Chapter – III

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Chapter – III

Plan and Procedure of the Present Study

3.1 Introduction

Planning is the most essential step to construct the scale systematically. The planning helps the investigator to make the work possibly faultless. Without comprehensive planning for the research work, no specific outcome would be generated. For the better and scientific planning of the work, the chief objectives of the research must be kept in view constantly. The objective of the present research is to study mental health of the higher secondary school students in relation to their sex, area, cast (category), achievement and stream. In the present chapter, the investigator describes the details regarding to research method, population, sample, tools, method of data collection, techniques for analysis of the data, assigning weightage & description of component and scoring of the scale.

3.2 Need of the tool

To develop human personality, the basic thing is health. There are two main aspect of health physical and mental. Both are important aspects. In the other way investigator likes to quote Sir Walter Scott’s statement, “ill health of body or mind is defeat, health alone is victory. Let all men if they can manage it, contrive to be healthy”.

For studying mental health of student, the first thing before the investigation was to study the tool available in the respective field. After
studying different type of tools, investigator seems to need any other tool, which can help to measure student’s health status in multiple dimensional.

This study will pass through two phases.

Phase I : Construction and standardize mental health scale

Phase II : Related study on mental health

For the first phase, construction and standardization of the mental health scale is required.

3.3 Design and process

This part describes design and process of the study.

3.3.1 Research method

Out of different methods of conducting research, survey method was considered appropriate using “Descriptive Survey Design”. This research design was considered the most appropriate to obtain answers to research questions that arise. It sometimes known as non experimental or co-relational research, deals with the relationships between variables, the testing hypotheses, and the development of generalization, principles or theories that have universal validity. It is concern with functional relationship.

3.3.2 Population

The students of std.-XI and XII of Gujarat state was taken as population for this study. The number of students were 3,87,506 during the academic year 2006-07.
3.3.3 Sample

The investigator had used stratified random sampling method for selection of sample. The representative sample is selected from all districts of Gujarat state. The sample consists of 5240 number of students from different district of Gujarat state. District wise total number of students drawn for sample from Gujarat state is shown in the Table – 5.1 of chapter – V.

The number of students taken as sample at different stages for construction and standardization of mental health scale are given in the following Table – 3.1.

Table – 3.1

Number of students taken as sample at different stages for construction and standardization of mental health scale

<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Stage</th>
<th>Rural</th>
<th></th>
<th>Urban</th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Boys</td>
<td>Girls</td>
<td>Total</td>
<td>Boys</td>
<td>Girls</td>
</tr>
<tr>
<td>1</td>
<td>Pre-Pilot</td>
<td>40</td>
<td>40</td>
<td>80</td>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>Pilot</td>
<td>136</td>
<td>90</td>
<td>226</td>
<td>103</td>
<td>104</td>
</tr>
<tr>
<td>3</td>
<td>Final</td>
<td>1098</td>
<td>996</td>
<td>2094</td>
<td>1757</td>
<td>1389</td>
</tr>
</tbody>
</table>

Details of sample in final stage are given in the Table – 5.2 of chapter – V.

3.3.4 Tools to be taken

In the present study, to collect the required data, the following tools were used.

1. Mental Health scale (Constructed and standardized by investigator)

For collecting data investigator developed and standardized mental health scale. Mental health scale is a dependent variable in present study. In this
scale investigator has taken different component, which can more effect on mental health of higher secondary school students. Keeping in mind different component, the investigator makes number of statements which measure mental health more sharply.

2. SES Scale developed by Dr. Pallaviben P. Patel (see Appendix – H)

The investigator has used Socio Economic Status Scale developed and standardized by Dr. P. P. Patel with a view to measure the Socio Economic Status of the students. This test measures Socio Economic Status of school students. The reliability index of the test established by test-retest method and split half method were 0.85 and 0.82 respectively. Also the validity of the test was established by concurrent validity having value 0.88.

3. Emotional intelligence scale standardized by Dr. Pallaviben P. Patel

Emotional intelligence scale developed by Dr. Pallaviben P. Patel was used. This scale was standardized on the students of 11th and 12th of Gujarat state. The reliability of the scale by test-retest method is 0.89 and by split half method is 0.85. The validity of this scale is calculated by Item Index Validity method. (see Appendix – I)

4. Mental Health Analysis Questionnaire standardized by Dr. Harkant D. Badami and Dr. Charulata H. Badami

Mental health analysis questionnaire by Dr. Harkant D. Badami and Dr. Charulata H. Badami was taken. The reliability of the scale by test-retest method is 0.81. (see Appendix - G)

5. Anxiety scale standardized by Dr. Pallaviben P. Patel (see Appendix-J)

6. Security-Insecurity scale standardized by Dr. Hitesh P. Patel. (see Appendix - K)
3.3.5 Method of data collection

The data collection was done in two phases. During Phase – I data was collected for standardization of mental health scale. During Phase – II data was collected by giving mental health scale, SES scale, Emotional intelligence scale, Anxiety scale and Security-insecurity scale.

3.3.6 Techniques for analysis of the data

The following techniques of data analysis and statistical calculation were applied.

1. The frequency distribution tables and figures were prepared and placed in the reports to present the data comprehensively.
2. Mean
3. Standard deviation (S.D.)
4. Median
5. Quartile deviation
6. Correlation
7. t – test
8. $\chi^2$ – test
9. The significance at 0.05 and 0.01 levels of confidence were considered satisfactory for the acceptance or rejection of the null hypotheses.

3.3.7 Norms

Norms have been decided to establish for the present test were

1. Percentile Ranks
2. Standard score
3.3.8 **Reliability**

In the present study, the investigator decided to use different methods for estimating the reliability which are as follows:

1. Test-Retest Method
2. Split-Half Method
3. Rulon formula
4. Flanagan Formula

3.3.9 **Validity**

The investigator has tried to determine validity of the present scale as follows:

1. Operational validity
2. Face validity
3. Content validity
4. Congruent validity
5. Construction validity

3.4 **Construction of mental health scale**

Construction of scale is systematic process. The process of construction of mental health scale is described as follows:

3.4.1 **Guiding Principles for preparation of scale statements**

The present scale has five components like Security-Insecurity, adjustment, emotional stability, self concept and autonomy. Guiding principles are as follows

i. The statements should measure individual component.

ii. The statement should be simple in language.
iii. The statement should be in five points rating scale of performance i.e. always, often, occasionally, rarely and never.

3.4.2 Assigning weightage

Next essential point that was to be considered, was regarding weightage to be assigned to each component of scale.

For that, the opinions were taken from various experts (see in APPENDIX – A) of education field. Investigator gets data in the form of preference of each component. Regularity as a one component is omitted. The weightage given to each component of mental health scale is shown in Table – 3.2.

Table – 3.2

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Component</th>
<th>Weightage in percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Security-Insecurity</td>
<td>30%</td>
</tr>
<tr>
<td>2</td>
<td>Adjustment</td>
<td>25%</td>
</tr>
<tr>
<td>3</td>
<td>Emotional stability</td>
<td>20%</td>
</tr>
<tr>
<td>4</td>
<td>Self concept</td>
<td>15%</td>
</tr>
<tr>
<td>5</td>
<td>Autonomy</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

3.4.3 Construction and selection of the statements

Initially 94 statements were constructed keeping in mind the components. According to judge’s agreement on these statements and according to their suggestions, modifications were made. So, after that 76 items were selected for pre-pilot test.
3.5 Description of scale measuring mental health

This part deals with the description of the scale.

3.5.1 Description of components

Description of components are given below.

3.5.1.1 Security-insecurity

Mentally healthy person feel secure & make secure other who feel insecure.

Dr. G. Arun Mohan (2009, p. 304) noted that one has a sound sense of security, which grows out of his feelings of belonging and being desired. He has feelings of adequacy. He has adjusted his aspirations to his talents and opportunities. He is free from excessive anxiety, depression, worry and disturbing fears.

Suresh Bhatnagar and Anamika Saxena (2008, p. 499) noted that life has become so conflict-ridden in contemporary society that the individual feels a threat to his very existence at almost every moment. He feels threatened at every step, at every place. In India, there is neither a set national educational policy nor any comprehensive plan or scheme for national development. Whatever few schemes and plans do exist are moving forward at such a snail-like pace that the individual is finding it difficult to pass his present time. The result is an inevitable increase in mental tension.

3.5.1.2 Adjustment/ Satisfactory social Adjustment

Mentally healthy person can easily adjust themselves in all the unfavourable situation and try to solve the problem rather than to run away.
Herbert Spencer defined ‘Life is the continuous adjustment of the internal to the external relations.’ Biological view thus emphasizes adaptation for survival. A satisfactory relationship may mean adaptation to the demands of reality. A person adapts himself to the environment, to overcome frustration in achieving the gratification of his needs through the adjustment process. The situation that offers few barriers makes the person struggle to overcome them. The adjustment process is affected and modified by the individual’s experiences and thus learning plays a significant part in aiding adjustment.

From the cultural point of view, adjustment is assessed when his cultural group accepts an individual. The behaviour in one culture is adjustive and normal and the same behaviour in another culture is maladjustive and abnormal. The idea of conformity to the social norms seems to determine whether one is adjusted or not. But conformity to culture becomes a static affair while adjustment is a continuous dynamic process.

Dr. G. Aruna Mohan (2009) says, “According to the requirements of the seasons, we wear clothes and adjust temperature of the houses and work places with modern technology. Thus there is a continuous struggle between the needs of the individual and the forces outside his environment. It consists in the reduction of inner needs and strains. Individual needs differ from person to person and from time to time. Accordingly, he adjusts himself in the immediate environment to meet his needs.”

Mangal, S. K. (2007, p. 527) defined Adjustment with regard to mental health as the other major aspect of one’s personal adjustment is related with his mental development and mental health. Like physical development, and individual of a particular age is expected to function at a certain level of intellectual growth and development. In case one does not
acquire even the normal mental capacities and abilities expected at his age, he may feel handicapped in terms of intellectual behaviour and this deficiency (while compared to other) may lead to frustration and complexes. Similarly, one who is not deeping good mental health may turn into a maladjustment personality. Anxiety, distress, stressful situation, pressures, complexes, frustrations all are bitter enemies of one’s mental health and these may lead a person to total maladjustment with his self.

3.5.1.3 Emotional stability

Mentally healthy person is emotionally stable in all the unfavorable circumstances.

To give a definition of emotion is an difficult task. Like motivation, the effective states – emotions and associated feelings, cannot be observed directly. However, inferences by observing the over behaviours accompanied by reflections on face, voice, gestures etc. can be drawn. But, since man is a dynamic person, such inferences sometimes go wrong. Despite these difficulties, the studies done so far indicate that emotions is conscious experience of joy, sorrow, hope, love, excitement, anger, hate and many other feelings.

B. K. Mishra (2008, p.448) noted that the term emotion is often considered synonymous with the term ‘feeling’ and ‘mood’. Feeling denotes the pleasure and pain dimensions of emotion which usually involve bodily functions. Mood is an affective state of long duration but relatively of lesser intensity than emotion. Both of these concepts (feeling and mood) are narrower than the concept of emotion. Emotions are a complex pattern of arousal, subjective feeling and cognitive interpretation. Emotions, as we
experience, move us internally and this process involves physiological and psychological reactions.

Emotion is a subjective feeling which varies from individual to individual. When an emotion is produced, the stimulus situation is perceived and evaluated as significant. This obviously means that the present emotion arousing situation is related to past experience and is also seen as having implication for the future. For example, presence of a dangerous situation arouses fear or horror in us because, we perceive the situation as dangerous on the basis of past experience. Similarly, our emotions of anger is aroused because we perceive the situation as dangerous or insulting – threats of being attacked. The emotion of love is aroused because we perceive the love object as positively affectionate. Hence, it is clear that the stimulation of emotion depends upon subjective perception of (experience) the stimulus situation as emotion frustrating based on sensing and evaluation.

Emotions usually occur with great suddenness. We suddenly and almost automatically feel pride at the success, anger at the sight of fast approaching enemies, disgust at the sight of careless table manners, love at the sight of beloved etc. Such sudden reactions do not depend much upon the events themselves, but the way in which events are evaluated or judged. Thus, emotion is a reaction to stimuli perceived and evaluated as emotion.

Emotional stability means do not react suddenly to stimuli perceived and evaluated as emotion.
3.5.1.4 Self-concept

Mentally healthy people can aware of their own ability and limitations. He decides the goal in light of his ability and limitations. He does not try more to get more than his ability.

Concept about the self is termed as one’s self-concept. It reflects the image, considerations or judgments about one’s abilities and limitations usually held by an individual not only for projecting himself before others but also for estimating himself in his own eyes. It is in this context that the term self-concept has been defined by the famous psychologist H. J. Eysenck in the following words:

“The totality of attitudes, judgment and values of an individual relating to his behaviour, abilities and qualities may be referred to as his self concept.”

In this way, what one thinks of himself may be referred to as his concept about his self. Like the development of other concepts about people, idea, objects and places, the formation of self concept is also the result of the interaction of his self with the environment surrounding him. Such interaction loaded with past and present experiences may make an adolescent have aware about a judgmental value related to his potentialities, his strengths and weaknesses, personality traits and behaviour pattern etc. Actually this is his judgment about his self, drawn from his own experiences and interaction with his environment. Therefore, the past of an adolescent related with his infancy and childhood intermingled with his present experiences become a deciding factor for a particular type of self concept. Thereby we may notice significant differences among the adolescent boys and girls depending upon their individualities, social and cultural background and varying experiences.
3.5.1.5 *Autonomy*

Mentally healthy person is doing all his work independently and does not like anybody else’s interference. He takes decision on his own. He forms objectives independently and modes of fulfilling and achieves them. He evaluates his own decision and works on them. He takes full responsibility of his actions, deeds and behaviour.

3.5.2 *General instruction*

There are several instructions on scale booklet of Mental Health Scale. On the front page student have to write their name, cast, school name, area, standard, stream etc. Approximately 30 minutes should be given for responding. Students have to give their respond by putting tick mark of right ‘✓’ in the given appropriate block.

3.5.3 *Scoring of scale*

The constructed statements were rated by Likert’s Rating Scale Method which has 5 points. The answerer indicates the agreement to the statement at five levels i.e. always, often, occasionally, rarely and never. The meanings of each word are as follows

- Always : To behave always according to statement
- Often : To behave often according to statement
- Occasionally : To behave occasionally according to statement
- Rarely : To behave rarely according to statement
- Never : To behave never according to statement
The scoring of each word for positive statement is as follows:

Always : 5 scores
Often : 4 scores
Occasionally : 3 scores
Rarely : 2 scores
Never : 1 score

The scoring of each word for negative statement is as follows:

Always : 1 score
Often : 2 scores
Occasionally : 3 scores
Rarely : 4 scores
Never : 5 scores

3.6 Conclusion

Planning and procedure of the study are multi-facet. This chapter includes research method, population, sample, tools, data collecting technique and data analysis. This chapter also includes the brief description of the different tools with its validity and reliability.

Initially 94 statements were constructed. According to judge’s agreement on these statements and according to their suggestions, modifications were made. So, after that 76 items were selected for pre-pilot test.

The next chapter deals with development of the present scale.