Chapter-3

Methodology
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Methodology

This chapter describes the methods adopted for the study (the design of the research), the sample, the tools used, the procedure adopted for the study, and the data analysis.

The purpose of this study is to explore Spiritual Intelligence, self-efficacy, Emotional Intelligence and Academic Achievement of B.Ed. student teachers. Furthermore, this study also attempted to focus inter-relationship of these variables and also to examine the degree of influence of Spiritual intelligence, Emotional intelligence and self-efficacy on academic achievement of B.Ed. Student-teachers. The methodology of the study has been described under the following heads;

a) Population of the Study

b) Sample of the Study

c) Tools used for the assessment

d) Data collection procedures

e) Scoring of data

e) Statistical techniques used for analysis.

3.1 Population of the Study

Polit and Hungler (1999) refer to the population as an aggregate or totality of all the objects, subjects or members that conform to a set of specifications. In this
study the population was B.Ed. Student-teachers of all races, age groups, educational status, socio-economic status and residential areas.

3.2 Sample used for the study

Sample is a small proportion of a population selected for observation and analysis. According to Sukhia (1966) “A good sample of population is the one within which restriction imposed by its size will produce that characteristics of the population with the greatest population accuracy”. It is not only difficult, but also rather impossible to utilize the entire population for the study. Therefore a sample of the whole population is taken for research studies.

The validity and reliability of the findings of a study is determined largely by the selection of the sample on which the tools for a data collection are administered. The sample selected should represent the population in all its diversity. In this study, the investigator selected student-teachers who were doing their B.Ed. course in different colleges of education of Kapurthala District.

Sampling technique in this study is random sampling. Four colleges were selected randomly from the nine colleges of education of Kapurthala district by choosing chits. It is free of classification error, and it requires minimum advance knowledge of the population other than the frame. Its simplicity also makes it relatively easy to interpret data collected. For these reasons, simple random sampling best suited in present research situation where investigator did not had much information about the population.

Sample of the study is 300 B.Ed. Student-teachers from four colleges of education namely, Lovely School of Education; DIPS college of Education,
Dhillwan, Kamla Nehru College of Education and Ramgharia College of Education.

Table 3.1. Sample Distribution

<table>
<thead>
<tr>
<th>Name of College</th>
<th>No. of Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lovely School of Education</td>
<td>40</td>
</tr>
<tr>
<td>DIPS College of Education</td>
<td>72</td>
</tr>
<tr>
<td>Kamla Nehru College of Education</td>
<td>89</td>
</tr>
<tr>
<td>Ramgarhiya College of Education</td>
<td>99</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
</tr>
</tbody>
</table>

3.3 Tools Used for the assessment

The selection of suitable tools is of vital importance for successful research. Effectiveness of evaluation largely depends on the accuracy of measurement. Accuracy of the measurement in turn depends upon the precision of the instrument. The word “tool” is defined as a means to collect evidences. In order to measure different variables explained earlier, the investigator made careful selection of standardized tools.

In the present study, investigator used two standardized Scales, one self-prepared scale and End of term examination scores and teaching practice assessment scores of B.Ed. pupil teachers. A detailed account of the tools has been discussed below.
3.3.1 Spiritual Intelligence Scale by Santosh Dhar and Upinder Dhar (2010)

The Spiritual Intelligence scale by Santosh Dhar and Upinder Dhar (2010) is a 5-point Likert type scale which measures 15 factors viz. Conviction, Self-efficacy, Inner Harmony, forgiveness, Achievement orientation, self-Actualization, Self-Realization, Humane, Just, Generous, Ethical, Privy, Compatible, Altruism and Optimism which are further subjected to six dimensions of spiritual intelligence viz. Benevolence, Modesty, conviction, compassion, Magnanimity and optimism.

**Item Distribution of Spiritual Intelligence Scale**

Factor I Conviction- the factor consists of item 21-belief in God, 47-trust in God, 23-praying higher power, 24-acknowledge god for good and 26-God governs.

Factor II Self-efficacy- this factor is constituted of item 9-free expression of emotions, 10-realization of full potentials, 5-emotions at workplace, 36-universe as a result of higher intelligence and item 8-success dependent on the ability to foster spirituality.

Factor III Inner-harmony- this factor is constituted of item 28-little tension or contradiction, 19-experience of harmony, 30-praying for guidance, 29-confidently moving in different social strata, 14-associated with bodies to serve and 18-ample opportunities to realize potential.

Factor IV Forgiveness- this factor is constituted of item 43-forgiving mistakes, 37-inner peace and calm, 42-spirituality and soul important of organization, 46-no ill feelings and 27-severe crisis to embark on spirituality.
Factor V Achievement Orientation-this factor is consisted of item 7- proud of achievement, 12 engagement in interesting work, 11-association with ethical organization and 6-proud of organization.

Factor VI Self-actualization- this factor is constituted of item 2-deployment of full creativity at workplace, 3-experience of joy and 1 complete self at work

Factor VII self-realization- this factor is constituted of items 39-spirituality as a binding force and 38- inner-connectedness.

Factor VIII Humane- this factor is constituted of item 48-not exploiting people, 49-high degree of self-awareness, 44 values people as human beings and 20- no compromise on basic values.

Factor IX Just- this factor is constituted of item 52-stand against injustice, 53-do not hurt deliberately, 51-living life as an opportunity, 33-serving whole of mankind.

Factor X Generous-this factor is constituted of item 15-money ceases to be important, 16-extending service to future generations and 32 as much goodness as evil.

Factor XI Ethical- this factor is constituted of item 41-profits follow ethicality and item 40-enactment of proper values.

Factor XII Privy- This factor is constituted of item 25-spirituality intensely personal.

Factor XIII Compatible- this factor is constituted of item 13-well thought communication.
Factor XIV Altruism- this factor is constituted of item 22-praying for coworkers, 50-sacrificing for needy people, 45-helping others without expectations, 4 excitement about the job and 35-optimistic.

Factor XV Optimism- this factor is constituted of item 31-things working out in the long run and 34- care for others.

**Factor Distribution Spiritual Intelligence Scale**

Dimension I Benevolence- this dimension is constituted of factor VIII Humane, factor II- self-efficacy, Factor VII Privy and Factor III Inner-harmony.

Dimension II Modesty- This Dimension is constituted of factor VI- self-actualization, Factor 14- Altruism, Factor VII- Self-realization and factor IX-Just.

Dimension III Conviction- This dimension is constituted of factor I- Conviction and factor X- generous.

Dimension IV Compassion- This dimension is constituted of factor IV-forgiveness and factor V- Achievement orientation.

Dimension V Magnanimity- This dimension is constituted of factor XIII-Compatible and factor XI Ethical.

Dimension VI Optimism- This factor is constituted of factor XV-Optimism.

The reliability of the scale has been determined by applying split-half technique on data collected from the sample of 323 subjects. The reliability coefficient is 0.98.

Besides face validity, the scale has high content validity (Dhar and Dhar, 2010). Validity of the scale has been determined from the reliability index. The index of reliability measures the dependability of test scores by showing how well obtained
scores agree with their theoretically true values. The index of reliability gives the maximum correlation which the given test is capable of yielding in its present form. The scale has high validity value of 0.99.

Norms for the scale are available on the sample of 323 executives working in private and public sector organizations. The scale can be successfully be used for assessing the spiritual intelligence of large adult age group surveys (Dhar and Dhar, 2010).

3.3.2 Teacher’s Emotional Intelligence Inventory by Shubhra Mangal (2008)

Teacher’s Emotional Intelligence Inventory by Shubhra Mangal (2008) is a self-administering inventory with 5-point Likert type scale. It has 200 items measuring four factors of emotional intelligence viz. Awareness of Self and others, Professional orientation, Intrapersonal management and Interpersonal Management. Out of which 94 items are negative.

Factor Distribution of Emotional Intelligence Inventory

Factor I Awareness of Self and others- the first factor implies being aware of one’s own self and others with whom the teacher is interacting. This factor subsumes the art of empathizing, influencing, commitment, appropriate assessment of one’s own capabilities and awareness of the organizations where the person is working.

Factor II Professional Orientation-the second factor that governs the emotional quotient of a teacher is his/her orientation towards the profession. EQ competencies like optimism towards the profession, service orientation and innate desire to achieve are the key stones to achieve professional orientation, a teacher who can adapt to changes and bring positivity in a diverse situation can be said to be a professionally oriented teacher.
Factor III Intrapersonal Management or self-regulation- A teacher who can assert himself/herself in public independently by exhibiting positive EQ traits of self-confidence and self-control can be said to possess the skill of self-management.

Factor IV Interpersonal management- the job of a teacher requires immense skill of managing others where competencies like teamwork capabilities, problem solving, building bonds and initiating a change are very essential. A teacher should initiate and manage a change amicably, whether it is during the course of teaching or during group work.

Reliability of the scale is based on test-retest and split-half method. Corresponding reliability of test-retest and split-half method are 0.96 and 0.95 respectively. Criterion related Validity coefficient of the scale is 0.55 (N=200) and 0.65 (N=500).

3.3.3. Self-prepared Self-efficacy Scale for Student-teachers.

Bandura (1977) defined self-efficacy as “beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments” (p. 3). He characterized Self-efficacy beliefs as the major mediators for our behaviour, and behavioural change. Over the years, Bandura’s other works continued to develop and defend the idea that our beliefs in our abilities powerfully affect our behaviour, motivation, and ultimately our success or failure (Bandura, 1982, 1986, 1993, 1996, 1997).

In present research, task specific self-efficacy of student-teacher is undertaken. It includes all possible tasks a student teacher performs during his course. On the lines of Bandura’s definition of self-efficacy, student teacher self-efficacy can be defined as judgment of his/her capabilities to bring about desired result of
his/her own commitment and learning and as well as of his students during teaching practice.

Self-efficacy beliefs are context sensual. Also one cannot be efficient in all fields, as this would require mastery of every sphere of human life. Bandura (2006) states that these beliefs cannot be measured with one all-purpose psychological test. This generalized approach of assessing self-efficacy usually has limited explanatory and predictive value because most of the items in all-purpose test may have little or no relevance to the area of functioning.

Moreover, in an effort to serve all-purpose, items in such a measure are usually designed in general terms detached from the situational demands and conditions. The results from such a scale are vague and tell very less about what exactly is being measured. The researcher is intended to measure self-efficacy beliefs of student teachers. The objective is cannot be achieved through any general self-efficacy scale and as per search of suitable self-efficacy scale has gone, no reported scale has been found which completely suit the functional areas of student teachers which require a different set of self-efficacy beliefs. So it is required to create a separate the test for the undertaken purpose i.e. self-efficacy beliefs in the area of student teaching.

**Construction of Self-efficacy Scale for Student-teachers.**

Following two major areas were defined for the purpose of constructing statements related to student-teacher self-efficacy on the bases of roles played by student-teacher i.e. being a teacher and being a student-

A. Student related self-efficacy

B. Teacher related self-efficacy.
Different self-efficacy scales and related literature was reviewed and according to guidelines provided by Albert Bandura for constructing self-efficacy scale for teacher and children, 8 dimensions were added under sections A and B.

**Section A: Student Related Self-efficacy.**

Bandura pioneered work in the measurement of children’s self-efficacy via the establishment of scales to measure children’s self-efficacy on several dimensions (Bandura et. al., 1999). Utilizing his social cognitive theory as a model, he proposed 28 items related to five constructs of self-efficacy: academic achievement; learning; leisure and extracurricular activities; self-regulatory to resist pressure to engage in high-risk activities involving alcohol, drugs, and transgressed behaviour; and social relations. Later in 2006, Bandura gave 8 dimension based children self-efficacy scale i.e. Self-Efficacy in Enlisting Social Resources, Academic Achievement, Self-Regulated Learning, Leisure Time Skills and Extracurricular Activities, Self-Regulatory Efficacy, Meet Others’ Expectations, Social Self-Efficacy, Self-Assertive Efficacy, and Enlisting Parental and Community Support. Other scales on student self-efficacy are Elementary Student Self-Efficacy by Carl et. al. (2009) in relation to functional domains: Student learning, peer relations and resisting drug use.

Taking these two scales as model and keeping specific tasks of student-teaching i.e. lesson planning, micro and macro teaching etc. in mind. Following dimensions were designed.

Dimension I: Identifying and usage of resources.

Dimension II: Understanding instructions in classroom.

Dimension III: Self- learning
Dimension IV: Leisure-time management and co-curricular activities:

Dimension V: Self-assertion/Self-expression

Dimension VI: Social self-efficacy

Dimension VII: Meeting other’s expectations

Dimension VIII: Community support

**Section B: Teacher related self-efficacy**

Based on social cognitive theory, teacher self-efficacy may be conceptualized as individual teachers’ beliefs in their own ability to plan, organize, and carry out activities that are required to attain given educational goals. Tschannen-Moran and Hoy (2001) defined teacher efficacy as a teacher’s “judgment of his or her capabilities to bring about desired outcomes of student engagement and learning, even among those students who may be difficult or unmotivated.”

Based on Bandura's definition of self-efficacy several instruments have been developed to measure (personal) teacher self-efficacy. In these scales items are associated to dimensions of job accomplishment, skill development on the job, social interaction with students, parents, and colleagues, and coping with job stress (Schwarzer, Schmitz and Daytnier, 1999); instruction, adapting education to individual students' needs, motivating students, keeping discipline, cooperating with colleagues and parents, and coping with changes and challenges (Skaalvik and Skaalvik, 2007); Influence Decision making, Influence School Resources, Instructional Self-Efficacy, Disciplinary Self-Efficacy, Enlist Parental Involvement, Enlist Community Involvement and Create a Positive School Climate (Bandura, 2006)
Taking these scales as model and keeping functional domains of student teacher following dimensions were designed:

Dimension I: Class room instruction self-efficacy.

Dimension II: Identifying and using resources.

Dimension III: Class room management

Dimension IV: Community Involvement

Dimension V: Decision Making

Dimension VI: Guidance and Counselling


Dimension VIII: Communication.

Under each dimension, possible statements were phrased following recommendations for item construction by Bandura (2006) for measuring student-teacher self-efficacy: (a) because self-efficacy is concerned with perceived capability the items should contain verbs like “can” or “be able to” in order to make clear that the items ask for mastery expectations because of personal competence, (b) the object in each statement should be “I” since the aim is to assess each teacher's subjective belief about his or her own capability, and (c) each item should contain a barrier. Total 58 items were constructed. The item distribution is gives below:
### Table 3.2 Item Distribution for Self-efficacy Scale

<table>
<thead>
<tr>
<th>Section A: Student related self-efficacy</th>
<th>Section B: Teacher related self-efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimension I: Identifying and usage of resources 1,2,6,45</td>
<td>Dimension I: Class-room Instruction Self-efficacy 3,4,5,21,24,25</td>
</tr>
<tr>
<td>Dimension II: Understanding Instructions in Class-room 7,12,49</td>
<td>Dimension II: Identifying and usage of resources 26,29,31,33,46</td>
</tr>
<tr>
<td>Dimension III: Self-learning 8,9,10,11,18,48</td>
<td>Dimension III: Class-room Management 32,36,47,52</td>
</tr>
<tr>
<td>Dimension IV: Leisure time management and Co-curricular activities 13,22,27</td>
<td>Dimension IV: Community Involvement 34,38,39,54,56</td>
</tr>
<tr>
<td>Dimension V: self-assertion/self-expression 14,16,28,36</td>
<td>Dimension V: Decision Making 55,57</td>
</tr>
<tr>
<td>Dimension VI: Social Self-efficacy 16,17,30,19</td>
<td>Dimension VI: Guidance and Counselling 37,40</td>
</tr>
<tr>
<td>Dimension VII: Meeting other’s Expectations 23,50,51,53</td>
<td>Dimension VII: Evaluation of Student’s Performance 41,42,43,44</td>
</tr>
<tr>
<td>Dimension VIII: Community Support 20</td>
<td>Dimension VIII: Communication 58</td>
</tr>
</tbody>
</table>

### Try-Out 1

For first try-out an open end question was also added to the draft in order to check missed out dimension. A preliminary try-out of the draft was done on 75 B.Ed. students in order to check whether all the dimensions are covered by the scale. Appropriate instructions were given to students and were assisted when they had any sort of problem.
Results of try-out 1

General Statistics was applied on the data of first try-out, as given below:

Table 3.3: General statistics on sample

<table>
<thead>
<tr>
<th>Total respondents (N)</th>
<th>75</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum</td>
<td>15928</td>
</tr>
<tr>
<td>Average</td>
<td>212.3733</td>
</tr>
<tr>
<td>SD</td>
<td>22.9745</td>
</tr>
<tr>
<td>Variance</td>
<td>527.82765025</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.633683125</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>-0.042147491</td>
</tr>
</tbody>
</table>

Table 3.3 shows that average of 75 B.Ed. student-teachers on self-prepared self-efficacy scale is 212.3733 and the curve is slightly negatively skewed, which can be subjected to conviction that they are gaining the necessary skills and self-efficacy through the teacher training program. They may have initially inflated level of self-efficacy.

Face validity of items of self-efficacy scale.

For checking the face validity of modified self-efficacy scale, the preliminary draft of the scale was administered to teacher educators of private and government institute. Total 11 number of Teachers’ feedback were received and recommended modifications regarding addition/deletion and language of items has been made in the draft.
**Implemented Modifications**

On recommendations of expert and discussion with Guide the four point scale was converted into 10 point scale as per the guide lines provided by Bandura (2005). Also, on the recommendations of experts, items under dimension I of section A and Dimension II in section B; dimension V of section A and Dimension VIII of section B; dimension VIII of section A and Dimension IV of section B were merged together which reduced the number of items to 53, and addition of Extra dimension of stress management added 1 more items resulting in total 54 items for final draft of the scale for try-out 2 for finding reliability of the scale.

**Reliability of the Scale**

Reliability refers to the consistency of a measure. A test is considered reliable if we get the same result repeatedly i.e. each time the test is administered to subjects; the results should be approximately the same. There are many different ways of estimating reliability of a scale. For this undertaken research, Split-half method has been employed. In split-half method, the test is first divided into two equivalent halves and correlation found for these half-tests. From the reliability of the half-test, self-correlation of the whole test is then estimated through the Spearman-Brown prophecy formula. The procedure in detail, is to make up two sets of scores by combining alternate items in the test. The first set of score represents performance on the odd-numbered items and the second set of score, performance on the even-numbered items. From the self-correlation of the half-tests, the reliability coefficient for the whole test can estimated from the formula:

\[ R_{11} = \frac{2r_{1/2}}{1 + r_{1/2}} \]
Where, $R_{11}$ = reliability of coefficient of the whole test and $r_{1/2}$ = correlation between two halves.

For finding reliability of the scale the scale was administered on the sample 200 student-teachers of Guru Nanak College of Education for women, Kapurthala and Lord Krishna College of Education, Sultanpur Lodhi, Kapurthala. Applying the split half method, self-correlation between two halves i.e. was found to be $r=0.486869253$ and reliability coefficient of the whole test is found to be 0.654913299.

3.3.4 **Academic Achievement:** Year End Examination scores and teaching practice assessment scores were used for assessing academic achievement of B.Ed. pupil teachers.

3.4 **Data collection**

Data for the study was collected by administering self-prepared student-teacher self-efficacy scale, Teacher’s Emotional Intelligence Inventory and Spiritual Intelligence Scale to the students of B.Ed. of four different colleges of Education. For the same permission was requested from the admins of the selected colleges. Data was collected according to availability of free lectures.

The investigator studied the basic literature relating to the selected psychological tests, contained in the test manuals and other references and acquainted her-self with the testing procedures, possible eventualities etc., before commencing actual testing.

In administering the test, a uniform procedure was adopted in all the selected colleges of education. The investigator got help of the class teachers in
administering the tests. The investigator gave a brief explanation of the objective and scope of the study to the students and appealed to their conscious involvement and co-operation. Appropriate instructions were given to the students, before-hand.

The following steps were invariably followed for conducting the test:

1. Distribution of the inventories to the samples
2. Clearing the doubts of the samples, giving instructions regarding time limit, method of dealing with eventualities, and filling up the personal information blank etc.
3. Explaining the general directions in filling up the five and ten response categories.
4. Making the students familiar with the five response categories, and method of entering the responses.
5. Giving 5 minutes intervals between testing of the section A and Section B.
6. Collecting back the answered response sheets.

**3.5 Scoring of the data**

Scoring of the data on variables Spiritual intelligence and Emotional Intelligence was done according to the instructions given in the manual available with the respective scales. Detail is given below:
3.5.1 Scoring of data on Spiritual Intelligence Scale by Santosh Dhar and Upinder Dhar (2010)

Each item which is marked as strongly agree, agree, not sure, disagree and strongly disagree has been awarded the score of 5, 4, 3, 2 and 1 respectively. While scoring, all illegible entries, double entries and empty entries were marked as zero. Sum of all individual scores on 53 items was calculated to find overall spiritual quotient and penned on the scoring sheets.

3.5.2 Scoring of data on Teacher’s Emotional Intelligence Inventory by Shubhra Mangal (2008)

The items in the inventory are either in nature of positive statements or the negative statements. The system of scoring the positive and negative natured items is as follows:

<table>
<thead>
<tr>
<th>Nature of the item</th>
<th>Choice made by the respondent</th>
<th>Score Awarded</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEGATIVE</td>
<td>A</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>5</td>
</tr>
<tr>
<td>POSITIVE</td>
<td>A</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>C</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>D</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>E</td>
<td>1</td>
</tr>
</tbody>
</table>

While scoring, all illegible entries, double entries and empty entries were marked as zero. After finding the score of all individual items the total score was calculated for overall Emotional Quotient and the sum is penned on the scoring sheet.
3.5.3 Scoring of Data on self-prepared student-teacher self-efficacy scale.

The self-prepared self-efficacy scale for student teacher is a 10 point scale having range of choice from 0 to 10, which possess self-explanatory scoring as below:

While scoring, all illegible entries, double entries and empty entries were marked as zero. After finding the score of all individual items the total score was calculated for overall student-teacher self-efficacy and the sum was penned on the scoring sheet.

The data collected were quantified following the scoring scheme of the various tools administered and the scores of the individual respondents on various variables were arrived at. The scores in the case of spiritual intelligence, Emotional Intelligence and self-efficacy, academic achievement and the demographic details like gender, age, residence, income, educational qualification, marital status, were entered separately. The data was either in the numerical form or in the descriptive form. Only those students for whom complete data was available were retained for analysis. The data were hand entered by the researcher from original evaluation forms and the data double checked for input accuracy for computer data processing.

3.6 Statistical techniques used for data analyses

Statistical analyses of the data were undertaken using procedures appropriate for the purpose of the study. The study used the following statistical techniques.
a) Descriptive statistical techniques: Mean, Standard Deviation, Skewness and Kurtosis.

b) For comparison of research variables with respect to demographic variables: t-test.

c) For Correlation analysis and association between variables: Pearson’s r.

d) To evaluate the contribution value of spiritual intelligence, Emotional Intelligence and self-efficacy in academic achievement: Multiple regression analysis.

Statistical processing was done with computer assistance. Data were analyzed utilizing descriptive statistics, t-tests, correlation coefficients, and multiple regression using Statistical Package for Social Sciences (SPSS11.5 version) computer program for statistical analysis.

The goal of descriptive statistics was to accurately portray data from a variable. Descriptive statistics involves summarizing scores by developing tabular or graphical representations. Descriptive statistics involves measures of central tendency which are mean, standard deviation, variance and confidence intervals.

The inferential statistics t-test was used to compare the variables with respect to demographical variables namely, gender, prior-teaching experience, educational qualification and marital status of student-teachers.

Relationship between the independent variables (spiritual intelligence, Emotional Intelligence and self-efficacy) and dependent variable (academic achievement) was ascertained using the corresponding scores obtained from the variables and tested the same through Pearson product moment correlation
coefficient statistics. Similarly, data on the prediction variables were analyzed using Multiple Regression Statistics. Inferential statistics were interpreted at the significant level of 0.05.

In this chapter the tools used for the measurement, sample selected for the study, data collection procedures, scoring and consolidation of data and statistical techniques used for analysis were explained. The analysis and interpretation of the data are discussed in the chapter IV.