Chapter - VII

DATA ANALYSIS : CORRELATIONAL STUDY

7.0 Introduction
7.1 Measure of Creative Personality
7.2 Rating of Creative Students
7.3 Teachers Creativity V/s Students Creativity
7.4 Global View
1.0 INTRODUCTION:

The present century is notable for the interest displayed by educators and the lay public in attempts to find an answer to the question: Who is an effective teacher?

Many informal and more formal studies have been conducted to ascertain the attributes of apparently successful leaders of young people's learning. The significance of the teacher in the complex totality of the teaching-learning process cannot be minimized.

"A good teacher and the quality of his teaching have always been of paramount importance to freemen and to a free society. As responsive note in the culture of people's through the world, the need for good teaching can be met only as we draw on our ware houses of research findings to improve teacher competence every where."

Young people tend to want to do things in ways that differ from accustomed routines. They constantly are seeking approaches to the meettings of situations that are likely to arise in day-by-day activities. Most adolescents have the urge to create the success of their endeavours differs, of course with their degree of creative talent.

As a teacher he can take advantage of this adolescent characteristic. He should recognize the opportunities that are available to him, in this area of learning motivation. Some subjects seem to lend themselves more easily others to the development of creative expression. The highly creative teacher at the subject like science, mathematics or social studies can stimulate their students more or less indirectly to give expression to their desire to create.

What is needed in any case is a creative imaginative teacher who can recognize possibilities for creative activities in his subject. He provides a rich learning environment. He is intelligently permissive in his attitude towards class procedures. He understands what the students are trying to do and appreciates their potentialities. He realizes that effective creative expression must be built on a solid background of appropriate knowledge and skill.

In other words the extent to which adolescents adopt their creative potential to learning procedures depends in good last on ability as the teacher to be a sensitive, perceptive and creative person.

The creative personality measures teaches to find under study were necessary on the basis of C.P. Inventory.
7.1 MEASURES OF CREATIVE PERSONALITY:

In this study the researcher had decided to measure the creative personality of the teachers of all the three streams of higher secondary education. To measure this trait the creative personality inventory developed by Donald Co. Macleinnon Institute of Personality Assessment and research, was translated in Gujarati by N.J. Patel for this research work.

The Creative Personality Inventory consists of two parts: (See Appendix X).

Part - I: It includes 12 statements which are incomplete. Two choices are given between statement. Out of which one is going to be checked by the correct respondent. The choice of responses show the creativity.

Part - II: It consists of 24 adjectives. The respondent has to check the adjectives that he believes describing himself. Some of these 24 adjectives describe the creative individuals.

The Creative Personality Inventory are administered to all the Higher Secondary Teachers of the various streams under study. They were given a full time to think and judge
themselves accordingly by checking the proper choice in part I and proper adjectives that describe him. The time range between 21 minutes to 34 minutes. It was found that the teachers were really enjoyed in taking this type of psychological test.

The test were examined according to the scoring key, shown in Appendix X. The scores were collected and put for descriptive statistics. The mean and standard deviation of the observed data are 11.0 and 2.6 respectively.

It is found that 21 teachers had the creative personality score more than the mean score. These teachers were studied for the correlational study to estimate the probable relationship between the creative teachers and creative students.

7.2 RATING OF CREATIVE STUDENTS:

Twenty one teachers were asked to perceive the creative students of their own stream keeping in view the following points:

1. Divergent Thinking Abilities:
   Verify at responses is produced to as....

   (i) FLUENCY: It means
   - Quantitative representation of units
   - Ideational
   - Expression
   - Association
   - Word
(ii) FLEXIBILITY: It means the number of classes of objects or traits of ideas produced. It indicates in how many distinct ways an individual can respond to a stimulus.

(A) measure of variety
  spontaneous
  adaptive

(iii) ORIGINALITY:

(A measure of Quantity):
It indicates uncommonness or newness in the product
Plot title - symbol production - consequences

(iv) ELABORATION:
It indicates expanding and combining of activities of higher thoughts. It shows production of detail steps, variety of implications and consequences.

(v) RE-DEFINITION:
It is the ability to require idioms, concepts, people and things. It requires imaginative of old things for new purposes.

(vi) SENSITIVITY TO PROBLEM:
When one sees defects, needs, deficiencies, oddities, unusualities and sees what must be done, it shows receptibility for problem.
(vii) CURIOSITY:

Murphy: The tendency to investigate any novelty perceived, tending to seek information about any thing.

Due to some unavoidable circumstances arisen in Gujarat, the researcher could not administer a Creative Personality Inventory to the higher secondary teachers for technical stream. So with a great sorrow researcher had to continue her study only with the data gathered in these situations.

According to Dr. J.Z. Patel\(^2\) the fourth categories of the teacher determined by Dr. K.M. Shah knowing how he acts,

- Poor teacher complains
- Average teacher teaches
- Good teacher explains
- But great teacher inspires.

Really the great teacher is an excellent teacher. He inspires the students to themselves. At the same time excellent teacher is open minded and also master of his subject. He passes the

wide base of knowledge and gives new illustration while explaining the students. Students, definitely never forget excellent - creative teacher. The intellectual development of the students can perceive the creative level of their students. To study, this researcher find out the two best creative students on the basis of their creative score observed on the creative ability test from the science and general streams. The students are to be of two categories: more creative/less creative.

Eleven teachers of science stream have perceived two Boys A and B, and Ten teachers of general stream have perceived two Boys C and D. More creative would be assigned a point 1 and less creative would be assigned point 0. The correlation between the more creativity teachers and creative students was found by the stratified technique known as point biserial - r. Hence the observed data were put to the significance of correlation 'r'.

7.3 TEACHERS' CREATIVITY V/S STUDENTS' CREATIVITY:

The creative personality score of all teachers of Science stream and their rating of two boys A and B and the score for general stream are shown in the following table and their Point-biserial 'r' was computed on calculator.
### TABLE 7.1

Point bi-serial 'r' for teachers of Science - General streams and their perceived two students

<table>
<thead>
<tr>
<th>No.</th>
<th>Teacher's C.P.I.</th>
<th>Science stream student perceived</th>
<th>General stream student perceived</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>1.</td>
<td>16</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>13</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>3.</td>
<td>12</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4.</td>
<td>15</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5.</td>
<td>12</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6.</td>
<td>14</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>7.</td>
<td>12</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>8.</td>
<td>12</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9.</td>
<td>15</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>10.</td>
<td>13</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>11.</td>
<td>12</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Point biserial correlation 'r' 0.78 0.89 0.72 0.81

For the point-biserial r formula used to calculate r is shown below:

\[ r_{pbis} = \frac{M_p - M_q}{\sigma} \times \sqrt{pq} \]

where \( M_p, M_q \) are means of two stream teachers

\( p \) Proportion of sample in the first group

\( q \) Proportion of sample in the second group.

3. STATISTICS in Psychology and Education by Henry E. Garrett and R.S. Woodworth, p. 381.
The creative score of students A and B belongs to the class interval 425 - 450 and that of the students C and D belongs to the class interval 476 - 500. The \( r_{pbis} \) of the creative teacher of science stream and creative level of students and A and B are 0.78 and 0.89 respectively while the \( r_{pbis} \) of creative teachers of general stream and creative level of students C and D are 0.72 and 0.81 respectively. All the calculated point biserial is significant at 0.01 level according to the table No. 25 shown by H.C. Garret.4

It is concluded that the creative teacher perceives the creative levels of his students. It means that there is a positive impact of creative teacher on his students in respect of the students for higher education.

7.4 GLOBAL VIEW:

It is found difficult for the teachers to distinguish the creative student and talented student. Generally the teacher recognizes the talented student i.e. high achiever a creative student. But when the teachers are asked to perceive a creative student with fully acquainted with the specifications of creativeness, the creative students can be perceived more accurately by them. Hence the teachers should be aware of a child's actions and behaviours in day-to-day life.

4. Ibid., p.201.