CHAPTER - IV

METHOD

AND

PROCEDURE
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This chapter deals with all the methodological and procedural aspects of the problem. It explains the procedure or design followed in the selection of the sample, hypotheses, gives description of the tools employed, procedure adopted in data collection and statistical operations carried out for treatment of the data.

STATEMENT OF THE PROBLEM

“LIFE SATISFACTION OF PRIMARY SCHOOL TEACHERS IN RELATION TO PSYCHO SOCIAL FACTORS”

SAMPLE

The random sampling technique was employed in the present study due to heterogeneous characteristics of the population and according to the purposes of the study. The critique for randomization in sample are met when every individual in the population has the same chance of being chosen for the sample and when selection of one individual has no influence on the choice of another.

The sample of the present study was drawn from Government and Private primary schools teachers of Ludhiana District (Punjab).

In the present study 250 male and 250 female primary school teachers of Ludhiana district were taken as sample. The original sample comprised 600 teachers out of whom 500 were retained for the analysis, other had to be ignored because complete data about them was not available.
DESIGN OF THE STUDY

The present study was a descriptive survey, which was conducted among government and private primary school teachers of Ludhiana District. The investigation was conducted in different phases.

Phase – I

During the first phase the investigator classified the sample into categories of satisfaction, i.e., high (LS_h), average (LS_a) and low (LS_l). Classification was done on the basis of Kelley’s (1939) criteria of top and bottom 27% cases. Above 27% were considered as falling into higher life satisfaction group (LS_h) while 27% cases were considered as falling into low satisfaction group (LS_l). The rest of the teachers were regarded as average life satisfaction group (LS_a).

Phase – II

In the second phase of the study, the investigator measured psychological factors of the teachers, i.e., personality, intelligence, mental health as well as social factors, i.e., socio economic status and modernization. In the present study, the techniques of correlation and regression analysis were employed in order to find out the nature and the extent of relationship of personality, intelligence, mental health, modernization, socio economic status with satisfaction. Product moment correlation and regression equations were worked out. The t-ratios were worked out to find out the differences among levels of satisfaction. Later on, multistage analysis of these correlates with life satisfaction was done. A diagrammatic representation of the design of the study is shown in Figure 4.1.
FIGURE 4.1
DESIGN OF THE STUDY
N=500

N - Numbers
P.F. - Psychological Factors
S.F. - Social Factors
LS_{hi} - High Level of Life Satisfaction
LS_{av} - Average Level of Life Satisfaction
LS_{lo} - Low Level of Life Satisfaction
HYPOTHESES

1 (a) Significant mean differences would be there among primary school teachers at three levels of Life Satisfaction (LS_h, LS_a, LS_i) with respect to personality.

(b) Significant mean differences would be there among primary school teachers at three levels of Life Satisfaction (LS_h, LS_a, LS_i) with respect to intelligence.

(c) Significant mean differences would be there among primary school teachers at three levels of Life Satisfaction (LS_h, LS_a, LS_i) with respect to mental health.

2 (a) Significant mean differences would be there among government primary school teachers at three levels of Life Satisfaction (LS_h, LS_a, LS_i) with respect to personality.

(b) Significant mean differences would be there among government primary school teachers at three levels of Life Satisfaction (LS_h, LS_a, LS_i) with respect to intelligence.

(c) Significant mean differences would be there among government primary school teachers at three levels of Life Satisfaction (LS_h, LS_a, LS_i) with respect to mental health.

3 (a) Significant mean differences would be there among private primary school teachers at three levels of Life Satisfaction (LS_h, LS_a, LS_i) with respect to personality.

(b) Significant mean differences would be there among private primary school teachers at three levels of Life Satisfaction (LS_h, LS_a, LS_i) with respect to intelligence.

(c) Significant mean differences would be there among private primary school teachers at three levels of Life Satisfaction (LS_h, LS_a, LS_i) with respect to mental health.
4 (a) Significant mean differences would be there among male and female primary school teachers at three levels of Life Satisfaction (LSh, LSa, LSf) with respect to personality.

(b) Significant mean differences would be there among male and female primary school teachers at three levels of Life Satisfaction (LSh, LSa, LSf) with respect to intelligence.

(c) Significant mean differences would be there among male and female primary school teachers at three levels of Life Satisfaction (LSh, LSa, LSf) in respect to mental health.

5 (a) Significant mean differences would be there among male and female government primary school teachers at three levels of Life Satisfaction (LSh, LSa, LSf) with respect to personality.

(b) Significant mean differences would be there among male and female government primary school teachers at three levels of Life Satisfaction (LSh, LSa, LSf) with respect to intelligence.

(c) Significant mean differences would be there among male and female government primary school teachers at three levels of Life Satisfaction (LSh, LSa, LSf) with respect to mental health.

6 (a) Significant mean differences would be there among male and female private primary school teachers at three levels of Life Satisfaction (LSh, LSa, LSf) with respect to personality.

(b) Significant mean differences would be there among male and female private primary school teachers at three levels of Life Satisfaction (LSh, LSa, LSf) with respect to intelligence.

(c) Significant mean differences would be there among male and female private primary school teachers at three levels of Life Satisfaction (LSh, LSa, LSf) in respect to mental health.

7 (a) Significant mean differences would be there among primary school teachers at three levels of Life Satisfaction (LSh, LSa, LSf) with respect to socio-economic status.
(b) Significant mean differences would be there among primary school teachers at three levels of Life Satisfaction (LS_h, LS_a, LS_l) with respect to modernization.

8(a) Significant mean differences would be there among government primary school teachers at three levels of Life Satisfaction (LS_h, LS_a, LS_l) with respect to socio-economic status.

(b) Significant mean differences would be there among government primary school teachers at three levels of Life Satisfaction (LS_h, LS_a, LS_l) with respect to modernization.

9(a) Significant mean differences would be there among private primary school teachers at three levels of Life Satisfaction (LS_h, LS_a, LS_l) with respect to socio-economic status.

(b) Significant mean differences would be there among private primary school teachers at three levels of Life Satisfaction (LS_h, LS_a, LS_l) with respect to modernization.

10(a) Significant mean differences would be there among male and female primary school teachers at three levels of Life Satisfaction (LS_h, LS_a, LS_l) with respect to socio-economic status.

(b) Significant mean differences would be there among male and female primary school teachers at three levels of Life Satisfaction (LS_h, LS_a, LS_l) with respect to modernization.

11(a) Significant mean differences would be there among male and female government primary school teachers at three levels of Life Satisfaction (LS_h, LS_a, LS_l) with respect to socio-economic status.

(b) Significant differences would be there among male and female government primary school teachers at three levels of Life Satisfaction (LS_h, LS_a, LS_l) with respect to modernization.

12(a) Significant mean differences would be there among male and female private primary school teachers at three levels of Life Satisfaction (LS_h, LS_a, LS_l) with respect to socio-economic status.
(b) Significant mean differences would be there among male and female private primary school teachers at three levels of Life Satisfaction (LS_n, LS_m, LS_s) with respect to modernization.

13 (a) There would be significant positive relationship of life satisfaction with psycho factors such as personality, intelligence and mental health of primary school teachers.

(b) There would be significant positive relationship of personality, intelligence and mental health of primary school teachers with high level of life satisfaction.

(c) There would be significant positive relationship of personality, intelligence and mental health of primary school teachers with average level of life satisfaction.

(d) There would be significant positive relationship of personality, intelligence and mental health of primary school teachers with low level of life satisfaction.

14 (a) There would be significant positive relationship of life satisfaction with social factors such as socio-economic status and modernization of primary school teachers.

(b) There would be significant positive relationship of socio-economic status and modernization of primary school teachers with high level of life satisfaction.

(c) There would be significant positive relationship of socio-economic status and modernization of primary school teachers with average level of life satisfaction.

(d) There would be significant positive relationship of socio-economic status and modernization of primary school teachers with low level of life satisfaction.

15(a) Significant variance towards life satisfaction among government and private school teachers would be contributed by major psycho factors such as personality, intelligence and mental health.
(b) Significant variance towards high level of life satisfaction among government and private school teachers would be contributed by major psycho factors such as personality, intelligence and mental health.

(c) Significant variance towards average level of life satisfaction among government and private school teachers would be contributed by major psycho factors such as personality, intelligence and mental health.

(d) Significant variance towards low level of life satisfaction among government and private school teachers would be contributed by major psycho factors such as personality, intelligence and mental health.

16(a) Significant variance towards life satisfaction among government and private school teachers would be contributed by major social factors such as socio-economic status and modernisation.

(b) Significant variance towards high level of life satisfaction among government and private school teachers would be contributed by major social factors such as socio-economic status and modernisation.

(c) Significant variance towards average level of life satisfaction among government and private school teachers would be contributed by major social factors such as socio-economic status and modernisation.

(d) Significant variance towards low level of life satisfaction among government and private school teachers would be contributed by major social factors such as socio-economic status and modernisation.

**TOOLS USED**

The following tools were used to collect data:


4. Mental Health Check-list (MHC) by Kumar (1990)
DESCRIPTION OF THE TOOLS


   This scale measures life satisfaction and is considered an important tool for younger immature as well as aged people. 60 items related to 6 areas, viz, health, personal, economic, marital, social and job are included in this scale. (Appendix I)

   **Reliability**: Test retest reliability was computed after a gap of six weeks. The obtained quotient was 0.84.

   **Validity**: The validity of the scale was obtained by correlating it with Saxena’s adjustment inventory and Srivastava adjustment inventory. The quotient obtained was 0.74 and 0.82 respectively. Further, the scale has face validity as all the items are closely related to covered areas. The items were judged by the experts. Thus the, scale is beyond doubt. It also possesses content validity.

   **Scoring**: In this scale, every item is to be responded either ‘Yes’ or ‘No’. There is no other alternative. Every ‘Yes’ response is assigned 1 mark. The sum total of marks is obtained for the entire scale.

2. Eysenck Maudsley Personality Inventory (M.P.I.) by Jalota and Kapoor (1975)

   Maudsley Personality Inventory (Appendix II) is a brief but standard, as well as easily administered and scored inventory which is designed for assessing neuroticism – emotionally stable and introversion extraversion dimensions of personality. It is suitable for normal and abnormal adults, and also for adolescents. This test can be used as a group as well as individual test, for persons of age group of 15 to 16 years and above. Although no time limit is enforced in the testing, but the short-scale takes about 15 to 20 minutes. Items from serial number 1 to 12
given on the front page of the test booklet make short – scale, while all 48 items of 
the booklet constituted long scale.

There are 24 items of the Neuroticism in long scale i.e. 2,3,6,7,10,11, 
13,15,17,19,21, 23,25,27,29,31,33,36,39,41, 43,45 and 47 and maximum raw 
scores are 48. There are 16 items of extraversion in short scale i.e. 
1,4,5,8,9,12,20,26,28,32,34,38, 42,44,46 and 48. The maximum raw scores of this 
dimension are 32.

Validity: The full scale was administered to 75 male and 75 female post-graduate 
students at Chandigarh. For the full scale, the mean neuroticism scores for the 
male groups combined was 23.2 with a S. D. of 10.0 This corresponds with 
English norms of 19.9, S.D. 11.0 for the extroversion scale, the mean combined 
scores were 27.6, S.D. 9.7. There were no differences of any significance between 
males and females and the data suggests that the Indian groups were slightly more 
neurotic and extraverted than the English standardization group.

The correlation between ‘N’ and ‘E’ for the long scale was 0.223 which is 
in good agreement with the English norms. The reliability co-efficient by 
comparing the 1\textsuperscript{st} half with the 2\textsuperscript{nd} half, yields for N= +0.567 and E= +.358. The 
data suggests the Indian version of the MPI, gives results not essentially different 
from those obtained with original version of English and it seems reasonable to 
conclude that these two personality dimensions can be found among Indian 
students as well as among the various European and American groups (Eysenck, 
1979) on whom the test has been standardized.

Scoring: The test is scored directly from the test booklets. The answer sheet is 
scored by scoring key. The scoring stencil is placed along the anchoring points 
made in the answer-sheet. The raw scores as read off and added to give a total of 
‘N’ and ‘E’ scores respectively. Raw scores are converted into standard scores. 
Standard score of 50 is equal to the average. A standard score of above 70 or 
below 30 needs attention as it indicates considerable deviation from the average.
3. **The Group Test of General Mental Ability by Jalota (1973)**

The Group Test of General Mental Ability is a very popular test for obtaining a measure of intelligence because it has been widely used by researchers being a group test. There are 100 items arranged in increasing order of difficulty. It is a composite test consisting of seven sub tests: number series, analogies and classifications having 20 items each and inferences, following the instructions, opposite and synonyms having 10 items each. Subjects are required to write correct responses on the response sheet provided to them. The norms have been provided in term of IQ for various stages. The test is to be tried for 25 minutes only. Another 20 minutes are usually required for the distribution of the test answer sheets, the explanation of examples and the later collection of the test material. So this test can be given in an average school period of 45 minutes.

**Reliability**: The reliability of the test scores has been calculated by the finding of correlations between the odd and even halves scored by the tested population. These correlation coefficients were corrected for length with Spearman Brown formula. The reliability of this test is 0.85.

**Validity**: The validity of this test has been computed on the basis of factor analysis of the entire element scores, which is 0.90.

**Scoring**: The tool can be scored with the help of hand scoring key provided for this purpose. A weightage of one point is given if the response is correct and zero weightage is given if the response is wrong. Total scores are found by adding all the correct responses.

4. **Mental Health Check-List (MHC) by Kumar (1990)**

Mental Health Check-List by Kumar (Appendix III) consists of 11 items – 6 mental and 5 somatic presented on a 4-point rating format.

**Scoring**: Scoring is done on the four- point scale. The subjects who put a (✓) tick on rarely, at time, often and always respectively are scored 1,2,3,4 respectively.
then the total scores of items of each dimensions dimension are worked out. Total score varies from 11 to 44 showing the highest to lowest (point) mental health status of a person. High scores on MHC indicate poor mental health.

**Reliability:** The split half reliability, correlating the odd-even items is 0.70 with an index of reliability of .83 test-retest reliability of the test is 0.65 with an index of reliability of 0.881.

**Validity:** The face of validity of MHC is fairly high as items were prepared by asking teachers of psychology to list all such symptoms which, according to them, showed poor mental health. The content validity was adequately assured as only those symptoms which showed 100 per cent agreement amongst the judges regarding their relevance to the study of mental health were selected.

5. **Socio-Economic –Status Scale by Bhardwaj (2001)**

The present Socio-Economic Status Scale (Appendix IV) has been constructed with a view to seek clarity of distinct aspects of Social and Economic Status of an individual separately and integrally. The test envisages to determine nine types of status namely social status (ascribed), social status (achieved), social status (as a whole), economic status (ascribed), economic status (achieved), economic status (as a whole) socio-economics (ascribed), socio-economic status (achieved) and socio-economics status (as a whole). The present scale of ‘socio-economic status’ has been developed for literate people. It can be administered on illiterate people also, but only by personal interviews.

**Reliability and Validity of Socio-Economic Status Scale:** The reliability of the test has been calculated by test re-test method. The scale was administered on a sample of 200 persons and after 21 days it was re-administered on the same sample. The correlation between two scores was calculated by Spearman-Brown formula. The reliability coefficient correlations were found in 7 areas social, family, education, profession, cast, total assists, monthly income and of the scale as a whole on the revised scale are 0.76, 0.69, 0.86, 0.74, 0.94, 0.69, 0.74 and 0.76 respectively. The content validity of the revised scale is high and promising.
**Scoring**: Scoring of this test is very easy and of a quantitative type. Scoring key provides the weightage score for each item. Every alternative of any of the items has only weighted score which will serve to provide the scores if the tick mark (✓) is present in horizontal plane for the case. The scoring key has to be placed vertically between the two assigned points on the test. The separate scores for each area are then to be totaled vertically. These totals of the scores for each separate area are thereafter to be a part in big box provided at the vertical end of each area for the case.

When scoring of each page has been completed, the area wise total scores of the cases are transferred on the first page of the questionnaire in the given Table.


The modernization scale by Singh et al. (Appendix V) measures modernization and is considered as important tool for younger, immature as well as aged people. The test contains 32 items regarding four areas: socio-economic, marriage, position of women and education.

**Reliability**: The mean age of the sample was 19.4. Split half reliability (odd-even method) was calculated and Spearman-Brown’s correlation was found to be $r = 0.78$ for total scale.

**Validity**: In order to ascertain concurrent validity, the scores from each sub scale i.e. socio-religious, marriage, position of woman, education were correlated with the scores on the total scale. The coefficient of correlation with respect to these sub scales were .97, .61, .86, .64 respectively. The correlation of sub- scales ranged from 0.61 to 0.97. These high correlations demonstrate that sub- scales have high validity.

**Scoring**: Since the test measures attitudes of modernity in four sub areas, two types of scores can be obtained; (a) area-wise modernization scale and (b) total score indicating overall modernization. Each sub-area contains both types of items: positive and negative. Positive items are given scores of 6, 5, 4, 3, 2 and 1 for extremely agree, strongly agree, agree, disagree, strongly disagree, extremely disagree respectively. Whereas negatives items are given the scores of 1, 2, 3, 4, 5
and 6 for extremely agree, strongly agree, agree, disagree, strongly disagree, extremely disagree respectively.

The sum of scores for different sub areas can be obtained with the help of code letters (A, B, C, D) printed in each statement. Total modernization score is obtained by adding the scores for all the areas.

**PROCEDURE OF THE DATA COLLECTION**

Prior of the administration of the Life Satisfaction Scale, Maudsley Personality Inventory, Group test of General Mental Ability, Mental Health Checklist, Socio-Economic Status and Modernization scale in different schools, the investigator sought the permission and cooperation of the heads of the institutions and teachers. First of all, the purpose of test was clarified to the teachers and rapport was established with them. All the primary school teachers under study was assured that the information would be kept strictly confidential and it would be used only for the research purpose. After seeking their consent, different tests were administered on them. The tests were administered to primary school teachers in two sittings. In the first sitting the teachers were administered three tools i.e. life satisfaction, personality and intelligence with the break of five minutes after the completion of each tool. In the second sitting the teachers were again given three tools i.e. socio-economic status, modernization and mental health with the break of five minutes after the completion of each tool.

**STATISTICAL TECHNIQUES USED**

1. Descriptive statistics, namely, Mean and SD were worked out
2. For seeing the differences in psycho-social variables at different levels of life satisfaction, i.e., LS\(_i\), LS\(_a\), and LS\(_l\), t-ratios were calculated.
3. Bivariate correlation ratio between criterion variables of life satisfaction and other predictor variables under study were calculated.
4. Multiple correlations and multiple regressions were computed for predicting psycho-social variables of primary school teachers.
5. Graphic representations were made wherever necessary.