ICICI Bank
   4. HDFC Bank
Table 3.1

Basis of Selection of Banks

<table>
<thead>
<tr>
<th>Public Bank</th>
<th>Total Assets (Rs. Cr.)</th>
<th>Total Deposits (Rs. Cr.)</th>
<th>Total Advances (Rs. Cr.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Bank of India</td>
<td>1223736</td>
<td>933933</td>
<td>756719</td>
</tr>
<tr>
<td>Punjab National Bank</td>
<td>378325</td>
<td>312899</td>
<td>242107</td>
</tr>
<tr>
<td>Bank of Baroda</td>
<td>358397</td>
<td>305439</td>
<td>228676</td>
</tr>
<tr>
<td>Canara Bank</td>
<td>336079</td>
<td>293973</td>
<td>212467</td>
</tr>
<tr>
<td>Bank of India</td>
<td>351173</td>
<td>298886</td>
<td>213096</td>
</tr>
<tr>
<td>Private Bank</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HDFC Bank</td>
<td>277353</td>
<td>208586</td>
<td>159983</td>
</tr>
<tr>
<td>ICICI Bank</td>
<td>406234</td>
<td>225602</td>
<td>216366</td>
</tr>
<tr>
<td>Axis Bank</td>
<td>242713</td>
<td>189238</td>
<td>142408</td>
</tr>
<tr>
<td>Kotak Mahindra Bank</td>
<td>50851</td>
<td>29261</td>
<td>29329</td>
</tr>
<tr>
<td>Federal Bank</td>
<td>51456</td>
<td>43015</td>
<td>31953</td>
</tr>
</tbody>
</table>

Source: Ace Equity, 2011

3.4 FORMULATION OF FRAMEWORK

The purpose of the study was to evaluate the impact of Human Resource Development practices of the banks on the performance of knowledge workers. So, in the study, two key variables were identified to be explored i.e. Human Resource Development Practices and Employees’ Performance.

A) Human Resource Development Practices:

According to Prof. T.V. Rao, the best known Indian HRD expert, the various key functions of Human Resource Development are Performance appraisal, Potential Appraisal, Career Planning, Training and Development, Organization Development, Rewards, Recognition and Employee Welfare. But the study has limited itself to those Human Resource Development practices that help in accentuating the performance of the employees. These practices were identified from the factors that enhance the performance of the employees in the organisation. The factors identified by the researcher were three concomitants of job performance, based on Blumberg and
Pringle’s Performance Model, 1982. The factors are: Capacity, Opportunity and Willingness. For formulation of research framework, the researcher has also integrated another model with this model which is developed by Ivancevich, 2002. According to Ivancevich, feedback and rewards are important ingredients of willingness.

**Identifying HRD Dimensions:**

![Diagram](image)

**Figure 3.1: Theoretical Framework for Identifying HRD Dimensions**

Source: Kreitner & Kinicki (2001); and Ivancevich & Lee (2002) (modified)

So, according to the model *(Blumberg and Pringle’s Performance Model, 1982)* factors affecting the job performances are: capacity to perform, opportunity to perform and willingness to perform, where Feedback and Reward system are considered to be the important ingredients of willingness (Ivancevich, 2002) linking the job performance cycle. The above factors affecting the performance were used to identify the progressive HRD practices (practices affecting the skills, willingness and opportunities) in the framework model developed by the researcher. The HRD practices identified were: Training & Development; Performance Appraisal & Management; Career Development; and Rewards & Recognition. According to the framework, the capacity of the person can be accentuated through learning and development focused cycle with the help of organisational training that helps in boosting up the employees’ knowledge, skill and ability. The provision of rightful opportunity in the work system is provided through Performance Appraisal and
Management that helps in: (a) placing the right man at the right place on the basis of their strengths and weaknesses identified in appraisal, (b) providing the opportunities for development in the workplace and driving their performance. In all this process, support of the supervisors is imperative for providing the necessary support to the employees at workplace. Once the person has put in the required efforts and performed, then the organisation needs to acknowledge and rightfully reward the performance achievement. The constructive Feedback and effective Reward system would help in motivating the individual to put in more voluntary efforts. The intrinsic and extrinsic motivation will influence the willingness of the individual by acknowledging and rewarding (financial and non-financial rewards) their performance. All the three components themselves are believed to work multiplicatively. Hence innovative human resource practices are expected to contribute to improved economic performance only when three conditions are met: when employees possess knowledge and skills that they lack; when employees are given a chance to actually contribute such discretionary effort; and when employees are motivated to apply this skill and knowledge through discretionary effort at the workplace (MacDuffie, 1995; Harel and Tzafrir, 1996). Thus, performance in the banking industry depends upon specialised knowledge of the individuals that can be viewed as resulting from the interrelationship among abilities, opportunities and efforts.

B) Performance

In the present study, the variable performance has been investigated from the standpoint of employees’ level of satisfaction on the job. The study by Nishii et al (2008) has also provided support for the potential role of attitudes as a mediator in the HPWS (High Performance Work System) and Performance relationship. Countless research studies have investigated the factors affecting the performance of the organization where employees’ job satisfaction is found to be the most essential ingredient of the productive organisational set up (Wang, He, and Zeng, 2001; Nishi et al., 2008). Job satisfaction, that has been used to measure the job performance in the study, is a powerful indicator of job performance and that has already been sufficiently proved in theoretical conceptualisation in the literature reviewed by the researcher. Since the study is dealing with the consequences of human resource practices on employee level outcomes, the study of behaviour along with attitude became equally
important. The study of behaviour has assumed significance as it emanates from the performer and transforms performance from abstraction to action (Armstrong, 2000). Behaviour is not just the instrument for results, but also the outcome in its own right—the product of mental and physical efforts applied to task and can be judged apart from the result (Brumback on performance in Armstrong, 2000). William (1998) has also related the concept of performance with behaviour. He has divided the concept of performance into two main perspectives i.e., Behaviour oriented performance and Output oriented performance. Output oriented performance is differentiated from behaviour oriented performance as it can be contaminated by the system’s factors (Campbel, 1990). Accordingly in the present study, to assess the performance, the questionnaire on HRD includes some questions covering employee’s behavioural reactions of HRD in the banks.

Moreover, the organizational performance does not stem directly from the HR practices but rather from the human efforts that result from using these human resource practices due to change effected in their skills, behaviour and motivations (Barney and Wright, 1998; Delery, 1998; Wright et al., 1994; Dyers and Reeves, 1995; Becker and Huselid, 1998). So, HR practices need to be employee-pro to motivate positive employee behaviour, thereby resulting in better employee performance. This makes it imperative to study the effectiveness of HRD practices as the employee performance is influenced by the way HRD system is implemented in the organisation (Nishii & Wright, 2008).

**Determination of Performance in the study**

Performance in the study has been evaluated as follow:

a) Performance supporting HRD dimensions have been identified from the factors affecting the performance, whose effectiveness will be empirically evaluated in the study.

b) The dependent variable Performance has been investigated from the standpoint of employees’ level of satisfaction on the job as it is found to be the most essential ingredient of employees’ productivity in various studies. Therefore, for measuring the employees’ performance, job satisfaction has been used as it has a performance Index.
c) Behaviours leading to attainment of organisational goals have also been observed by collecting perceptual data on the employees’ behavioural reactions to HRD.

The theoretical framework above contains a combination of some of the important contemporary articles and studies on the subject of HRD.

### 3.5 OBJECTIVES OF THE STUDY

The objectives proposed of the study are:

1. To study the Present HRD Policies of selected Public and Private Sector Banks.
2. To study the HRD Practices of selected Public and Private Sector Banks.
3. To examine the Satisfaction of knowledge workers with regard to HRD Practices of selected Public and Private Sector Banks.
4. To study the Impact of HRD practices on Job Satisfaction of knowledge workers in selected Public and Private Sector Banks.
5. To identify the important factors which are most helpful to uplift the Job Satisfaction of knowledge workers.
6. To provide suitable suggestions with regard to HRD Practices in the selected Public and Private Sector Banks.

### 3.6 HYPOTHESES FORMULATION

The eight hypotheses have been formulated after extensive literature review to satisfy the objectives of the study. The first hypothesis was generated to find out the difference in HRD Practices in public and private sector banks. The second hypothesis was formulated to know and compare the job satisfaction level of employees in the selected public and private sector banks. The hypotheses 2, 3, 4, 5, 6 and 7 have been formulated to elucidate the third objective of the study. To illustrate the fourth and fifth objective, eighth hypothesis has been formulated. Therefore, to test the validity and applicability of the objectives of the study and to gain an insight into the banking sector, the following hypotheses have been developed:
**H1:** Significant differences exist in the perception of public and private sector banks’ knowledge workers regarding the effectiveness of HRD Practices.

**H2:** Private sector banks knowledge workers will be higher on the level of Job Satisfaction than the public sector banks knowledge workers.

**H3:** Training and Development Practice of the banks will have a significant and positive relation with Job Satisfaction of knowledge workers.

**H4:** Performance Appraisal and Management Practice of the banks will have a significant and positive relation with Job Satisfaction of knowledge workers.

**H5:** Career Planning Practice of the banks will have a significant and positive relation with Job Satisfaction of knowledge workers.

**H6:** Rewards and Recognition Practice of the banks will have a significant and positive relation with Job Satisfaction of knowledge workers.

**H7:** Private sector knowledge workers will be more satisfied with regard to HRD Practices of their banks than that of public sector knowledge workers.

**H8:** All the HRD Practices will have a significant impact on the Job Satisfaction of knowledge workers.

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**Figure 3.2:** Hypotheses Formulation
Objectives and Related Hypotheses of the Study are as follows:

(1) To study the Present HRD Policies of Selected Public and Private Sector Banks.
(2) To study the HRD Practices of Selected Public and Private Sector Banks.
    H1: There is a significant difference in the perception of public and private sector banks’ knowledge workers regarding the effectiveness of HRD Practices.
(3) To examine the Satisfaction of knowledge workers with regard to HRD Practices of the selected Public and Private Sector Banks.
    H2: Private sector knowledge workers will be higher on the level of Job Satisfaction than that of public sector knowledge workers.
    H3: Training and Development Practice of the banks will have a significant and positive relation with Job Satisfaction of knowledge workers.
    H4: Performance Appraisal and Management Practice of the banks will have a significant and positive relation with Job Satisfaction of knowledge workers.
    H5: Career Planning Practice of the banks will have a significant and positive relation with Job Satisfaction of knowledge workers.
    H6: Rewards and Recognition Practice of the banks will have a significant and positive relation with Job Satisfaction of knowledge workers.
    H7: Private sector knowledge workers will be more satisfied with regard to HRD Practices of their banks than public sector knowledge workers.
(4) To study the Impact of HRD practices on Job Satisfaction of knowledge workers in the Selected Public and Private Sector Banks.
    H8: There is a significant impact of all the HRD Practices on the Job Satisfaction of knowledge workers.
(5) To identify the important factors which are most helpful to uplift the Job Satisfaction of knowledge workers.
(6) To provide the suitable suggestions with regard to HRD Practices in the selected Public and Private Sector Banks.
3.7 DATA COLLECTION AND RESPONSE RATE

Questionnaires were administered to staff using Quota sampling and Purposive sampling. This enabled the researcher to sample the views of knowledge workers working in the different banking sectors. All the knowledge workers in the branches of the selected banks represented the total population size. According to quota sampling, the sample size covered 20% of the target population in public sector banks and 20% in private sector banks (thus making it a sample of 300 i.e., 150 from each sector, out of the total population of 745 in private sector banks and 755 in public sector banks). Thus a total sample of 300 knowledge workers was selected on the basis of twenty percent of population size of the study (Saunder et al, 2003). Purposive Convenience Sampling was used to select cases that enabled researcher to answer research questions, to meet the objectives and to capture different levels, without sampling at random. Purposive convenience sampling involved choosing people (Department-wise/Cadre-wise) whose reviews were relevant to the issue being looked at based on the convenience of the researcher.

**Table-3.2**

<table>
<thead>
<tr>
<th>S. No.</th>
<th>Selected Banks</th>
<th>Total population (Sector wise approx)</th>
<th>Sample Size (20% approx)</th>
<th>Non Response</th>
<th>Invalid Responses</th>
<th>Valid Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Private Sector Banks</td>
<td>750</td>
<td>150</td>
<td>5</td>
<td>4</td>
<td>141</td>
</tr>
<tr>
<td>2.</td>
<td>Public Sector Banks</td>
<td>755</td>
<td>150</td>
<td>7</td>
<td>16</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>1505</td>
<td>300</td>
<td>12</td>
<td>20</td>
<td>268</td>
</tr>
</tbody>
</table>

The above table indicates that a total of 300 questionnaires were distributed to respondents, personally as well as by post. Among the 300 questionnaires that have been distributed to employees, 288 returned their questionnaire (12 non-responses). The data of 20 employees had to be excluded due to invalid or missing responses, leaving the information from 268 employees. So a total of 268
valid responses were obtained which led to the response rate of 89.33%. The opinions were solicited from the 268 managerial staff from among the employees in public and private sector banks.

3.8 CHARACTERISTICS OF KNOWLEDGE WORKERS
The defining characteristic of the knowledge workers (respondents) in the context of the study was taken to be the level of their formal education, their training experience and job experience. For addressing the employability skills required for the job success, the level of their formal education assumed significance which ought to be at least a graduate degree. For expertise in a particular area, the job experience and training experience of the employees were taken into consideration as expertise or knowledge base can be developed only after the employee has availed some kind of training and experience in the area of his specialisation and uses that knowledge at the workplace. For this, knowledge workers having more than one year job experience and who have attended at least one training program were selected. It was assumed that the above mentioned features of knowledge workers would enable them to perform in the networks rather than placing them in strict hierarchies, which was the central concern of the study (Drucker, Collins, Kotler, Kouzes, Rodin, Rangan, and Hesselbein, 2008).

3.9 STUDY OF OPERATIONAL HIERARCHY IN PUBLIC AND PRIVATE SECTOR BANKS
The managerial staff in the banks is divided into three hierarchical levels: Senior management level, Middle management level and Junior management level. The data were collected from these banks through questionnaire administration which was completed by a lower, middle and middle higher level of managers (senior level). The levels in public and private sector banks differ substantially in their meaning and interpretation of the role. In order to have better understanding of the various levels of management and the nature of various managerial roles, structural arrangements have been outlined as below:
3.9.1 Operational Hierarchy in Public Sector Banks:

According to operational hierarchy of the bank, the employees of SBI and PNB working under various levels have been placed into 7 scales from scale I to scale VII defined as:

- **Junior Management Grade Scale I (JMGS-I):** Encompasses Deputy Managers/Officers in PNB and Officers/clerks in SBI
- **Middle Management Grade Scale II (MMGS II):** Encompasses Managers PNB and Assistant Managers in SBI
- **Middle Management Grade Scale III (MMGS III):** Encompasses Senior Managers in PNB and Managers in SBI
- **Senior Management Grade Scale IV (SMGS IV):** Encompasses Chief Managers
- **Senior Management Grade Scale V (SMGS V):** Encompasses Assistant General Manager (AGM)
- **Top Management Grade Scale VI:** Encompasses Deputy General Manager (DGM)
- **Top Management Grade Scale VII:** Encompasses General Manager and Chief General Manager, Deputy Managing Director, Director and then Chairman.

3.9.2 Operational Hierarchy in Private Sector Banks:

According to operational hierarchy of the bank, the employees of ICICI and HDFC working under various levels have been placed as under:

- Junior Management Level encompasses Officers and Senior Officers
- Middle Management Level encompasses Assistant Managers I, Assistant Managers II, Managers I and Managers II
- Senior Management encompasses Branch Heads (Assistant Vice President), Band D1 and Band D2, Regional Heads, Zonal Heads, Cluster Heads and Circle Heads
- Top Level encompasses Vice President, Board of Directors and Chairman
Sub staff and employees having less than 1 year job experience have been excluded from the study as the ambit of our study is limited to knowledge workers who on the basis of their knowledge and skills affects the decision in a particular area. And for the purpose of the study, Junior Management is taken as Officers and Senior Officers in private banks and Deputy Managers and Officers in public banks; Middle Management is taken as Managers, Assistant Managers, Senior Managers in public and private sector banks; and Senior Management is taken as Branch Heads (Big branch), Cluster Heads, Regional Heads, Circle Heads, Chief Managers and Assistant General Managers. The levels in public and private sector banks differ substantially in their meaning and interpretation of role.

Table 3.3

<table>
<thead>
<tr>
<th>Designation</th>
<th>Private Banks (%)</th>
<th>Public Banks (%)</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior</td>
<td>40(28.37)</td>
<td>47(37)</td>
<td>87</td>
</tr>
<tr>
<td>Middle</td>
<td>95(67.38)</td>
<td>62(48.83)</td>
<td>157</td>
</tr>
<tr>
<td>Senior</td>
<td>6(4.25)</td>
<td>18(14.17)</td>
<td>24</td>
</tr>
<tr>
<td>Total</td>
<td>141(100)</td>
<td>127(100)</td>
<td>268</td>
</tr>
</tbody>
</table>

The above table 3.3 shows the level of the respondents in the operational hierarchy in private and public sector banks.

3.10 SOURCES OF DATA

To carry out the research, both primary and secondary data have been used. The researcher has relied on questionnaire method for collection of primary data concerning the HRD practices of the banks and factors affecting the Job satisfaction level. The questionnaires were administered personally face to face, either for immediate completion or for return later on. In order to elicit maximum response, repeated reminders were sent to those who had not replied. The validity of the data was further enhanced by collecting secondary data that comprised the collation of
formalised documentation from senior managers to authenticate the existence of HRD practices.

3.10.1 Primary Data

The self developed questionnaire was used to collect the perceptual data on the various selected dimensions of HRD. Although constructing a questionnaire seems to be quite simple, yet it is a complex and taxing process. The aim of the researcher was kept in mind while deciding the content of the information to be sought in the questionnaire. Keeping in mind previous decisions regarding the research objectives, the nature of the research design, the source of data, the target population, the sampling plan, the communication method, the measurement techniques and data processing and analysis plan (Kinnear and Taylor 1996), first four parts of the questionnaire related to HRD were self designed by the researcher. The necessary steps were taken as to: developing the questions in the questionnaire (content, wording and layout, structure and format), pretesting and revising, and checking the reliability and validity (adapted from: Churchill, 1979; Zikmund; William, 1997; Frazer and Lawley, 2000; Kinnear and Taylor, 1996).

3.10.1.1 Design of Questionnaire

The self developed questionnaire was used to collect the information regarding range of practices that different banks have adopted, having in its ambit Training & Development, Appraisal & Performance Management, Career Planning and Rewards & Recognition. Questionnaire started with the information relating to demographic profile of the respondents i.e., Age, Experience, Qualification, Gender, Level of Management.

To assess the effectiveness of HRD practices in banks and to measure the Job Satisfaction level, questionnaire was classified into five parts. The first, second, third and fourth part of the questionnaire comprised the four HRD Practices. Part I was related to Training & Development and 21 measurement items have been framed in this section; Part II was related to Appraisal & Performance Management and 12 measurement items have been selected in this section; Part III focused on Career Planning and 6 measurement items have been framed in this section; Part IV focused on Rewards & Recognition practice and 5 measurement items have been framed in this
and Part V was devoted to the statements which were considered relevant for getting the desired information related to Job Satisfaction of respondents and twenty measurement items of Job satisfaction were selected (Appendix 1).

The following Questionnaires were used for the present investigation:

**A Self Developed Structured Tool on Various Selected HRD Dimensions**

The self developed structured tool was used to assess the perception of employees in relation to Training & Development practice, Performance Appraisal & Management practice, Career Planning practice and Rewards & Recognition practice of their bank. Questionnaire consisted of four sections and the items were rated on a five point Likert scale. The five point Likert Summated Scale had options which ranged from 5 to 1 i.e., strongly agree (5), agree (4), Neutral (3), disagree (2), strongly disagree (1). Numerical values varying from 1 to 5 were linked to the scale codes. The HRD variables and their dimensions examined in the study were:

![Diagram of HRD dimensions](image)

**Figure 3.3: Indicators/Elements Used to Measure HRD Dimensions**
The researcher has measured the employees’ performance through their job satisfaction level but at the same time behaviours leading to attainment of organisational goals have also been observed (William, 1998; Campbell 1991; Model of Opatha, 2002; Brumback). So, the researcher has incorporated questions covering behavioural reactions to HRD and affecting performance in the HRD scale. The study has adapted some questions from standardized scales also (Udayakumar, 2003; Gallup Q12 questionnaire of employee Engagement and Job Performance; Model of Opatha, 2002; Hanna, 2012; Rodwell, Kienzle, and Shadur, 1998; Adekola, 2011), covering its various dimensions and aspects. The perceptual indicators of employees’ performance used in the ‘Opatha Model’ have also been used to study the behavioural aspect of employees (Appendix 3). Those indicators are- Trait, Behaviour and Results.

**TABLE: 3.4**

Dimensions and Aspects of Job Performance (Opatha, 2002)

<table>
<thead>
<tr>
<th>S. No</th>
<th>Dimension</th>
<th>Aspects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TRAIT</td>
<td>• Job knowledge</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Cooperation</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Dependability</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Interpersonal relations</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Communication skills</td>
</tr>
<tr>
<td>2</td>
<td>BEHAVIOUR</td>
<td>• Planning work</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Organizing work</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Punctuality</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Attendance</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Speed</td>
</tr>
<tr>
<td>3</td>
<td>RESULTS</td>
<td>• Efficiency achievements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Completion of work on schedule</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Quality of work</td>
</tr>
</tbody>
</table>

- Indicators/ elements used to measure Performance dimensions
The questions have attempted to know if the investments in training programs produced the positive employee behaviour. Researcher also attempted to seek information regarding the focus of training—Is it job skills or/and soft skills (soft skill covering Personality domain as cooperation, dependability, interpersonal relations with superiors, subordinate and peers, communication skills). Their behavioural reactions were assessed in terms of their presence on the job, their regularity, effect on interpersonal relations etc. Performance results were assessed by their responses to the questions on quality, quantity and target completion in time. The scoring has been obtained on a five-point scale, the possible range of which is 13 to 65 (Appendix 3). Therefore, the specific behaviours an employee displays as a result of perceived HRD practices can prove to be a win-win situation for organisation if the behaviour of the employees is more forthright and outcome more focussed.

B    Job Satisfaction Scale (B.L. Dubey, C.K. Maini, K.K. Uppal)

The standardised Job Satisfaction Questionnaire cum Scale developed by B.L. Dubey, C. K. Maini and K. K. Uppal has been used in the study. It consists of 20 statements pertaining to different factors affecting the job satisfaction of knowledge workers (Refer Appendix 1). Employees rated their level of satisfaction from the following features:- Promotion, salary, confidence in management, favouritism, supervision, working conditions, job security, suitability of job, qualification and experience, satisfactory relations, learning opportunities, team spirit, welfare facilities and advancement in job. The scoring has been obtained on a five-point scale, the possible range of which is 20 to 100. Higher score indicates greater job satisfaction. On the basis of calculated mean and standard deviation, executives have been divided into three categories:

<table>
<thead>
<tr>
<th>Category</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Highly Satisfied (with the Job)</td>
<td>More than 79.4</td>
</tr>
<tr>
<td>2. Moderately Satisfied</td>
<td>55.3 to 79.4</td>
</tr>
<tr>
<td>3. Less Satisfied</td>
<td>Less than 55.3</td>
</tr>
</tbody>
</table>

To show the degree of agreement the items in the questionnaire were rated on five-point Likert Scale, where 5 = strongly agree, 4 = agree, 3 = neutral, 2 = disagree and 1 = strongly disagree.
The average of employees’ job satisfaction was used for each company and these averages were used to predict the company’s performance.

3.11.2 Secondary Data

Comprehensive review of the existing literature was undertaken to find out the gaps in the literature. Information from books, periodicals, journals, magazines, reports of the banks and RBI statistical tables was referred to obtain the factual information pertaining to selected banks. The data and information related to banks were collected from published Training material of the banks, published literature and unstructured interviews with HR managers and practicing Managers, and tours of the work place.

3.11 RELIABILITY AND VALIDITY ANALYSIS

Reliability:- Joppe (2000) defines reliability as the extent to which results are consistent over time and an accurate representation of the total population under study is referred to as reliability and if the results of a study can be reproduced under a similar methodology, then the research instrument is considered to be reliable (p. 1). Embodied in this citation is the idea of replicability or repeatability of results or observations.

Following the recommendation of Churchill, Ford and Walker (1974), “Goodness of Fit” of data, the internal consistency of the scale items was assessed by calculating the coefficient alpha for the overall scale.

Table: 3.5 Reliability Coefficients

<table>
<thead>
<tr>
<th>Items</th>
<th>Training and Development</th>
<th>Performance Appraisal &amp; Management</th>
<th>Career Planning</th>
<th>Rewards and Recognition</th>
<th>Job satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cronbach’ s Alpha</td>
<td>.873</td>
<td>.700</td>
<td>.798</td>
<td>.747</td>
<td>.785</td>
</tr>
<tr>
<td>No of Items</td>
<td>20</td>
<td>12</td>
<td>6</td>
<td>5</td>
<td>20</td>
</tr>
</tbody>
</table>
The above values of reliability test in the table indicated the adequacy and internal consistency among the construct. The reliability test proved that variables in the model were fit to measure the influence of HRD variables on the satisfaction of the knowledge workers.

Validity:- Joppe (2000) provides the following explanation of what validity is in quantitative research. According to Joppe, validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are. In other words, does the research instrument allow you to hit "the bull’s eye" of your research object? Researchers generally determine validity by asking a series of questions, and will often look for the answers in the research of others. (p. 1). So validity refers to the accuracy of measurements of a concept. The difficulty in assessing validity is that the true value is usually unknown. Therefore, absolute validity cannot be measured due to the abstract nature of concepts, although the indicators used to measure them are concrete (Neuman 1994; Stevens et al. 2000).

Validity in Detail
Content Analysis: Content or face validity is the degree to which the content of a questionnaire provides adequate coverage of what it intends to measure under the topic of the study and researchers’ subjective assessments of the presentation as to whether the elements in the instrument appear to be fairly represented, addressed in breadth and depth, reasonable, unambiguous and clear (Cohen, Manion and Morrison 2008; Haynes and Stephen, 2000; Richard and David, 1993; Kubany, 1995). The study can use subjective judgment for evaluation of content validity. However, in order to strengthen content validity, several procedures are recommended by Kinnear and Taylor, 1996. Firstly, prior literature can be reviewed to identify the possible dimensions. Secondly, having experts in the field of study could be asked to rate the suitability of the measuring instrument for its intended use and give suggestions for amendments to the questions in the questionnaire. With multiple judges rating, the researcher can make use of experts judgement in the field of the research to rate each item in the instrument in terms of its match or relevance to the content (Rubio, BergWeger, Tebb, Lee & Rauch, 2003). Finally, the researcher can modify the measurements based on feedback received from all groups by test and retest method (Cooper & Schindler (2001), Davis & Cosenza 1993).
(I) **Content-validity judgment in study**

Content validity was assessed by four experts in the field of Psychology, Human Resource Management and HR experts in the Industry. These experts were asked to rate each of the 100 items as ‘representative’ or ‘not representative’ of the Human resource development (Churchill, 1979). Their advice was also sought in respect of the dimension not included in the item pool, and to evaluate the items for clarity and conciseness. Only those items were retained which were marked representative (relevant in the context of the study) by at least two of the four experts. Based on the responses of the experts, items were rewrote and deleted, leaving 71 items in the final questionnaire. Thus the expert’s judgment led to the content validity of the data. Respondents were acquainted with the fact that the purpose of the study is to ‘learn the effect of HR policies of bank on employee’s behaviour and attitudes. Respondents were instructed that the researcher is interested in the actual behaviour of the respondents and not what they thought they should be doing. It was decided to further test the Hypotheses on the basis of the data collected through questionnaire.

Factor analysis on self developed questionnaire was also done to determine whether the items in the instrument fit into conceptual domain (Sireci, 1998). Such discriminant validity by factor analysis, clusters together similar issues and separates them from others (Cohen, Manion and Morrison, 2008).

As standardised questionnaire relating to Job Satisfaction, was used for the purpose of collecting data, validity testing has already been performed by the respective authors Dubey, Maini, and Uppal.

In so far, the definitions of reliability and validity in quantitative research reveal two strands: First with regards to reliability, whether the result is replicable. Second with regards to validity, whether the means of measurement are accurate and whether they are actually measuring what they are intended to measure.

### 3.12 PILOT SURVEY

A pilot survey of 20 respondents was conducted (10 from each sector banks). Therefore, the qualitative stage preceded the survey to identify the items to be included in the questionnaire. The main objective of this pilot test was to investigate the potential weakness in the research instrument due to lack of clarity, ambiguous
wording and the format of the questionnaire. The responses were carefully reviewed and requisite changes were made in the questionnaire.

3.13 ANALYSIS OF DATA

Data obtained through questionnaire was appropriately edited, coded, and entered into an SPSS program for statistical applications (descriptive as well as inferential). The three data analysis objectives were met through:

a) **Testing goodness of data** using Reliability Analysis (Cronbach’s alpha) and Validity Analysis.

b) **Discriminant validity** by Factor Analysis was done to assess whether items in the instrument fit into the conceptual domain.

c) **Testing of hypotheses:** In order to prove the hypothesis, statistical testing instruments used were: Mean, Standard Deviation, Chi square, Correlation, Multiple Regression and Step-wise Regression. To test the difference across sectors on the various HRD dimensions, the level of Job Satisfaction and the Behavioural outcomes- t tests and Chi square tests have been used.

To conduct the analysis and to test the hypotheses, Total Scale Score has been calculated for each HRD practices. When some concepts are measured by several items (questions), the items can be summarized to calculate the mean values. This is called calculating total scale scores.

For the purposes of determining whether a statistically significant relationship exists between job satisfaction and HRD variables, Correlation Coefficient has been used. Multivariate Regression analysis has been used to study the impact of extracted factors of HRD variables on job satisfaction. To find the relationship between the variables and to identify the most dominating variable or significant predictor/driver as compare to other variables- step wise regression has been used.

3.14 LIMITATIONS OF THE STUDY

The present study has the following limitations:-

1. The main limitation of the research work is that the research has relied on attitudinal and perceptual measure of employees’ performance though financial measures are equally desirable.
2. Researcher failed to collect complete and accurate information from few employees as they were subject to fear. Even a second set of questionnaires was routed to them. Also the non-cooperation and passive interest of the respondents posed a serious problem in the research work that obstructed the collection of primary data. Next to that, scales may create different response patterns because some people tend to pick extreme values on scales when they see them.

3. As the research is conducted in Public and Private sectors banks only, the findings may not be exactly applicable to other organisations as well.

4. The confidentiality of bank documents impeded the research work more than anything else in spite of the best efforts of the researcher.

5. Compensation has not been studied as one of the component of HRD in the present research as the management as well as the employees of the selected banks were reluctant to share the requisite information. That is why only incremental aspect of pay i.e., rewards and recognition (which is a more objective measure of performance) has been studied.

Despite these limitations, every effort has been taken that these limitations do not come in the way of arriving at authentic and accurate information. The sample selection was done very carefully to make the sample representative of the whole population. Further the respondents were guided thoroughly to understand the questions whenever they faced any difficulty.

3.15 CHAPTER SCHEME

The research study, by and large, remained focused on the under mentioned areas:

Ch.1. Human Resource Development and Knowledge Workers-An Introduction: This chapter provides an outline of the research.

Ch.2. Review of Literature: This chapter provides the review of literature used to guide the investigation and to find the research gaps.

Ch.3. Research Methodology: This chapter provides the methodology used in the study and questionnaire development applied in the research work.

Ch.4. Human Resource Development Policies in Selected Banks: This chapter addressed the present HRD policy of the banks as intended by the management.
Ch.5. Data Analysis and Interpretation: This chapter presents the results from analysis of the data.

Ch.6. Conclusions and Recommendations: This chapter presents the conclusions drawn from the analysis and discusses the results in relation to its theoretical and practical contribution. This final chapter further highlights the guidelines for future research.

3.16 CONCLUSION
The research methodology used in the present study is addressed in this chapter. This chapter has discussed sample selection, the measuring instruments used, the justification for their inclusion, as well as the statistical methods employed by the researcher.