Chapter - 3

METHOD AND PROCEDURE

The purpose of the present study was to look into well being of elementary school teachers of Punjab in relation to emotional intelligence, stress and self-esteem. For this purpose descriptive method of research was followed to conduct the present study. In order to achieve the objectives of the study, it was required to select a representative sample of elementary school teachers of Punjab and the necessary tools for collecting the requisite information. The relevant details regarding these aspects of the study are given as under:

3.1 RESEARCH METHOD

The study was conducted through descriptive method of research which has undoubtedly been the most popular and widely used method in education. It helps in explaining the phenomena in terms of the conditions or relationships that exists, process that are ongoing, effects that are evident; or trends that are developing. It also involves in it measurement, classification, interpretation and evaluation. This method requires sample for the conduct of the study with certain research tools for the conduct of the study. The description of tools and sampling is given here under:

3.2 RESEARCH TOOLS USED

The following tools were used to collect data for the present study:

1. Well Being Scale by Singh and Gupta (2001)
2. Emotional Intelligence Scale by Hyde, Pethe and Dhar (2002).

The description of tools being used is as under:

3.2.1 Well Being Scale

It can be administer to group or individual. It is widely used by researchers. It consisted of five sub-scale namely-physical well being, mental well being, social well being, emotional well being and spiritual well being. Each sub-scale has ten items and there are 50 items in total. Scores on all the sub-scale are added up to get a composite score as total well being. Minimum and maximum score can be 50 and 250 respectively. Only 10-15 minutes are required to administer the well being scale. It consist 29 positive items and 21 negative items.

**Reliability:** Test-retest reliability of the scale was 0.98 and split half reliability was found 0.96.

**Validity:** Content and concurrent validity of the Well being Scale was established. Concurrent validity of the scores of well being scale was determined by comparing it with the scores of Subjective Well being Inventory Sall and Nagpal (1992). Correlation between subjective well being inventory and physical well being, subjective well being inventory and social well being, subjective well being inventory and emotional well being, subjective well being inventory and spiritual well being and subjective well being and total well being were -0.45, 0.87, -0.90, 0.28, 0.18 and 0.53 respectively.

3.2.2 Emotional Intelligence Scale

Emotional Intelligence scale was developed and standardized by Ankaul Hyde, Sanjyot Pethe and Upinder Dhar in (2002). The scale consists of 34 items. There is no time limit for the scale but administrative time really exceeds 10 minutes. It is in Hindi and
English version. There are 10 factors in this scale. These are as follows:

A. **Self-Awareness:** Self awareness is being aware of one self and measured by items 6, 12, 18, 29. The correlation of this with total scores is 0.66.

B. **Empathy:** Empathy is feeling and understanding the other person and the measured by item, 9, 10, 15, 20, 25. The correlation of the factor with total score is 0.70.

C. **Self-Motivation:** Self-motivation is being motivated internally and is measured by 2, 4, 7, 8, 31, 34. Its correlation with total score is 0.77

D. **Emotional Stability:** It is measured by item 14, 19, 26, and 28. The correlation of this factor with total scores is 0.75

E. **Managing Relation:** It is measured by items, 1, 5, 11 and 17. The correlation of this factor with total score is 0.67.

F. **Integrity:** is measured by item 30 and 32.

G. **Self-Development:** It is measured by items 30 and 33.

H. **Value Orientation:** It is measured by items 21 and 22.

I. **Commitment:** Commitment is measured by item 23 and 24.

J. **Altruistic Behaviour:** It is unselfishness concern for the welfare of other. It is measured by the items 3 and 13.

**Reliability:** The reliability of the scale was determined by calculating reliability coefficient on a sample of 200 subjects. The split half reliability coefficient was found to be 0.88.

**Validity:** Beside face validity, as all items were related to the variable under focus, the scale has high content validity. It is evident from the assessment of judges/experts that items of scales are dually related to the concept of emotional intelligence. In order to find out the validity, the coefficient of reliability (Garrett, 1981) was 0.93, which indicated high validity of the scale.
3.2.3 Occupational Stress Scale

To measure occupational stress among teachers a scale was prepared by Satvinder pal Kaur. The scale consists of 30 items which include the various components of occupational stress among teachers as: role overload, role ambiguity, role conflict, unreasonable group and political pressures, responsibility for other persons, under participation, powerlessness, poor relation with colleagues, low status, strenuous working conditions, unprofitably and inadequacy.

**Reliability:** The reliability of the scale pertaining to occupational stress was established by test-retest technique. The coefficient of correlation between the two test scores was found to be 0.86 (N=50) with an interval of 15 days.

**Validity:** To find out the face validity of the scale, the scale was sent to twenty celebrated experts of different universities by the constructor. Out of which 16 experts responded. All the items were modified from the language point of view and their usability or meaning point of view. The items which were recommended by the experts were related to constitute the final form of the scale.

To find out the construct validity, the correlation coefficient between scores of each component and the total score was calculated by the method of biserial correlation. All the 30 items are significant at 0.01 levels.

3.2.4 Self-Esteem Inventory

SEI (Adult Form) by Stanley Coopersmith is designed to measure attitudes towards the self in social, academic, family and personal areas of experience. It consisting of items to be scored in terms of being “Like me” or “Unlike me” was used to measure evaluative attitudes towards the self in social, academic, family and
personal areas of experiences which indicate the extent to which a person believe himself or herself competent, successful, significant and worthy.

The adult form of Self-Esteem Inventory has been designed to be used with persons aged sixteen and above. It may be administered to group or individual. It is self-administered. It consists of twenty five items. The items were positively scored and the items were scored negatively. A high degree of self-esteem is reflected in a combination of high scores and vice-versa.

**Reliability:** Internal consistency carried out by Bedeian, Geagud and Zmud (1977) 103 college student reported KR20s of 0.74 for males and 0.71 for females. The reliability coefficient is probably somewhat lower because of the shorter length. However test-retest reliability of the above is found to be having coefficient of 0.80 for males and 0.82 for females.

**Validity:** Validity of SEI is confirmed from construct validity, predictive validity, facto analysis and multi trait-multi method validity. The construct validity of the inventory along with concurrent and factorial validity has been established.

### 3.3 UNIVERSE OF THE STUDY AND SAMPLE

The elementary school teachers of Punjab constituted the universe of the study. One district each was selected randomly from advanced, average and backward districts on the basis of Human Development Index. The advanced districts as mentioned in Human Development Report (2004) published by Punjab Government are Ludhiana, Roopnagar, Fatehgarh Sahib and Gurdaspur; average districts are Hoshiarpur, Jalandhar, Amritsar, Kapurthala, Ferozepur, Moga, Faridkot, Nawanshahr and Patiala and backward districts are Muktsar, Bathinda, Sangrur and
Mansa. After the selection of districts the researcher collected the list of elementary schools from District Education Officer (Elementary) and Zila Prishad office of each districts. 146 elementary schools out of 1010 from Ludhiana, 42 out of 303 from district Moga and 41 out of 281 from Muktsar were selected.

Approximately 14% of elementary schools were selected from each district. A sample of 600 elementary school teachers was selected from three districts. While selecting sample for the study due weightage was given to the rural and urban location of the school and school under government and panchyati raj institution. All teachers from the selected schools were included in the sample. The original sample comprises 700 teachers, out of whom 600 were retained for analysis; other has to be ignored because of incomplete data. The data deleted from district Ludhiana was 48 teachers, from Moga 27 and from Muktsar 25. The split of the school, from each district and total selected teachers are given in table 3.1.

<table>
<thead>
<tr>
<th>Districts</th>
<th>Total No of Govt. elementary Schools</th>
<th>Selected Govt. Elementary Schools</th>
<th>Total No. of Schools under Panchyati Raj Institution</th>
<th>Selected Schools under Panchyati Raj Institution</th>
<th>Total selected schools</th>
<th>Total selected teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ludhiana</td>
<td>440</td>
<td>148</td>
<td>50</td>
<td>422</td>
<td>50</td>
<td>146</td>
</tr>
<tr>
<td>Moga</td>
<td>189</td>
<td>17</td>
<td>11</td>
<td>97</td>
<td>23</td>
<td>42</td>
</tr>
<tr>
<td>Muktsar</td>
<td>163</td>
<td>28</td>
<td>13</td>
<td>90</td>
<td>19</td>
<td>41</td>
</tr>
</tbody>
</table>

Table 3.1
The Split of Schools and Selected Teachers
The overall picture of sample in terms of teaching experience, location of school, gender and type of recruitment is presented as under:

<table>
<thead>
<tr>
<th>Teaching Experience</th>
<th>Location of School</th>
<th>Gender</th>
<th>Type of Recruitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;15</td>
<td>Rural</td>
<td>Male</td>
<td>Govt.</td>
</tr>
<tr>
<td>&gt;10</td>
<td>Urban</td>
<td>Female</td>
<td>PRI</td>
</tr>
</tbody>
</table>

N=600

3.4 DATA COLLECTION

After finalizing the tools and selecting the schools, the researcher personally visited the schools. The investigator sought permission from the Head of the schools to collect data. The purpose of testing was clarified to the teachers and rapport was established with them. Then the set of tools distributed to the teachers and they were requested to co-operate by filling up the research tools as per instructions. The subjects were assured that the information provided by them would be kept confidential and will be used only for research purposes.

3.5 SCORING OF TOOLS

The scoring of different research tools was done in the following manner:

3.5.1 Well being Scale: The Well being Scale can be scored by hand by attributing the values 5, 4, 3, 2, 1 to response categories of the positive items and 1,2,3,4,5 to negative items.

Positive Items: 1, 5, 6, 9, 10, 11, 13, 14, 15, 20, 21, 22, 24, 25, 27, 29, 30, 31, 38, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50 = 29

Negative Items: 2, 3, 4, 7, 8, 12, 16, 17, 18, 19, 23, 26, 28, 32, 33, 34, 35, 36, 37, 39, 40 = 21
Score of well being scale can be interpreted in the following broad score ranges:

- 50-124 Low
- 125-175 Average
- 177-250 High

The maximum and minimum score on the positive items are 145 and 29 respectively. On negative items, minimum score is 21 and maximum is 105. Score on well being scale can be interpreted in another way.

Maximum and minimum scores on each dimension are given in Table no. 3.2

If the scores are above the middle value, the person enjoy overall good sense of well being. If the scores fall below the middle value, possibility is that the individual is not leading a happy living.

A high score indicates enhanced sense of well being and the low scores denotes diminished sense of well being. High and low scores indicate positive and negative directions respectively.

### Table 3.2

**Scoring Table of Well Being**

<table>
<thead>
<tr>
<th>Dimension</th>
<th>No. of Items</th>
<th>Minimum Score</th>
<th>Middle Value</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>10</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>2</td>
<td>10</td>
<td>10</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>10</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
<td>10</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>5</td>
<td>10</td>
<td>10</td>
<td>30</td>
<td>50</td>
</tr>
<tr>
<td>Total</td>
<td>50</td>
<td>50</td>
<td>150</td>
<td>250</td>
</tr>
</tbody>
</table>
3.5.2 Emotional Intelligence Scale: Manual scoring of Emotional Intelligence Scale can be done conveniently. Hence no scoring key is provided. Each item is scored 5 of strongly agree, 4 for agree, 3 for uncertain, 2 for disagree and 1 for strongly disagree. Individual having high score can be considered to have high emotional intelligence. The minimum score is 34 and maximum is 170.

The scale can be used for research and survey purpose. It is self administering and does not require the services of highly trained testee. It is eminently suitable for group as well as individual testing.

3.5.3 Occupational Stress Scale: The Occupational Stress Scale was a five point scale and subjects were supposed to mark one option out of five. All items were positively worded. Scores of 5, 4, 3, 2, and 1 were awarded for Strongly agree (SA), agree (A), Undecided (UD), Disagree (DA) and Strongly disagree (SDA) response respectively. After adding the scores of all the items, the total score of the each subject were find out. Categorization of the subjects has been done on the basis of value of $Q_1=88$ and $Q_3=107$.

The following categories were worked out:

<table>
<thead>
<tr>
<th>Category</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highly stressed</td>
<td>108 and above</td>
</tr>
<tr>
<td>Average</td>
<td>89 - 107</td>
</tr>
<tr>
<td>Less Stressed</td>
<td>0 – 88</td>
</tr>
</tbody>
</table>

3.5.4 Self-Esteem Inventory: The Self-Esteem Inventory can be scored by using the scoring key. If a scoring key is not available the general rules listed below should be followed when scoring the self-esteem items:

(i) Score negative items correct (for example “I get upset easily at home”).

(ii) Score positive items correct (for example “I am pretty sure of myself”).
To get a total self-esteem score, sum the number of self-esteem items answered correctly and multiply the total raw scores by 4. This results a maximum possible total self-esteem of 100. By using $Q_1 = 54$ and $Q_3 = 76$ categories may be:

- 77 and above : High self-esteem
- 55 - 76 : Average
- 0 - 54 : Low

### 3.6 STATISTICAL TREATMENT OF DATA

The data so collected were recorded in tabular form for statistical analysis.

Descriptive statistic was used to check the normality of scores. Frequency distribution was prepared. Mean, median, standard deviation, skewness and kurtosis were computed for the measure of well being, emotional intelligence, stress and self-esteem to find out the nature of scores distribution.

As, present investigation is primarily designed to determine the relationship of well being with emotional intelligence, stress and self-esteem among elementary school teachers of Punjab as serving either on regular basis or contractual basis. Therefore Pearson’s product moment method of co-relational analysis was applied to determine the relationship between dependent and independent variables. Fisher’s ‘z’ score was used to study the difference between two ‘$r_s$’. To predict well being from psychological variables, namely emotional intelligence, stress and self-esteem regression analysis was applied. The analysis of variance and t-ratio were used to find out difference in well being of elementary school teachers in terms of high and low levels of emotional intelligence, stress and self-esteem and also type of recruitment, locale, gender and teaching experience.