Chapter 3

Statement of the Problem and Hypothesis and Methods
We are living in what has been called an age of turbulence, an age of anxiety and stress, when man’s ability to cope with his environment is being taxed in new and unprecedented ways. Other generations have faced threat, peril, and anxiety, but there is something different about the stresses that confront us today. Current emotional pressures are more subtle, more intangible, more pervasive. Man is now faced with a world of increased complexity in which his adjustive capacities are strained; there is no way to escape and often no way to fight back.

The National Association of Mental Health, although an oversimplification, comes closest to saying it all in a few words. They describe a mentally healthy person as one who feels comfortable about himself,
feels right about other people, and is able to meet the demands of life. Another line of thought relates mental health to the competence with which an individual lives in his environment and the competence of social institutions (home, school, work, recreation, etc.) to make his living as effective as possible. This approach considers mental health in terms of the quality of interaction between an individual and his environment, rather than its intrapsychic manifestations.

One of the major aims of the education is the development of wholesome personality. The student life is influenced by the home and school. Home and school are the primary agencies to develop the personality. The school is the second home to the child. Teachers and parents have greater responsibility to foster mental health status of the students. The school substitutes the home situations and often meets the emotional needs are neglected in the home.

Over the past few years a number of studies like Powers, Stephen; Wagner, Michael (1984), Madhu Asthana (2000), Reddy, Babu Rao & Nagaratnamma (2002) have shown that the school environment and its associated factors, such as attitude toward teacher, methods of teaching co-students, facilities available in the classroom and school as a whole; adversely affects on mental health status of children.
Achievement is a need to accomplish something difficult; to master, to manipulate or organize ideas, or people; to do this rapidly and as independently as possible; to overcome obstacles and attain a high standard; to excel oneself; to rival and surpass others; to increase self-regard by the successful exercise of talent (Murray). Achievement, again is synonymous to the level of proficiency in scholastic work.

Achievement need is one of the needs postulated by Murray referring to the desire to master objects, ideas and persons.

Achievement motivation is an important milestone on the way to success. If it is not a personal and unchangeable characteristic which comes from the birth, it is element of education that emphasize vitally. Therefore, achievement motivation should be recognized by the teachers who designs learning environment.

According to Chaplin’s (1970) Dictionary of Psychology, academic achievement is a specific level of attainment of proficiency in academic work as evaluated by teacher by standardized tests or by a combination of both. Academic achievement as an aspect of the total behaviour of the students is an outcome of the interaction of the students as an individual with this environment, namely school or college teachers and peers. Krishna Murthy
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(2000), reported that there is significant positive relationship between Achievement Motivation and Academic Achievement.

Academic achievement is related to the acquisition of principles and generalizations and the capacity to perform efficiently certain manipulations of objects, symbols and ideas. Assessment of academic performance has been largely confined to the evaluation in terms of information, knowledge and understanding. It is universally accepted that the acquisition of factual data is not an end in itself but that an individual who has received 'education' should show evidence of having understood them. But, for obvious reasons the essay type of tests and examinations are largely confined to the measurement of the amount of information which students have acquired. This apparent inconsistency between the stated purposes of the process of education and devices commonly used for assessing them is perhaps due largely to the difficulty involved in constructing devices that would provide true measures of ability of the student, to think for himself and solve problems.

The school going adolescent face several stresses and adjustment problem such as the age old, custom, honored, parental authority. The compelling demands of a stirring sexual / biological phenomenon and the school's powerful demand for examination success actively supported by parents. Any school worth its name whether it be elite, public private or
government demands and exerts from its students irrespective of capability and quality a minimal performance in the examination halls. This is easily borne out when one reads in the newspaper schools advertising 100 percent success and the examination boards announcing glaringly low percentage of students have gone down! As Chandler et al. (1962) observe the adolescent becoming increasingly bureaucratized by the activities of high school and the products of such a system of control may prove to be a more rigidly conformist population of adults.

Now-a-days education has become highly competitive and commercial. On the basis of better Academic Achievement alone students get selected for better course of study and eventually for better jobs. Academic Achievement is a product of various factors like adjustment, achievement motivation, socio-economic status, school environment etc. But in most of the studies the relative contribution of all these factors do not find a place. The present study is an attempt to investigate the relative contribution of mental health, achievement motivation and other demographic variables to academic achievement.
OBJECTIVES

1. To examine whether on an absolute level the adolescent students of the study would possess good mental health.

2. To examine the level of achievement motivation of the subjects of the study.

3. To study the impact of mental health on academic achievement of the students.

4. To study the impact of achievement motivation on academic achievement of the students.

5. To examine the relationship between demographic variables on mental health, achievement motivation and academic achievement.

HYPOTHESIS

1. (a) There would be significant difference between the boys and girls with regard to mental health.

   (b) There would be significant difference between the boys and girls with regard to achievement motivation.

   (c) There would be significant difference between the boys and girls with regard to academic achievement.

2. (a) There would be significant difference between urban and rural students with regard to mental health.
(b) There would be significant difference between urban and rural students with regard to achievement motivation.

(c) There would be significant difference between urban and rural students with regard to academic achievement.

3. (a) There would be significant difference between schools and college students with regard to mental health.

(b) There would be significant difference between schools and college students with regard to achievement motivation.

(c) There would be significant difference between schools and college students with regard to academic achievement.

4. (a) There would be significant relationship between education level of parents and mental health status of the subjects.

(b) There would be significant relationship between education level of parents and achievement motivation of the subjects.

(c) There would be significant relationship between education level of parents and academic achievement of the subjects.

5. (a) There would be significant relationship between parents’ occupation and mental health status of the subjects.

(b) There would be significant relationship between parents’ occupation and achievement motivation of the subjects.
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(c) There would be significant relationship between parents' occupation and academic achievement of the subjects.

6. (a) There would be significant relationship between family income and mental health status of the subjects.
   (b) There would be significant relationship between family income and achievement motivation of the subjects.
   (b) There would be significant relationship between family income and academic achievement of the subjects.

7. (a) There would be significant relationship between caste and mental health status of the subjects.
   (b) There would be significant relationship between caste and achievement motivation of the subjects.
   (c) There would be significant relationship between caste and academic achievement of the subjects.

8. There would be significant relationship between mental health and academic achievement of the subjects.

9. There would be significant relationship between achievement motivation and academic achievement of the subjects.

10. There would be significant relationship between mental health and achievement motivation of the subjects.
Materials

In order to realize the objectives of the study and to test the hypotheses that have been formulated, appropriate tools were chosen. Thus the study has necessitated the following tools:

1. Personal profile sheet.
2. Mental Health inventory.
3. Achievement motivation scale.
4. Recording of academic achievement

Description of the Materials

Tool 1  Personal Profile Sheet

This tool was prepared by the investigator to obtain information relating to personal details, namely, age, gender, class, ordinal position, parents' education, parents' occupation and income, caste and type of family of the subjects. (Appendix - II)

Tool 2  Mental Health inventory

Most of the psychometric devices available to assess mental health tend to measure the negative aspects of mental health. Rather they measure the mental ill-health of the individual. Individual lower score on mental ill-health is supposed to indicate his "good mental health". But in fact, absence of
mental ill health may not be considered as an indicator of good mental health or psychological well being. That was the reason the positive aspects of mental health were taken for the present study.

It is difficult to have a global score for positive mental health, but a number of attempts have been made to measure some of its aspects. Though they are overlapping and to that extent interdependent eg: General well-being (Verma et al., 1983 Sharma, 1985) adjustment (Veroff et al., 1962).

Assessment of mental health falls largely into two categories viz., interview schedules and standardized psychological scales or instruments on the one hand, and clinical interviewing on the other.

Instruments like mental health analysis questionnaire (Badami and Badami 1984), mental health questionnaire (Srivastava) and mental health inventory (Jagdish and Srivastava, 1983) were available to assess mental health of the subjects. Of these tools mental health inventory developed by Jagdish and Srivastava (1983) was chosen for the present study. This tool consists of 54 items relating to:

a. Positive self evaluation (PSE)
b. Perception of reality (PR)
c. Integration of Personality (IP)
d. Autonomy (AUNTY)
e. Group oriented attitudes (GOA)
f. Environmental mastery (EM)

In the present scale, four alternative responses have been given to each statement i.e., Always, Often, Rarely and Never. A response of “Always” is given a score of 4, a score of 3 is given to a response of “Often”, a score of 2 is given to a response of “Rarely” and a response of “Never” is given a score of 1 for true keyed (Positive) items, where as 1, 2, 3 and 4 scores are given for “Always”, “Often” “Rarely and “Never” respectively in the case of false keyed (negative) statements. In table 1, the over lined items are negative while the remaining are positive. The test-retest correlation of 50 individuals with an interval of 50 days is found to be 0.79.

Table 1: Item numbers included in various dimensions of mental health

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Dimension of Mental Health</th>
<th>Items</th>
<th>+VE</th>
<th>-VE</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>PSE</td>
<td>1,7,13,19,23,27,32,36,45,51</td>
<td>6</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>2.</td>
<td>PR</td>
<td>6,8,14,24,35,41,46,52</td>
<td>4</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>3.</td>
<td>IP</td>
<td>2,8,15,18,20,25,28,33,36,40,47,53</td>
<td>1</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>4.</td>
<td>AUNTY</td>
<td>3,10,29,42,48,54</td>
<td>2</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>5.</td>
<td>GOA</td>
<td>4,11,18,21,26,30,39,43,49</td>
<td>4</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>6.</td>
<td>EM</td>
<td>5,12,17,22,31,34,37,44,50</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>23</td>
<td>31</td>
<td>56</td>
<td></td>
</tr>
</tbody>
</table>

PSE : Positive self evaluation       AUNTY: Autonomy
PR : Perception of reality            GOA : Group oriented attitudes
IP : Integration of Personality       EM : Environmental mastery.
Methods

The inventory is intended as an aid in counseling individuals in various spheres of life mostly employed in industrial and educational research fields. The scale helps to screen the individuals with poor mental health, who may need assistance and counseling for their happier life and excellent future. High score on this scale indicates poor mental health. (Appendix – III).

Achievement motivation scale

Achievement motive has a more significant influence on the success or failure of an Academic success than any other motive we know about, such as, the competence motive, (White, 1959), the affiliation motive (Schacter, 1959), etc. Every one has an achievement motive to some extent, but some people are consistently more oriented toward achievement than others. Perhaps the most important aspect of a really strong achievement motive is that he tries harder. Most of the people will put more effort into their work if they are challenged to do better as if some valid reason for exertion is pointed out to them. But the achievement motivated person is likely to outstrip all others in his zeal to improve his performance when he is challenged to do so. He tries harder and demands more of himself, especially when the chips are down. Consequently he accomplishes more. McClelland (1959), on administration of his theory on executives found that the higher the level of achievement motivation, the more likely is the executive to rise to positions of greater power, and responsibility.
Investigation of need achievement has been undertaken by three methods, vis., direct objective methods, situational tests and projective measures.

1. Direct measures utilize direct questioning, inventories, multiple choice type items, etc.

2. Ratings of behaviour in a situation have also been used to measure motivation.

3. Projective measurements are based on the assumption that the fantasies of an individual are as much a part of 'operant' behaviour as any other behaviour and therefore, the needs and motives of a person are reflected in the fantasies of the individual. A number of projective and semiprojective tests have been developed to assess the need for achievement.

The tool designed by Pratibha Deo and Asha Mohan in 1985 was used to assess achievement motivation. This consists of 50 items. Five alternative responses have been given to each statement i.e., always, frequently etc., out of these items 37 were -ve and 13 were +ve. The scale designed by Pratibha Deo and Asha Mohan was used for the present study to assess achievement motivation (Appendix IV).
Academic Achievement

Academic achievement is the performance of the students in their exams in the course of their study in their respective institutes. The marks awarded to the students in the year / annual examinations conducted by the school or college system is taken as the index. In addition to this the opinions of teachers and the peers also were taken into consideration.

Sample

The subjects of the study comprised of 600 students studying in high schools and Junior Colleges in and around Tirupati, Chittoor District, Andhra Pradesh, in the age group of 13-18 years. The details of the sample are given below.

Table 2: The distribution of sample in each category

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Gender</th>
<th>Urban School</th>
<th>Urban College</th>
<th>Rural School</th>
<th>Rural College</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Girls</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>300</td>
</tr>
<tr>
<td>2.</td>
<td>Boys</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>300</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>300</td>
<td>300</td>
<td>600</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Selection of the random sample involved two steps. In the first step lists of schools and colleges in and around Tirupati are obtained. From these lists 9 schools and 7 colleges were selected to draw samples for the study.

In the second step with the permission of the Head Masters & Principals concerned, all the schools and colleges located for study have been visited and lists of the students have been prepared along with their personal details. From these lists students of various categories as shown in table 2 have been selected at random. In order to check the loss of Subjects in the process of testing over sampling has been done to an extent of approx. 20%. The mean age of the subjects selected for the study is 16.4 years.

Method

The study has been conducted in two phases:

1. Pilot study
2. Main study

The pilot study has been conducted on 100 students (50 Boys and 50 Girls) who fulfilled the established criteria for the following purposes:

1. To assess the mental health, achievement motivation and academic achievement.
2. To decide on the order of presentation of the tools.
3. To estimate the time taken to complete evaluation of each subject.
4. To familiarize the researcher with the administration of the tools.
Methods

Based on the pilot study the order of presentation of the tools for the main study has been decided as follows:

1. Personal profile.
2. Mental Health analysis.
3. Assessment of achievement motivation.
4. Assessment of academic achievement.

Subjects have been personally interviewed and data collected using structured schedules. The time required for each testing session was approximately 60 mts, which has enabled the investigator to plan data collection in view of the examinations and holidays in the Schools/Colleges. Prior permission from the school principal and class teacher has been taken after briefing them about the purpose of the study before the students are first contacted. The Principal, teachers and students have been very cooperative throughout the data collection.

In the main study, the investigator has personally contacted and selected sample of students in the school and college during the working hours. After establishing personal rapport with each selected student, the items in the general information questionnaire have been read and the students asked to fill in the data regarding their personal details.
Methods

The investigator has spent 60 mts in a total of two contacts with a group of 25 students for the administration of questionnaires in the same order of presentation. The students have been helped whenever they have felt ambiguous about an item or expressed a feeling of confusion. They have been assured of confidentiality and requested not to discuss the proceeding with other fellow students. In order to minimize discussion among students, data collection has been spaced in such a way that all the students have been able to fill the first questionnaire in a short time and then proceed on to the second questionnaire.

Analysis of Data

The data obtained have been treated statistically in order to test the hypothesis. The design measures like means, SDs and 'Z' test, ANOVA, Correlation, Chi-square Test and Regression Analysis have been employed. In some instances descriptive statistics like frequency and percentages have been used for further analysis of the data.