Creative children differ from children in general in many respects. The peculiar behaviour of the former may be resented by parents or teachers or other elders who cannot understand and appreciate the creative urges in them. Therefore, it seems that these peculiar personality characteristics as well as the situations in which they find themselves may create problems of adjustment for creative children.

The present study was carried out to see whether there was any significant difference between highly creative children and their comparatively less creative peers in their (1) home adjustment, (2) health adjustment, (3) emotional adjustment, (4) social adjustment, (5) school adjustment, (6) adjustment to problems stemming from the situations in which they find themselves, and (7) adjustment to problems created by their personality characteristics.
It was also proposed to study whether the better adjusted children differed from poorly adjusted children in their performance in creativity tests.

**METHOD**

**Tests and Inventories**

The following tests and inventories were used in the present investigation:

(1) **Tests of Creative Thinking Abilities**
    (Consisting of five sub-tests viz., Instances, Alternate Uses, Similarities, Pattern Meanings and Line Meanings)

(2) **Adjustment Inventories**
    (a) An Adjustment Inventory (Consisting of four areas viz., Home, Health, Emotional and Social).
    (b) A School Adjustment Inventory.
    (c) Personal Adjustment Inventory.

Among these tests and inventories, the first three were available in the Department of Psychology, University of Kerala, Trivandrum. Since they were found to be valid and reliable, they were used in the study.

The Personal Adjustment Inventory was prepared by the investigator to assess the special problems confronted
by the creative children. This inventory consisting of 101 items, was prepared in two parts. The first part, giving emphasis to situational aspects, consisted of 60 items, and the second part, concerned with personality characteristics, consisted of 41 items. The inventory was administered to 470 students. From among them a total of 370 answer-sheets were selected and the items were analysed to prepare the final form of the inventory. The final form of the inventory had 33 items in Part I and 33 items in Part II.

Sample

The sample for the final investigation consisted of 1100 students (510 boys and 590 girls). The sample was taken from the secondary schools randomly selected from the 77 schools in Trivandrum Educational District, giving proportionate representation to boys' and girls' schools, rural and urban schools as well as private and government schools.

Administration and Scoring

In the final study the tests and inventories were administered to the selected sample, and they were scored.
The items in the creativity instruments were scored for 'uniqueness' and 'number'. Thus ten measures of creativity variables were obtained, five for uniqueness and five for number. These scores were then transformed into T-scores. The creativity index of an individual was obtained by summing up the ten scores.

Adjustment inventories were scored with the help of the keys prepared for each area of adjustment measured. In each area a high score is indicative of maladjustment and a low score is indicative of satisfactory adjustment.

**ANALYSIS**

The details of analyses are:

1. As a first step, correlational analyses were carried out to find out the interrelationships between measures of creativity, as well as between measures of adjustment.

2. Analysis to study extremes of creativity in relation to adjustment was undertaken. For this purpose, on the basis of their scores on Tests of Creative Thinking Abilities the final sample of boys and girls was divided into three groups, viz., highly creative, moderately creative and less creative. This was done by dividing the score distribution at the first and third quartiles. Thus, the subjects getting scores above the third
quartile were considered highly creative, those getting scores below the first quartile were considered less creative. All the remaining cases falling in between the first and third quartiles were considered moderately creative.

The scores obtained by the three groups of creative children on different areas of adjustment were subjected to two-way analysis of variance to find out the difference, if any, among the three groups. In cases where F-ratios were found significant critical differences and differences between mean scores were compared to see whether the difference between the means were significant or not.

3. A test by test analysis also was performed to study the effects of each sub-test, as well as the effects of verbal tests and non-verbal tests, on each area of adjustment. In all these analyses, the samples of boys and girls were divided into two separate groups based on the median points of distribution for the index scores in each area. In each sub-test the subjects getting a score above the median constituted the high creative group and those getting a score below the median constituted the low creative group.
The scores obtained by the two groups in each test on each of the different areas of adjustment were subjected to analysis of variance (two-way) with a view to study the interaction effect, if any, between creativity and sex. In cases where the analysis of variance showed significant differences among the groups, critical differences and differences between mean scores were compared to see if the differences between the means were significant.

4. A reversal analysis, to relate extreme of adjustment with different measures of creativity, was also carried out. On the basis of their scores on different areas of adjustment the samples of boys and girls were divided into three groups viz., better adjusted, moderately adjusted and maladjusted. For this purpose, the subjects who fell below $Q_1$ were considered to be the better adjusted group, those who fell above $Q_3$ were considered to be the maladjusted group and those who fell between $Q_1$ and $Q_3$ were considered to be the moderately adjusted group.

The scores obtained by the three groups on different measures of creativity were analysed using analysis of variance (two-way) technique. In cases where F-ratios were found significant critical differences and differences between mean scores were compared to see if the differences between the means were significant.
RESULTS

The following are the results obtained in the present study:

1. The three groups of boys differ significantly from one another in home adjustment. The highly creative group differs significantly from the moderately creative and the less creative groups, the former showing a tendency for comparatively better adjustment. But no significant difference is observed between moderately creative and less creative groups.

   In the case of girls, no significant difference is observed among the three groups in home adjustment.

   Further, boys and girls differ significantly in home adjustment.

2. No significant difference is observed among the three groups of boys, and among the three groups of girls in health adjustment.

   Significant difference is observed between boys and girls in health adjustment.

3. The three groups of boys show significant difference among themselves in emotional adjustment. The highly creative group is significantly different from the
moderately creative group. But no significant difference is observed between the highly creative and the less creative groups as well as between the moderately creative and the less creative groups.

No significant difference is seen among the three groups of girls in emotional adjustment.

Boys and girls differ significantly from each other in emotional adjustment.

4. No significant difference is seen among the boys' groups in their social adjustment, nor does there any significant difference among the three groups of girls.

There is no significant difference between boys and girls in social adjustment.

5. No significant difference is found among the three groups of boys, and among the three groups of girls in school adjustment.

Significant difference is observed between boys and girls in school adjustment.

6. No significant difference is found among the three groups of boys, and among the three groups of girls in adjustment to situations that are assumed to create problems for creative children.
Boys are found to differ significantly from girls in adjustment to problems concerning situational aspects.

7. There is no significant difference among groups of girls in adjustment to problems produced by their personality characteristics.

But, boys and girls differ significantly from each other in adjustment to problems concerning personality characteristics.

8. There is no significant difference between the boys who score high in Instances and the boys who score low in it, in any of the areas of adjustment except in emotional adjustment.

In the case of the girls, the high scores and the low scores do not differ significantly from each other, in all areas of adjustment.

9. When judged by the Alternate Uses test alone, the creative and the non-creative groups of boys differ significantly from each other only in emotional adjustment.

In this case, the high creative and the low creative groups of girls show no significant difference between themselves, in all areas of adjustment.
10. Significant difference is observed between high creative and low creative groups of boys (according to their performance in Similarities test) again in home adjustment alone. In all other areas of adjustment, no significant difference is found between the high creative and the low creative groups.

The high creative and the low creative groups of girls are found to be more or less homogeneous in all areas of adjustment.

11. No significant difference is found between the creative and the non-creative groups of boys (grouped so according to their performance in Verbal Tests of Creativity), as well as girls in different areas of adjustment.

12. Significant difference is found between the high creative and the low creative groups of boys (according to their performance in Pattern Meanings) in home adjustment, emotional adjustment and adjustment to problems concerning personality characteristics. In all these cases, the low-scoring boys exhibit a tendency for greater maladjustment than their high-scoring peers.
The high and low groups of girls here are found to be homogeneous in all areas of adjustment.

13. No significant difference is observed between the high creative and the low creative groups of boys (dichotomized on the basis of their performance in Line Meanings) in all areas of adjustment. The same trend is seen in the case of girls too. In both the cases, the only exception is adjustment to problems concerning personality characteristics. Here, significant difference is seen between the high creative and the low creative groups of boys, the former exhibiting a tendency for comparatively better adjustment.

14. The creative and the non-creative groups of boys (according to their performance in Non-Verbal Tests of Creativity) show significant difference in home adjustment and adjustment to problems concerning personality characteristics. In both these cases creative boys exhibit a tendency for better adjustment. In all other areas of adjustment, the subgroups of boys are found to be more or less homogeneous.
There is no significant difference between the high creative and the low creative groups of girls in any of the areas of adjustment.

15. When the sample is trichotomized on the basis of the scores obtained by the subjects in home adjustment, better adjusted and maladjusted groups of boys are found to differ from each other in Instances, Similarities, Verbal Creativity and Creativity (Total). Significant difference is also observed between better adjusted and moderately adjusted groups of boys in Instances.

But no significant difference is seen among the three groups of girls in all measures of creativity.

Boys and girls differ significantly from each other in all measures of creative thinking.

16. As far as health adjustment is concerned, better adjusted and moderately adjusted boys differ significantly from each other in Similarities and Pattern Meanings. But moderately adjusted and maladjusted groups of boys are found to differ from each other in Similarities, Pattern Meanings, Non-verbal Creativity and Creativity (Total).
17. Emotionally better adjusted and maladjusted groups of boys differ from each other in Instances, Alternate Uses, Similarities and Verbal Creativity. Better adjusted and moderately adjusted groups differ from each other in Alternate Uses only.

However, better adjusted girls are found to differ significantly from their maladjusted peers in Non-verbal Creativity.

18. With respect to social adjustment, better adjusted and moderately adjusted groups of boys differ from each other in Similarities, Verbal Creativity, Pattern Meanings, Non-verbal Creativity and Creativity (Total). Significant difference between moderately adjusted and maladjusted groups of boys is seen in the cases of Similarities and Line Meanings.

19. There is no significant difference among the three groups of boys, as well as the three groups of girls in any of the measures of creativity, as far as school adjustment is concerned.

20. There is no significant difference (in any of the creativity measures) among the three groups of boys,
with respect to adjustment concerning situational aspects. No significant difference is observed among the three groups of girls in any of the measures of creativity except in Instances.

21. As far as adjustment to problems concerning personality characteristics is concerned, better adjusted and maladjusted groups of boys differ from each other in Similarities. Moderately adjusted and maladjusted groups also differ from each other in Similarities. However, better adjusted and moderately adjusted groups of boys are found to differ from each other in Pattern Meanings only.

In the case of girls, moderately adjusted and maladjusted groups are found to differ from each other in Pattern Meanings.

CONCLUSIONS

The most important conclusions that emerge from the present study are:

1. The highly creative children are more or less equally adjusted as their less creative peers.
2. Better adjusted, moderately adjusted, and maladjusted children are more or less homogeneous with respect to their performance in creativity tests.

3. Boys and girls differ significantly in creativity, and in adjustment.

**SCOPE FOR FURTHER RESEARCH**

The present study is restricted to certain specified areas and is concerned with problems in home, at school and in society; health problems; emotional problems; problems arising out of the peculiar situations in which the creative children find themselves; and problems stemming from the peculiar behaviour patterns of creative children. In the context of the present study, the following few suggestions seem relevant in planning for future research.

(i) A detailed analysis may be planned using intelligence as a variable so that adjustment of creative children can be studied, differentiating between the more and the less intelligent among them.

(ii) An extensive investigation using variables such as temperament, motivation and achievement in relation to creativity and adjustment can be planned.
(iii) It will be quite interesting to study the effects of cultural determinants on the adjustment of creative children.

(iv) Effects of bio-social variables, including economic status, occupation and educational status of the parents, etc. on adjustment of creative children may be examined in a further study.