

Effect of Enriched Learning and Improved Recreation on the Psychological Development of Under-achievers.

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The modern school is child oriented whose goal is to help every child achieve maximum growth. More and more special educational programmes are thought of planned and put to use owing to the fact that problems of the under privileged, Socially, intellectually and emotionally, require different emphasis and careful handling which only special individual education can provide.

While the sources of backwardness are many, educational psychologists (Guilford, 1971) perceive two broad distinctions – one group of children who by nature have limited intellectual endowment and who would not be expected to become bright adults after receiving specialized education: the other group of children whose achievements are depressed by causes other than low mental ability and who could, with careful handling and remedial aid, be expected to do better. While the former group is termed “slow learners” the latter group is called “under-achievers”. The distinction between the 2 groups is generally confirmed by intelligence tests. While the slow-learners score between 70 and 80, the under – achievers score well over 80 (Kolesnik, 1963)

Remedial and compensatory education is usually planned for under achievers in that teachers specially appointed offer education in addition to the normal schooling as a sort of “topping up” process.

An attempt has been made in this study to find the effect of providing enriched curriculum and improved recreation for under-achievements in an institution.

Materials and Methods:

20 children of both sexes in the age range of 6 to 16 years were selected from an orphanage in madras. All were underachievers with their academic achievement scores falling 30 percentile ranking below their intelligence test scores. The average mark obtained in all the subjects in 3 terms for the recent 2 consecutive years was taken as the Achievement Quotient.

Quartile Percentile Matrices were formed for intelligence and achievement separately. Children in the I and II quartile (75 – 100 and 50-75) respectively in I.Q) but come under the III and IV quartile (25 to 50 and below 25) in achievement were termed under achievers.]

Binet-Kamat test (1964 revision) and Draw-a-person test were administered for verbal and non-verbal I.Qs. Rutter’s behavior rating scale was filled up to know the neurotic and anti-social tendencies in the children. Concurrently the classroom behavior of the children was assessed through another proforma. Personality traits were assessed through Early School Personality Questionnaire. All the tests were done initially and again at the end of 6 months.

Conduct of the study:

The children were divided into 2 groups of 10 each and placed in 2 classroom situations of “enriched curriculum:, namely structured and unstructured. Two trained teachers were appointed for the 2 classes. The “Structured” situation closely resembles the formal traditional classroom with the time table drawn giving importance to the academic part alone. In the “unstructured” situation, play was introduced as part of the co-

curricular activity, atmosphere was permissive, democratic and student participation was more. Oratory, story-telling, free expression drawing/painting, drama, enactment, simulation games, group singing etc were included as part of the studies.

The “improved recreation” part includes taking the children for frequent outings, day-long picnics and educational tours.

The children had access to varieties of story books, comic strips, periodicals, newspapers etc. and had freedom to play in-door or out-door games in the evenings.

Results and Discussion:

Inter and intra comparisons were made. Table I presents the data with regard to I.Q. As can be seen, both the groups registered significant increase in I.Q. between initial and final values with regard to verbal and nonverbal I.Qs. However, there was no significant difference between the 2 groups.

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Table 1

I.Q.	Structured group	Unstructured group	Between groups comparison
Verbal I.Q.	9.5 + 2.67 P<0.01	9.0 + 1.12 P<0.01	N.S.
Non Verbal I.Q	7.1 + 2.06 P<0.01	9.7 + 3.73 P<0.02	N.S.

Values are Mean Difference + Standard Error

The Iqs of about 230 children, residing in the same institution were assessed to know the average I.Q. which was found to be 71.0. The I.Qs. of 20 home – reared children from a nearby school were also assessed and was found to be 93.01. Though it is well established that institutionalization per se causes some backwardness, the idea was to see how much it can be offset by providing enrichment. Though the average I.Q. of the underachievers in this study has been raised from 73 to 82, a longer period of enrichment is necessary for still better results.

Table 2

Achievement Groups	Structured group	Unstructured group	Between groups comparison
At the end of 3 months	2.6 + 6.34	2.3 + 3.77	N.S.
3 months Vs 6 months	7.19 + 2.62 P<0.05	6.43 + 3.21 N.S	N.S.

Values are Mean Difference + Standard Error

Table 2 presents the analysis of achievement scores. The achievement scores of the structured group between 3 and 5 months were significantly enhanced. This confirms the superiority of the structured classroom situation over the other one as far as the academic achievement is concerned.

Table 3

	Structured group	Unstructured group	Between groups comparison
General knowledge	39.0 + 4.58	46.5 + 3.65	N.S.
Emotional problems			
As assessed by the Patrons	44.0 + 1.98	47.0 + 0.00	N.S.

Values are Mean + Standard Error

Table 3 represents the analysis of non-academic features at the end of 6 months. As the unstructured group had not registered any significant increase in academic scores, either at 3 or at 6 months, an attempt was made to find out whether this group is superior to the structured group in non-academic features like general knowledge gained and improvement in general behavior, emotional problems etc. As can be seen from the table, the unstructured group, though not showing statistically significant increase, shows a numerical increase of 7 points in general knowledge. The other parameters show non-significance.

Table 4

	Structured group	Unstructured group	Between groups comparison
1. Rutter's			
Behaviour test	-1.1 + 0.50	-0.1 + 0.48	
a. Neurotic	P<0.05	N.S.	N.S.
b. Antisocial	-0.30 + 0.98	1.0 + 1.13	
	N.S.	N.S.	N.S.
c. Neurotic + Antisocial	-1.4 + 0.90	0.9 + 1.06	
	N.S.	N.S.	N.S.
2. Classroom			
Behaviour problems	3.8 + 1.71	4.00 + 2.66	
	P<0.05	N.S.	N.S.

Values are Mean Difference+ Standard Error

Table 4 shows the analysis of overall behavior problems as assessed by the Psychologist and classroom behavior problems as assessed by the teachers. The structured group shows a significant decrease in neurotic tendencies and classroom behavior problems.

Table 5

	Structured group	Unstructured group	Between groups comparison
Recreational status	6.60 + 2.3 P<0.02	10.4 + 1.98 P<0.01	N.S.

Values are Mean Difference + Standard Error

Table 5 represents the recreational status. Both the groups have improved their recreational status significantly at the end of the project though between groups, there is not difference.

Table 6

Personality dimensions	Structured group	Unstructured group	Between groups comparison
A	-1.3 + 6.84 N.S.	-0.1 + 4.1 N.S	N.S.
B	0.2 + 0.76 N.S	0.6 + 1.00 N.S	N.S.
C	-0.7 + 0.56 N.S	-0.1 + 1.03 N.S	N.S
D	-0.5 + 0.54 N.S	-0.6 + 0.89 N.S	N.S
E	0.1 + 0.69 N.S	-0.5 + 0.82 N.S	N.S
F	0.5 + 0.67 N.S	-2.7 + 0.96 P<0.01	P<0.05
G	-0.4 + 0.58 N.S	-1.5 + 0.78 N.S	N.S
H	-0.1 + 0.87 N.S	-0.9 + 0.38 P<0.05	N.S.
X	0.7 + 0.92 N.S	0.4 + 0.96 N.S	N.S
J	-0.6 + 0.76 N.S	-0.2 + 0.95 N.S	N.S

K	0.8+-0.74 N.S	-0.9+-0.57 N.S	N.S
O	0.3+- 0.83 N.S	-1.5+-0.81 N. S	N.S
Q	0.4+- 0.64 N.S	-0.5+-0.60 N. S	N.S

Values are mean differences +- standard error

Table 6 represents the analysis of the 13 personality dimensions. factor F represents desurgence vs surgence. The unstructured group shows a significant increase in this factor and the intra-group comparison is also significant. Factor H denotes shy vs uninhibited tendencies. Again the unstructured group has registered a significant increase in these scores from the initial to the final. Factors F and H are correlated to each other and the findings strongly reflect the point that the unstructured learning situation has helped the children to come out of their inhibitions and shyness and to gain enthusiasm and carefree liberated attitudes. All other factors show non-significance.

Substantial increase in I.Q, academic scores and other factors, as a consequence of enhanced learning, reported by a number of investigators like wooley (1925) skeels et. Al (1938) weikart (1972) etc., is thus corroborated in the present study..

While the traditional curriculum with its highly structural approach and emphasis on rigidity and testing is considered idle for the large group of average student, it was thought that a more permissive atmosphere would be ideal for the underachievers in this study and hence 2 types of learning situations are presented, one with a structured and another with an unstructured approach . while the structured group showed increase in academic scores improvement in neurotic and classroom behaviour the unstructured group had come out of their inhibitive tendencies and gained confidence enthusiasm and free expression. It is interesting to note that Rosenthal shaldon (1952) obtained similar results in their study with California personality test.

Summary and conclusions

The Results of a study with 20 under achievers placed in 2 different learning situations indicate the following picture

EXPERIMENTS IN EDUCATION

1. Both the groups have shown improvement in I.Q Scores.
2. The structured group has more beneficial effects in academic achievement.
3. The class room behaviour of the structured group has improved and the neurotic tendencies also decreased.
4. The unstructured situation has helped the children to come out of their inhibitive tendencies and gain more confidence and enthusiasm.
5. Emotional problems and fears have been considerably reduced for both the groups and identification with the teacher is more in the unstructured group.

The present study can set a precedent in this important field of education and mental health of educationally handicapped children especially in an institution

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