

Chapter-IV

RESEARCH METHODOLOGY

This chapter deals with the research procedures applied in conducting the present study. For convenience, the research methodology has been discussed under the following three sub-heads :-

1. Research design
2. Variables and operationalization
3. Data gathering procedure and statistical techniques used

1. Research design

It comprises of the following sub-parts

(i) Locale of the study
(ii) District under study
(iii) Selected of tehsils
(iv) Selection of the schools
(v) Sample of respondents
(vi) Pilot study
(vii) Pre-test of standing
(viii) Tools and data collection
(ix) Statical analysis of data

(i) Locale of the study

Uttar Pradesh was chosen as locale of the study. This was done with the intension that U.P. is a major state of the country and children have an important role to play in the development of the state as well as the country.
DISTRICT MORADABAD
(ii) District under study

District Moradabad was purposively selected for this study as the researcher hailed from this place. This helped the investigator to collect the necessary information accurately and timely. The researcher, being from the same place could easily have dialogues and discussions with both during pilot study and final data collection.

(iii) Selection of tehsils

Moradabad district was divided into 6 tehsils. Two tehsils namely Chandausi and Bilari were randomly selected for this study.

(iii) Selection of the schools

District Moradabad comprises of 20 Hindi medium junior High schools and 14 English medium junior high schools, out of which 4 Hindi medium schools such as - Laxman Sarasvati Shishu Mandir, Kamlanand Sarasvati Bal Vidya Mandir, Adarsh Bal Vidya Mandir and R.K. Bal Vidya Mandir and English medium schools such as Willsonia Public school, City Public school, R.R.K. Senior Secondary school and O.P.G.M. Public School were randomly selected for the purpose of drawing samples.

(iv) Selection of late childhood children

A list of children of working or non-working women after having prepared of list of late childhood children for each school. 20 children were selected from each school. Thus total 160 children were selected randomly from selected school. The list of children were prepared with the help of B.S.A. office.
(v) Pilot study

Prior to finally deciding the title of the project a pilot survey of the area was conducted. This gave an idea about the place of the study and nature of the samples that could be drawn and type of aspects and problems which could be explored out.

(vi) Pre-testing of instruments

Before collecting the necessary data from the finally selected sample of 2400 children was identified other than those included in the final sample of respondents. These 160 children of WW and NWW were interviewed with the help of schedules and questionnaires developed for collecting the data. This helped the investigator in making necessary changes in instruments to be finally used their wording and composition etc.

(vii) Variables and their measurements

(i) Independent variables

(a) Age:

The chronological age of late childhood children at the time of investigation was taken. All late childhood children were listed according to following age groups and given the scores as follows.

<table>
<thead>
<tr>
<th>Age-group (years)</th>
<th>Score assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) 6 – 8</td>
<td>1</td>
</tr>
<tr>
<td>(b) 8 – 10</td>
<td>2</td>
</tr>
<tr>
<td>(c) 10 - 12</td>
<td>3</td>
</tr>
</tbody>
</table>

(b) Education of the respondents

Education was operationalized as the number of years of formal education obtained by the respondents. Scores assigned to different categories on the bases of modified Kulshrestha’s socio-economic status (SES) scale for rural was as follows:
BILARI TEHSIL

Laxman Saraswati Sishu mandir
Kamal and Saraswati Sishu Mandir
Willsoula School
City Public School
<table>
<thead>
<tr>
<th>Educational qualification</th>
<th>Score assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 to 4 class</td>
<td>1</td>
</tr>
<tr>
<td>5 to 6 class</td>
<td>2</td>
</tr>
<tr>
<td>7 to 8 class</td>
<td>3</td>
</tr>
</tbody>
</table>

(c) Family structure

Family structure was divided into two major categories viz. nuclear and joint. Nuclear type was referred to the family composing of parents and their children only, while joint family referred to the family composing of more than one couple and their children including other persons related to them. The scoring procedure adopted was taken from the modified socio-economic status scale for rural of Kulshresta.

<table>
<thead>
<tr>
<th>Family structure</th>
<th>Score assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nuclear family</td>
<td>1</td>
</tr>
<tr>
<td>Joint family</td>
<td>2</td>
</tr>
</tbody>
</table>

(d) Family occupation

This was measured on the basis of the scores allotted to different family occupation in the socio-economic status scale developed by Trivedi (1963).

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Score assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service</td>
<td>1</td>
</tr>
<tr>
<td>Business</td>
<td>2</td>
</tr>
</tbody>
</table>

(e) Family monthly income

It is the sum of net annual income of the family. The scores were assigned as:

<table>
<thead>
<tr>
<th>Income group (Rs.)</th>
<th>Score assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to Rs. 5,000</td>
<td>1</td>
</tr>
<tr>
<td>Rs. 5,000 to 10,000</td>
<td>2</td>
</tr>
<tr>
<td>Rs. 10,000 to 15,000</td>
<td>3</td>
</tr>
<tr>
<td>Rs. 15,000 and above</td>
<td>4</td>
</tr>
</tbody>
</table>
(f) Religion

The selected study area was having mostly Hindu religion and some are Muslim. The following scoring pattern was adopted.

<table>
<thead>
<tr>
<th>Category</th>
<th>Score assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hindu</td>
<td>1</td>
</tr>
<tr>
<td>Muslim</td>
<td>2</td>
</tr>
<tr>
<td>Christian</td>
<td>3</td>
</tr>
<tr>
<td>Sikh</td>
<td>4</td>
</tr>
</tbody>
</table>

(g) Sex

Sex refers to the male and female respondents.

<table>
<thead>
<tr>
<th>Sex</th>
<th>Score assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>1</td>
</tr>
<tr>
<td>Female</td>
<td>2</td>
</tr>
</tbody>
</table>

(ii) Dependent variables

(a) Social development

Socialisation is the process of presenting alternate channels for individual together with positive and negative sanctions which will lead to acceptance of some and rejection of others. “The author emphasised the influence of social groups, formal and informal, upon the personality of the individual”.

(b) Emotional development

He believed that biological or animal derives such as sex and aggression were the primary forces behind the development of emotions. What is an emotion? It is an energy which can be channelised in the right direction or suppressed, thus converting it into a destructive force. It is involuntary, uncontrollable state of mind of little duration.
Late childhood children

Late childhood children extends from the age of six years to time the individuals becomes sexually mature. At both its beginning and end, late childhood is marked by conditions that profoundly affect a child’s personal and social adjustment, the physical growth is still slow and the child grows in height and weight the muscles get will developed.

Working women

A woman who is salaried employer wage earner, staying out of the house for at least eight hours a day during the day-time and working even since the birth of the child.

Non-working women

A woman who is not a salaried employee and who remains at home throughout the day.

Emotional Maturity Scale

This test was constructed by the Dr. Yashvir Singh and Dr. Mahesh Bhargava. 48 close ended questions were there in this test. For which responded were asked to tick on the yes/no option.

Maturity

The concept of maturity has not received a great deal of explicit attention in the literature. Delineation of libidinal development has been yielded the important formulation of the “Genital level” and “object interest (Freud, 1924). Recent emphasis on the conflict between the regressive, dependents, versus the progressive, productive forces in the personality has directed interest toward the more detail of maturity.

Emotional maturity

In the present circumstances, youth as well as children are facing difficulties in life. These difficulties are giving rise to many psycho-somatic problems such as
anxiety, tensions, frustration and emotional upsets in day to day life. So, the study of emotional life is now emerging as a descriptive science, comparable with anatomy. It deals with an interplay of forces with intensities and quantities. Available tests are crude and measure chiefly the degree of dependence. But this test measures the different aspects of emotional maturity. As self acceptance is an important aspect of maturity says Wenkart, and it must be preceded by acceptance from others.

According to Walter D. Smitson (1974) emotional maturity is a process in which the personality is continuously striving for greater sense of emotional health both intra-psychically and intra-personally.

(a) Emotional instability

This is a broad factor representing syndrome of lack of capacity to dispose off problems, instability, needs, constant help for one's day to day work. venerability, stubbornness and temper tandrums. This group factors has a high correlation (75) with the total score obtained on the scale. On the inter-correlational matrix, syndrome of emotional instability has high inter-correlation with social maladjustment but low correlations with emotional regression, personality disintegrations, and lack of independence. This factor has low correlations with the two factors analysed in factor analysis and seems to be an independent factor of emotional immaturity.

(b) Emotional regression

Emotional regression is also a broad group of factors representing such syndromes as feeling of inferiority, restlessness, hostability, aggressiveness and self-centreness. This factor has correlation with total score on the scale on inter-correlation matrix. It is highly intercorrelated with other two factors that of personality disintegration and lack of independence, but has low intercorrelation with those of emotional unability and social maladjustment factors. This has
emerged as the most broad factors in the scale as revealed by the factorial analysis. It has high inter correlations with (0.47), (0.45) and low intercorrelation with (0.27) and (0.18). It also has a high correlation (0.63) with the total score on all the five factors of the scale.

(c) Social maladjustment

Such a person shown lack of social adaptability should hatred, reclusive but boasting, liar and shirker.

(d) Personality disintegration

It include all those symptoms, which represent disintegration of personality, like reaction, phobias formation, rationalization, pessimism, immorality etc. Such a person suffers from inferiorities and hence reacts to environment through aggressiveness, destruction and has distorted sense of reality. In brief such a person shows varied degrees of neuroticism which could be put as below

\[
V_s \times S_s = \frac{A_d}{F} \times \frac{R}{P} \times \frac{T}{E} \times a \times N
\]

Where,

\[
V_s = \text{specific emotional vulnerability}
\]

\[
S_s = \text{External stresses specially in relation to emotional vulnerability}
\]

\[
A_d = \text{Difficulty of adjustment – internal and external}
\]

\[
F = \text{Flexibility}
\]

\[
R = \text{Regressive forces}
\]

\[
P = \text{Progressive forces}
\]

\[
T = \text{Emotional tensions}
\]

\[
E = \text{Ego strength}
\]

\[
N = \text{Degree of neuroticism}
\]
2. Lack of independence

Such as person shows parasitic dependence on others is egotic and lack 'objective interests'. People think of him an unreliable person.

Reliability

The reliability of the scale was determined by (i) Test-retest method and (ii) internal consistency.

(i) Test retest reliability

The scale was measured for its test, retest reliability by administering upon a group of collegiate children (N=160) including male and female children aged 6–12 years. The time interval between the two testing was that of six months. The product moment between the two testing was 80.

(ii) Internal consistency

The internal consistency of the scale was checked by calculating the coefficient of correlations between total score and scores on each of the five areas.

Validity

The scale was validated against external criteria. The area of the adjustment inventory for college students by Sinha and Singh. The inventory has different area measuring emotional adjustment of college student. The number of items of this area is twenty-one. Product moment correlation obtained between total scores on all twenty-one and total scores on EMS was .64 (N 0.64).

Interpretation

The scale was administered upon 160 school going children belonging to urban background. The three quartiles were calculated for the scores of all the 160 respondents.
Socio-economic Status Scale (SES)

The test was constructed by the L.N. Dubey and B. Nigam. 30 close ended questions were there in the test. For which respondents were asked to select are option only. The options were agree/disagree/strongly agree/strongly disagree.

The socio-economic status indicates the similarity of social position, income, occupation and education. Economic and educational factors play important role in determining the SES. The official position, rights, privileges and respect in society are other factors which raise SES of the individual and the family (Franzen, R. 1962).

Scoring

There are thirty items and each item has four alternatives. Allot 4 marks for the first choice, 3 marks for the second choice, 2 marks for the third choice and 9 marks for the fourth choice. Add the marks and interpret the raw scores is terms of class of SES use key for scoring.

Validity

The items of the scale were prepared in terms of degree to which they differentiate between upper, middle and lower class. These items were judged by the people of different classes namely (1) leading doctors, lowers, businessmen, professors and highly placed officials (2) middle class employers – bank employers, railway employees, school teachers and people working in different offices (3) persons working on different lower posts in schools and offices. The correlation coefficient of scores of these judges is found 0.62.

Reliability

The reliability of the scale is calculated by Test-retest method (N=100) with the gap of 30 days. The coefficient of correlation is found 0.81.
Vineland social maturity scale

This test was constructed by Dr. A.G. Merlin 56 close ended questions were there in the test for which respondents were asked to select one option only.

Maturation is the unfolding of characteristics potentially present in the individual that come from the individual’s genetic endowment in psychogenetic functions common to the race – such as creeping, crawling, sitting and walking. Social development comes from maturation. Social development means acquisition of the ability to behave in accordance with social expectations.

Reliability and validity

Correlation between VSHS social age (SA) and Binet MA was reported as 0.85 and Patterson (1943) reported correlation of 0.96 on normal children.

The construct validity yielded the correlation of 0.6 to 8.0.

Norms

Norms were established for each item of the scale, representing the age at which the behaviour appears on the average. Hence the social age norms are given in the table.

Scoring

The scoring should be done by parents or guardians, who know the children well. The individual should be asked whether the child “does” the activity, he should be asked whether he “can” do it. For each item award 9 mark for positive answer e.g. “yes” indicating that he does it, and zero mark for negative answer i.e. “No” indicating he does not do it. In case he does it up to some extent award half mark. Sum up all the marks and interpret in terms of social age (SA). After converting the raw scores into SA, compute the social quotient (SQ) by using the formula –

\[ SQ = \frac{SA}{CA} \times 100 \]
Period of investigation

The data collection was initiated from August 2005 to September 2006.

Statistical analysis

Statistical analyses are procedures used in finding out the numerical value of the whole study. The statistical techniques for data analysis used in the study are as follows:

1. Percentage
2. Mean
3. Weighted mean
4. Rank
5. Correlation coefficient
6. Rank correlation

1. Percentage

Single comparisons were made on the basis of the percentage, for drawing percentages, the frequency of a particular cell was multiplied by 100 and divided by total number of respondents in that particular category to which they belonged.

\[
\text{Percentage} = \frac{\text{The sum of all the responses}}{\text{Total number of all the responses}} \times 100
\]

2. Mean

The arithmetic average mean of a variable is obtained by dividing the sum of its given values by their number. If the variable is denoted by \(X\) and if \(n\) value of \(X\) are given \(X_1, X_2 \ldots \ldots X_n\), then the arithmetic mean of \(X\) is

\[
\overline{X} = \frac{\sum_{i=1}^{n} X_i}{n}
\]
3. Weighed mean

It is average which is calculated on the basis of weights and coding. If \(X_1, X_2, X_3, \ldots, X_n\) are the codes and \(W_1 + W_2 + W_3 \ldots \ldots \ldots W_n\) are their respective weights, then:

\[
\text{Weighted mean} = \frac{W_1X_1 + W_2X_2 + W_3X_3 + \ldots + W_nX_n}{W_1 + W_2 + W_3 \ldots \ldots \ldots W_n}
\]

\[
= \frac{\sum_{i=1}^{n} W_iX_i}{W_i}
\]

4. Rank

Rank was calculated from the values obtained from the weighted mean scores. According to the weighted scores, highest ‘Rank I’ was given to the highest score, second highest rank II was given to the second highest score and so on, lowest ‘Rank IV’ was given to the lowest weighted score value accordingly.

5. Correlation coefficient

Karl Pearson has given a coefficient of correlation for the measurement of linear relationship, which exists between two variables. If \(X\) and \(Y\) are two variables and if \(E(X,Y) \neq 0\) then correlation coefficient (r) is

\[
r = \frac{\text{Cov.} (X, Y)}{\sqrt{\text{Var.} (X) \cdot \text{Var.} (Y)}}
\]

or

\[
r = \frac{\Sigma xy}{\sqrt{\Sigma x^2 \cdot \Sigma y^2}}
\]

where,

\[
\Sigma xy = [\Sigma XY - \frac{\Sigma X \Sigma Y}{n}]
\]

\[
\Sigma x^2 = [\Sigma X^2 - \frac{(\Sigma X)^2}{n}]
\]
\[ \Sigma y^2 = \left[ \Sigma y^2 - \frac{(\Sigma y)^2}{n} \right] \]

and \( n = \) Sample size

Here, one variable is dependent on other. For testing the significance of correlation coefficient \((r)\), \(t\) test is applied. Degree of lack of relationship or coefficient of alienation is measured as –

\[ K = \sqrt{1 - r^2} \]

6. Rank correlation

In which the estimate the correlation between two characters on the basis of the rank of individuals in the whole lot for each of the characters without making an exact measure for any of the individuals.

After this, the rank correlation ‘R’ will be calculated by the following formula:

\[ \text{Weighted mean } t = \frac{0 - \Sigma d_1^2}{N (n^2-1)} \]

Where is difference between two ranks of an individual.

\[ \star \]