Chapter - III

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Chapter - III

PLANNING AND PROCEDURE

3.1. INTRODUCTION:

With the hypotheses formulated, the next major step to which the investigator turned was the planning of the experiment and detailed description of the investigation. This included the selection of the subjects for experimental group, evolving criteria for the same, descriptive data, about the instruments used and the design of the study including the way in which the experiment was conducted.

3.2. EXPERIMENTAL GROUP (SAMPLE)

Experiment was conducted on college girls. College girls at C.P.Ed. and D.P.Ed. classes at Itola, a small village of Baroda district, Gujarat, served as subjects for this study. There were 81 girls, all staying in the hostel on the college campus.

To select the group for the experiment all the subjects were rated on the following five variables:

1. Anxiety
2. Emotional Maturity
3. Frustration
4. Security - Insecurity
5. Adjustment Inventory
It was assumed that all these measures attributed to the level of mental health of an individual. Hence it was decided to select only those students who were found to be anxious, emotionally unstable, frustrated and insecure. To locate such subjects quartiles were computed as was taken into consideration of cut off point and subjects about that were considered to be high on that measure.

Subjects between $a_3$ and $a_2$ were designated to be middle on that measure, and subjects above that were considered to be high on that measure.

Subjects between $a_3$ and $a_2$ were designated to be middle on that measure and subjects between $Q_2$ and $Q_1$ were thought to be low on that measure.

Subjects below $Q_1$ were considered to be normal ones on that particular measure and hence they were treated as drop-out cases.

Based on this, the following criteria were devised to select the group for the experiment:

1. Those subjects who were rated as high on any two or more variable and not being dropped on any variable were considered to be in high group.

2. Those subjects who were rated as middle on any two or more variables and not being dropped on
any variable were selected to be in the middle group.

3. Those subjects who were rated as low on any two or more variables and not being dropped on any variables were selected to be in the low group.

Following this criteria 24 subjects were finally selected for the study.

As stated previously the sample for the study had the following qualities:

All the 24 subjects were found to be on the negative side of the mental health pattern. This means each subject was found to be anxious, emotionally unstable, frustrated and to be more specific subjects were further classified into three groups: High, Middle and Low. With eight subjects in each group. Those subjects whose mental health pattern was found to be 'poorest' were clustered in high group subjects whose mental health pattern was classified as 'poor' were included in the 'middle group' and subject whose mental health pattern was decided to be poor were clustered in 'low group.' Exact description in tabular form is presented in Chapter IV.

For selection of subjects for the final experiment same system was followed. Mental health pattern of each subject was taken into consideration and change of pattern was examined.
Encouraged by the results another study was done for cross-validation. In that replicated study one more variable was included. It was decided to examine the impact of meditation on Adjustment. General adjustment was examined. To secure general adjustment level, Adjustment Inventory (Kumar, 1967) was used.

3.3. INSTRUMENTS AND THEIR CHARACTERISTICS:

The following five standardized tests were used in the present study:

1. Anxiety Scale (Srivastava and Tiwari, 1973)
2. Emotional Maturity Scale (Kum. Roma Pal)
3. Frustration Test (Chauhan and Tiwari, 1972)
4. Security - Insecurity Inventory (Tiwari and Singh, 1975)
5. Adjustment Inventory (Kumar, 1967)

3.3.1. Anxiety Scale:

There are 100 'yes' - 'no' type of items in the scale, split half readability is reported to be 91, in the manual.

The validity of the test is established by correlating the scores with Sinha's W.A. Self Analysis and Sinha's comprehensive Anxiety Test. The correlation was found to be '73' and '71'.
There is no time limit for the test. But ordinarily examination take about 20 to 25 minutes in completing whole inventory. Score of one is to be given for any answer checked as 'yes'. As there are 110 items, the maximum possible score is 110. The total manifest anxiety score of an individual would be the sum of items checked as 'yes'. Higher score indicates high level of anxiety.

3.3.2. Emotional Maturity Scale

The following five areas of emotional maturity are taken into consideration in this scale:

1. Emotional unstability

2. Emotional regression

3. Faulty social adjustment

4. Lack of Independency

5. Flexibility and Adaptability

The test consists of 40 items, i.e., there are 8 items for each area of emotional maturity. Areawise as well as for the total scale split-half reliability is reported to be '81', '73', '74', '76', '80 and 74 respectively. Test-retest reliability is reported to be '72, '79, '82, '77, '86, and '77, respectively. Similarly internal consistency of the scale is also reported in the manual. It was checked by calculating the coefficient of correlations between the total scores and scores on each of the five areas. Areawise internal consist thus calculated is reported to be '79, '68, '69, '82 and '65 respectively.
The validity coefficient of the scale with Singh and Bhargava's Emotional Maturity Scale is reported to be '84.

The scale is self-administering, and can be administered individually as well as in group. There is no time limit, but usually it takes 15 to 20 minutes to complete the test.

There are 40 items in the scale. This is a five point scale. Maximum score for each item is 5, so maximum possible score is 200. Higher score indicates emotional instability.

3.3.3 Frustration Test:

The scale consists of 40 items. The following four modes of frustration are taken in account and each mode has 10 items. (1) Regression, (2) Fixation, (3) Resignation, (4) Aggression.

All the 40 items of the scale are presented in brisk style. Each item has six answers (multiple choice) graded on five point scale on the positive dimension and a zero point on the negative dimension.

Test re-test reliability is found to be '78, '92, '85 and '87 for four frustration modes respectively. As a whole test re-test reliability is found to be '88. Higher score indicates high frustration.

3.3.4 Security - Insecurity Inventory:

There are '70' items in the inventory. Each item has three alternative 'yes' or 'no' and 'indefinite' score range for each item from 0 to 2. Maximum possible score is 140. Higher score indicates insecurity.

Split half reliability as reported to be '67 and test re-test reliability is found to be '79.

External validity is established with Maslow's 3-I Inventory and the correlation was found to be '67. The inventory has been validated against teacher's rating also, and coefficient of correlation.

3.3.5 Revised Adjustment Inventory (RAI):

The split-half reliability of the test for the male sample apply the Spearman Brown for male for doubling the test length is found to be '88. (No=108) with index of reliability of '93.

The test retest reliability of the inventory with the male sample is found to be '81. (No = 63). time interval = One week).
with an index of reliability of '90, with the female group the test retest reliability is found to be '74. (N = 51, time interval = two weeks) with an index of reliability of '86. All t-values were found to be highly significant at 0.01 level of confidence.

Validity of the R.A.I.:

The coefficient of correlation of the RAI with Asthana’s 'Hindustani Adjustment Inventory (1950) was found to be '71, (N = 108) which was highly significant at 0.01 level of confidence.

3.4. EXPERIMENTAL DESIGN:

A special hall in the college campus was selected for meditation and it was exclusively used for this purpose during entire period of experiment.

This is because every place has its own vibration and if is a particular place used for meditation only, the atmosphere of that place is charged with emerge and becomes helpful in which one can go deeper more easily.

Similarly a regular hour in the morning was fixed for the experiment because body and mind is such a mechanism that any regular activity becomes a habit pattern and physically as well as mentally one is prepared for that particular activity at that particular time, if it is repeated regularly.
Experiment was carried out everybody in the same place and at the same time to create a climate because in the beginning such arrangement helped the subjects to be ease and to wait for the happening.

As no observation was to be formed subjects were very clearly asked to be loose and natural. They were instructed to be unoccupied, unobsessed and simply following during the experiment.

Instructions and Explanation:

Tape-recorder with stereo-sound system was used for being consistent in instructions throughout the experiment special 'Dynamic Meditation' music was there with instructions to help the subjects. Instructions were as under:

"When you get up in the morning, the whole nature is alive, the night is gone. The darkness is no more, the sun is coming up, and everything becomes conscious and alert. This is a meditation, in which you have to be continuously alert, conscious aware, whatsoever you do remain a witness, don't get carried away."

It is easy to be carried away while you are breathing you can forget to remain alert, you can become one with the breathing, so much so that you can target the witness. But then you miss the point. Breathe as fast, as deep as possible, bring your total energy to it. But still remain a witness, observe what is happening, if you are just a spectator, as if the whole thing is happening to somebody else, as if the whole
thing happening in the body and the consciousness is just centered and looking this witnessing has to be carried in all the three steps. And when everything stops, and in the four step you have become completely inactive, frozen, then this alertness will come to its peak.

First Stage (10 minutes):

Breathe vigorously through the nose, concentrating always on the exhalation. The body will take care of the inhalation. Do this as fast and as hard as you possibly can and then a little harder, until you literally become, the breathing use, your natured body movements to help you, to build up your energy, feel building up. But don't let go during the first stage.

SUBJECTS PHOTOGRAPHED WHILE PERFORMING THE FIRST STAGE
Second Stage (10 minutes):

Explod! Let go at everything that needs to be thrown out. Go totally mad, scream, shout, cry, jump, shake, dance, sing, laugh, throw yourself, around, hold nothing back, keep your whole body moving. A little acting often helps to get you started. Never allow your mind to interfere with what is happening, be total.

SUBJECTS PHOTOGRAPHS
WHILE PERFORMING THE SECOND STAGE
Third Stage (10 minutes):

With raised arms, jump up and down shouting the mantra "Hoo! Hoo! Hoo!" as deeply as possible. Each time you land on the flats of your feet, let the sound hammer deep into the six centre. Give all you have, exhaust yourself totally.

SUBJECTS PHOTOGRAPHED
WHILE PERFORMING THE
THIRD STAGE
Fourth Stage (10 minutes):

Stop! Freeze where you are in whatever position, you find yourself. Don't arrange the body in any way. A cough, a movement, anything will dissipate the energy flow and the effort will be lost. Be a witness to everything that is happening to you. Rejoice with music and express your gratitude towards the whole carry your happiness with you throughout the day.

SUBJECTS PHOTOGRAPHED
WHILE PERFORMING THE
FOURTH STAGE
CHART 1.1
EXPERIMENTAL DESIGN FOR MEASURING THE IMPACT OF
DYNAMIC MEDITATION ON MENTAL HEALTH OF
COLLEGE C.P.Ed. & D.P.Ed.
GIRLS

<table>
<thead>
<tr>
<th>GROUPS</th>
<th>MEASURE THE TEST</th>
<th>DYNAMIC MEDITATION</th>
<th>MEASURES</th>
</tr>
</thead>
<tbody>
<tr>
<td>N = 24</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIGHER GROUP</td>
<td>1. ANXIETY</td>
<td>All the subjects</td>
<td>Some as in Col.</td>
</tr>
<tr>
<td>(N = 8)</td>
<td>2. EMOTIONAL</td>
<td>did Dynamic</td>
<td>2 at after each</td>
</tr>
<tr>
<td></td>
<td>MATURITY</td>
<td>meditation daily</td>
<td>week i.e., after</td>
</tr>
<tr>
<td>MIDDLE GROUP</td>
<td>3. FRUSTRATION</td>
<td>for one hour.</td>
<td>7 days, 14 days</td>
</tr>
<tr>
<td>(N = 8)</td>
<td></td>
<td>These sessions</td>
<td>and 21 days</td>
</tr>
<tr>
<td>LOWER GROUP</td>
<td>4. SECURITY -</td>
<td>were conducted by</td>
<td></td>
</tr>
<tr>
<td>(N = 8)</td>
<td>INSECURITY</td>
<td>the investigator</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>for 21 days</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>without a break</td>
<td></td>
</tr>
</tbody>
</table>

As shown in Chart 1 the subjects were given a daily session of 1 hour for 21 days without a break. At the end of each week post test was administered to measure the impact. The results are presented in the Chapter IV.

3.5. DATA COLLECTION:

Investigator was on the staff of the institute where the experiment was to be conducted. Initially all the candidates of the college were tested for the measures. Tools were administered one by one with a sufficient time gap between two successive administrations.
Based on scores specific candidates were selected for experimental group. During the experiment same measures were administered at the end of the experiment final administration of the tests was done. As per manual subjects were assigned a status on a particular measure and it was seen whether any change in his position takes place on that particular measure. Following charts show the classification criteria for each measure.

**CHART I: II**

CLASSIFICATION CRITERIA FOR ANXIETY SCORES

<table>
<thead>
<tr>
<th>Measure</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. HIGH TROUBLE</td>
<td>66 and above</td>
</tr>
<tr>
<td>2. MIDDLE TROUBLE</td>
<td>50 to 65</td>
</tr>
<tr>
<td>3. LOW TROUBLE</td>
<td>32 to 57</td>
</tr>
<tr>
<td>4. MENTAL ANXIETY</td>
<td>51 and below</td>
</tr>
</tbody>
</table>

**CHART I: III**

CLASSIFICATION CRITERIA FOR INTELLIGENCE MATURESCORES

<table>
<thead>
<tr>
<th>Measure</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. HIGH</td>
<td>147 and above</td>
</tr>
<tr>
<td>2. MIDDLE</td>
<td>120 to 146</td>
</tr>
<tr>
<td>3. LOW</td>
<td>132 to 138</td>
</tr>
<tr>
<td>4. MENTAL MATURE</td>
<td>131 and below</td>
</tr>
</tbody>
</table>
### CHART - IV
CLASSIFICATION CRITERIA FOR FRUSTRATION SCORES

<table>
<thead>
<tr>
<th>Group</th>
<th>Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. High</td>
<td>119 and above</td>
</tr>
<tr>
<td>2. Middle</td>
<td>114 to 118</td>
</tr>
<tr>
<td>3. Low</td>
<td>101 to 113</td>
</tr>
<tr>
<td>4. Normal</td>
<td>100 and below</td>
</tr>
</tbody>
</table>

### CHART - V
CLASSIFICATION CRITERIA FOR SECURITY - INSECURITY SCORES

<table>
<thead>
<tr>
<th>Group</th>
<th>Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. High</td>
<td>63 and above</td>
</tr>
<tr>
<td>2. Middle</td>
<td>55 to 62</td>
</tr>
<tr>
<td>3. Low</td>
<td>49 to 54</td>
</tr>
<tr>
<td>4. Normal</td>
<td>48 and below</td>
</tr>
</tbody>
</table>

### CHART - VI
CLASSIFICATION CRITERIA FOR ADJUSTMENT SCORES

<table>
<thead>
<tr>
<th>Group</th>
<th>Score Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. High</td>
<td>28 and above</td>
</tr>
<tr>
<td>2. Middle</td>
<td>22 to 27</td>
</tr>
<tr>
<td>3. Low</td>
<td>16 to 21</td>
</tr>
<tr>
<td>4. Normal</td>
<td>15 and below</td>
</tr>
</tbody>
</table>
3.6. DATA ANALYSIS PLAN:

At the end of an experiment, score on all the measures were at hand. It was a big task before the investigator to present the data systematically. At the outset the investigator prepared a 'Master Chart' showing the numerical scores for the variables under study, so as to work out the findings in a systematic form. From this 'Master chart' separate score cards were prepared for each subject of the experimental group separately. This made manual calculation easy. Needed statistical inference were drawn. Based on this, data analysis plan was worked out and it was thought worthwhile to computerize the data. The score cards were punched at the computer center at Sardar Patel University, Vallabh Vidyanagar for further statistical calculations. After the cards were satisfactorily verified, the programme was prepared to calculate the required data.

Along with statistical data looking to the nature of the study and to understand the Gestalt impact of meditation investigator interviewed each subject individually, subjects were asked to furnish such qualitative impressions on scheduled forms. Those forms were also studied and separate report for some cases is also presented in descriptive form.