

CHAPTER II

REVIEW OF THE RELEVANT LITERATURE

Review of the relevant literature has been done with two objectives in mind. First, it was done to get insight into the methodology and procedure for the present study, and second, to get some clear idea about basic concepts and terms related to the present study. To begin with, the work done in the field related to the education of the backward children, in the foreign countries is reviewed.

I. WORK DONE IN FOREIGN COUNTRIES

In the following pages, work done by some of the research workers in the field of education of backward children have been noted.

SIR CYRIL BURT

Sir Cyril Burt, the distinguished psychologist and educationist, can be regarded as the pioneer investigator of 'Education of the Backward Child.' His work on the 'Backward Child' is of prime importance. It has proved of

lasting value to teachers and all who are concerned with the welfare of the child.

In his book 'The Backward Child,' Burt reported his study. In the beginning before reporting his work, he thought it useful to clarify and distinguish the term 'backward' from some other related terms like 'dull' and 'retarded'. Burt was the first who defined the term 'backward' systematically. He states :

' I regard as educationally backward in the technical sense all those who in the middle of their school career would be unable to do the work of the class next below that which is normal for their age.'¹

To make the term 'backward' more clear, he differentiated it from the term 'dull.' He describes:

'We have... to discriminate, so far as we are able, between the boy who cannot learn, except within the narrowest limits, and the boy who can learn, but for some reason or other has never actually done so. The former may be called 'innately retarded,' or, in one word, 'dull'; the latter 'educationally retarded' or 'merely backward,' implying by this phrase that the child is backward in school work only and not in natural development.'²

¹C.Burt, The Backward Child, (London:University of London Press Ltd.,1961),pp.77-78.

²Ibid.,pp.8-9.

Burt also discriminates the term 'dull' from the term 'mentally defective' when he points out :

'Children... who by comparison, seem less seriously retarded than the mentally deficient, may be called the 'merely dull'.'¹

Burt, in his study, selected the backward children from the whole area of the county of London. In selection of such children he used two criteria, viz., I.Q. and school achievements. According to his definition of a backward child, he considered those children backward who were average in I.Q. but remain behind in scholastic achievements. A control group of normal students matched for sex, age, school but normal in scholastic achievements was also formed. A sample group of mentally defective cases was also examined along similar lines to corroborate the general conclusions.

In his investigation, he studied the causes of educational backwardness. In this report, he inquired into (i) school conditions, such as, irregular attendance and teaching efficiency, and (ii) home conditions such as poverty, material conditions of the home, intellectual conditions of the home, emotional and moral conditions of the home and conditions of the neighbourhood.

Burt also studied the defects of development, defects of general health, sensory defects, motor defects, left handedness, defects of speech, intellectual disabilities,

¹Ibid.,p.12.

defects of temperament and character, with reference to backward children.

Burt, in selecting backward children, started with tests of scholastic attainments, turning later, to psychological tests of intelligence. In collecting data, he made use of data from two sources : first, the cumulative record which the teachers kept at the school; secondly, the records compiled by the psychologist for those cases referred to the child guidance centre - the office of the psychologist in the education department of the London County Council. He prepared a Record Form for Backward children which includes information regarding Family History, Home Conditions, Physical History, Physical Examination, Psychological Examination, Educational attainments, Vocational aptitudes etc. For the collection of data the teachers, the students, the parents, the medical officers, care committee workers and research students were taken help.

Various statistical measures like percentage difference, chi-squares, correlations and especially factor analysis were applied to arrive at the conclusions. Some of his observations may be cited:

1. 10 percent of the total school population are definitely backward.
2. The chief reasons for educational backwardness are psychological.

3. On an average, each backward child suffers from at least three adverse factors tending to retard his progress at school, viz., physical, mental and social or environmental.

Discussion

Burt's view regarding the term 'backward' refers to the Educational Age in relation to Chronological Age. Children having Educational Quotient of 85 or less could be regarded as Educationally Backward, according to his criterion. Burt's criterion is, of course, quite arbitrary with regard to the degree of underachievement, which he equates with backwardness.

Burt also uses the term 'retarded' to describe any child whose Educational Ratio ($E.R = E.A./C.A.$) falls below 85 percent. This indicates that 'backward' and 'retarded' are used synonymously by him. Moreover, according to him the term 'dull' is more related to the intellectual aspect than the achievement aspect.

F.J.SCHONELL

F.J.Schonell, the renowned educationist and psychologist, can also be aptly considered the pioneer investigator in the field of Education of the Backward Child. He was a student of Professor Sir Cyril Burt. Schonell's study deals with disabilities in reading, spelling, oral and written English. Before attempting the

study, he also tries to clarify some basic terms related to 'backward.' He defines the term 'backward' as follows:

'A backward pupil is one who, compared with other pupils of the same chronological age, shows marked educational deficiency.'¹

In categorising 'backwardness' he goes one step forward than that of Cyril Burt. He introduces the term 'retarded' so as to make the term 'backward' more clear. He writes ;

'Retardation is a state of improvable scholastic deficiency and as such may characterise dull, normal or supernormal pupils.'²

He further describes :

'Retardation may be regarded as an assessment from an individual standpoint of educational level in relation to intellectual capacity. Backwardness may be regarded as an assessment from a group standpoint of educational level in relation to chronological age capacity.'³

According to Schonell, retardation is measured in terms of the extent to which the Educational Age falls below the Mental Age. Thus, he makes use of the concept of Mental Age in the concept of 'retardation' while for the term 'backwardness' he refers to only Educational Age.

¹ F.J.Schonell, Backwardness in the Basic Subjects (Oliver and Boyd, Edinburgh: Irwin and Co., Ltd., 1949), p.55

² Ibid., p.61.

³ Ibid., p.66.

Schonell simply describes the effect of dullness when he says :

' Although dullness necessarily produces scholastic backwardness, not all backwardness is the outcome of dullness.'¹

After clarifying the nature of backwardness and the terms employed in denoting its types and degrees, Schonell reports his actual study.

The active research spread over a period of eight years in both primary and pre-primary schools. Schonell studied the cases of specifically backward pupils who were markedly below normal in only one or at the most two school subjects but of average or above average intelligence. The investigation related to all the cases of specific backwardness in reading, spelling and composition in a school population of 15515 children, mainly in London schools. The schools from which the cases were studied, were classified into threefold categorical distinction of being poor, medium and good social conditions.

Selection of students involved three steps :

- (a) An accurate assessment of the degree of disability in the subject or subjects in which the pupil was regarded as backward.
- (b) A reliable estimate of his general intelligence.

¹Ibid.,p.59.

- (c) A measurement of his achievements in other school subjects.

Standardised Attainment Tests, Intelligence Tests and Teachers' Opinions were made use of in selecting the students. In collecting data various tools and techniques were used, some of them may be given as follows :

1. Application of Diagnostic Tests in the backward subject or subjects.
2. Application of Sensory Tests.
3. Rating Scale for assessing emotional characteristics.
4. Schedule for recording interests of backward pupils.
5. Personal History Questionnaire which included home life, family facts etc. This was used as Interview Schedule in personal interviews with the students.
6. Education History Sheet was also used as Interview Schedule in personal interviews with the students.

One of the important observations may be cited :

1. In all the basic subjects environmental, intellectual and emotional factors may produce backwardness. Occasionally, these forces act singly, but the nature of the figures suggests that more often they act conjointly.

Discussion

According to Schonell, the educational capacity or achievement and intellectual capacity are closely related to each other when the term 'retardation' is used. Thus, retardation refers to Educational Age in relation to Mental Age. Sch^onell's concept of 'Backward' and 'Retarded' facilitates to differentiate failing pupils having low intelligence from those having average or high intelligence. An example will clearly discriminate the two terms 'backward' and 'retarded'. An 8-year-old child with the school attainment of a 10-Year-old child but an intellect of a 14-Year-Old child would be regarded by Sch^onell as 'retarded', although clearly not 'backward.' Thus, in short, intellectual development of a child should be taken into consideration while using the term 'retardation', while the term 'backwardness' does not need it.

Most of the psychologists and educationists follow Schonell in differentiating the two terms 'backward' and 'retarded.'

E.W.McELWEE

In 1932, E.W.McElwee¹ published his study about the personality differences in the bright, normal and retarded children.

¹E.W.McElwee, 'A Comparison of the Personality Traits of 300 Accelerated, Normal and Retarded Children, Journal of Educational Research, 26, 1932, pp. 31-34.

He selected 100 children in each category solely on the basis of an Intelligence Test. In locating the children neither scholastic achievements nor the teachers' opinions were taken into consideration. In order to study personality differences McElwee used a check-list of 14 characteristics such as interest in school work, talkativeness, good effort, quietness, obedience, calmness, restlessness, stubbornness etc. He asked the teachers to rate those children from the sample who were in their classes at the time of rating or whom they knew. Teachers were not explained the traits nor the traits were illustrated in terms of everyday behaviours.

The investigator observed that all the three groups possessed more desirable traits than undesirable, according to the teachers' rating. He also observed that, in general, the bright children possessed a greater degree of all the desirable traits than did the retarded children.

Discussion

McElwee, in his study, considered children either bright or normal or retarded solely on the basis of their Intelligence Quotient. In his study, the selected traits were not clarified by illustrating each in terms of everyday behaviours.

McGHEE and DRAYTON

William McGhee and Lewis W. Drayton¹, in 1942 reported

¹William McGhee and Lewis W. Drayton, 'A Comparison of Certain Personality Characteristics of Mentally Superior and Mentally Retarded Children', Journal of Educational Research, 35, April, 1942, pp. 600-610.

a study comparing certain personality characteristics of mentally retarded and mentally superior children.

Their sample included 45,000 children in grades IV to VIII, from 455 schools and 310 communities in 36 states in U.S.A. The mentally retarded group included the lowest 10% and the other the top 10% of this population as measured by Kuhlmann-Anderson Test.

Two measures of personality were used, the Personality Inventory and Teachers' Ratings on 70 personality traits. The teachers were instructed to study carefully and pick out at least 5 personality traits for each child and probably not more than 10 or 12.

The investigators observed more desirable personalities in mentally superior children. The mentally retarded children possessed more undesirable personalities.

Discussion

McGhee and Drayton ignored the aspect of achievements in the concept of 'mental retardation' or 'mental superiority.' In location of the children, teachers' judgments were not invited. The traits under study were not illustrated so as to get a clear idea of the traits and to make rating more reliable.

G.F.LIGHTFOOT

In 1952, Georgia Frances Lightfoot¹ studied personality differences in bright and dull children. The basic problem of the study was to find out whether personality differences exist between bright and dull children. The investigator tried to discover what traits were characteristic of these two groups of children so different from each other in intellectual endowment.

The sample consisted of 104 children from the Speyer School, Public School 500 of New York city. Two groups were selected solely on the basis of Intelligence Test. Terman Group (very bright children) consisted of 48 children (18 girls and 30 boys) ranging in I.Q. from 130 to 200 (Stanford-Binet) with the Median at 147. The Binet Group (dull children) consisted of 56 children(20 girls and 36 boys) ranging in I.Q. from 68 to 104(Stanford-Binet) with the Median at 88. The combined group ranged in age from 10 years 1 month to 13 years 5 months with the Median at 11 years 7 months.

As much information as possible was obtained to aid in making judgments as to the presence or absence of the 20 variables of personality under scrutiny. For this purpose a rating scale - 'Forty Attributes of Personality ' - was constructed.

¹Georgia Frances Lightfoot, Personality Characteristics of Bright and Dull Children (New York:Bureau of Publications, Teachers College,Columbia University,1951).

The procedure for collecting data included information on the home and neighbourhood environment, opinions or ratings of others, self-ratings and other information gained directly or indirectly from the subjects themselves. In rating the children teachers' help was taken.

To test the significance of the difference between the two groups, bright and dull, t ratios between the ratings of the 48 bright and 56 dull children were found.

The important observations were as follows :

1. The dull children appeared to be somewhat less adjusted and the bright better adjusted.
2. There were statistically significant differences between the Means of the two groups for the personality traits shown below :

The difference was in the direction of the dull group for :

- Self-distrust
- Physical timidity
- Dependence
- Deference

and in the direction of the bright group for :

- Ability to make friends
- Leadership
- Achievement
- Rivalry
- Concentration
- Initiative in School Activity.
- Zest
- Sympathy for friends.
- Sympathy for other than friends.
- Dominance

- Self-confidence
- Creativity
- Curiosity
- Courage
- Self-defence
- Playful
- Appearance : Physique
- Appearance : Clothing

Discussion

The investigator introduced self-rating by the children under study.

The observations clearly indicates that the undesirable traits were characteristics of the dull group and desirable traits were the characteristics of the bright group.

PETERSON AND SMITH

Le Roy Peterson and Lloyd L. Smith¹ published their research report in 1960. The problem of their study was to investigate some differentiating factors concerning the post school adjustment of a group of educable mentally retarded adults with adults of normal intelligence but who were judged to be of low economic status at the time they were attending secondary schools.

The sample was drawn from the city of Cedar Rapids. Two groups, Experimental and Comparison, were formed: There were 15 females and 30 males in each group. 45 educable mentally retarded subjects had formerly been enrolled in

¹ Peterson
Le Roy/and Lloyd L. Smith, 'A Comparison of the Post School Adjustment of Educationally and Mentally Retarded Adults with that of Adults of Normal Intelligence,' Exceptional Children, Vol. 26, No. 8, April, 1960.

special classes for educable mentally retarded in the city of Cedar Rapids. 45 comparison group subjects were judged to be from families of low economic status at the time they attended school. All the latter had been enrolled in Public Secondary Schools. The common Median Age of both the groups was 24 years 2 months. The mean I.Q. of the retarded group was approximately 65, that of the comparison group approximately 103.

The two groups were compared on the areas related to work, home, family, social and civic characteristics. The data were collected with the help of a questionnaire consisting of 117 items distributed among the areas mentioned above. This questionnaire was used as an interview guide in the personal interviews arranged by the investigators. Results of the interviews were analysed by comparing 117 items in the questionnaire.

Major observations made by the investigator are as follows :

1. The subjects of the retarded group spent considerably less time in the school life than did the subjects of the comparison group.
2. Below average living conditions characterised the retarded group.

Summary

Sir Cyril Burt and Schonell in their studies related to the backward child, have considered intellectual aspect

and also school achievement aspect in identifying the backward child. Other research workers cited above, have used in their studies the terms 'mentally retarded and children' or 'dull'/_in selecting these children, only intellectual aspect has been considered.

In studying personality characteristics or traits boys and girls have been treated equally by the investigators.

From the investigators noted above, only G.F.Lightfoot introduced self-rating by the children. In rating children, generally, teachers' help is taken.

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Though the present search is confined to dull backward children, it may not be out of place to review a search or two, related to gifted children. The gifted and the dull backward children can be aptly considered at the different ends on the same continuum. The criteria in selecting gifted, may be applied in selecting dull backward children with the shift in level only. In the same way the methodology for collecting data for gifted children may be used for dull backward children.

Below are given two researches related to gifted children and some of the opinions from the literature regarding location of gifted children.

L.M. TERMAN

L.M.Terman, the world-famous American psychologist and educationist can be regarded as the pioneer investigator in the field of education of the gifted children. L.M.Terman et al¹, in their classic work in California, studied the influence of educational and other environmental factors in shaping the life career of gifted children. The purpose of the research was to locate subjects of a degree of brightness that would rate them well within the top one percent of the school population.

The sample was drawn from the schools of California. In selecting students, first, the teachers' judgments were invited. Then, the Stanford-Binet Intelligence Test was administered. In selection, the I.Q. level was set at 130 and above. Boys and girls, both were included in the sample. The study included nearly 1500 students.

The data included personality traits, character traits, home and family background, personal history, interests and hobbies, vocational choice etc. For collecting data various types of tools and techniques were used. They were Achievement Tests, Information Tests, Personality Rating Scale, Home Information Sheet, School Information

¹ L.M.Terman et al, The Gifted Child Grows up (Vol.IV Genetic Studies of Genius, Stanford; Stanford University Press, 1947).

Sheet etc. Interviews with the teachers, students and parents were held.

The data obtained with regard to the experimental group and control groups were compared with the help of statistical measures like Standard Deviation, Significant Difference between Means, Chi-squares by Contingency tables etc.

One of the important conclusions drawn was that in Character and Personality traits, gifted children average above the general child population, but that the degree of superiority was less marked for traits indicative of emotional stability and social adjustment than for intellectual and volitional traits.

PIGNATO AND BIRCH

C.W.Pignato and J.W.Birch¹ reported a study in 1959, of a relative efficiency and effectiveness of seven different means of locating gifted children in Junior High Schools. The major purpose of the investigation was to discover which procedure or which combination of commonly used procedures would prove best.

The sample was drawn from the Junior Division of a Junior Senior High School in a large city(Pittsburgh,Pa.) The Junior Division enrolled 1400 students in grades VII to IX. Mental giftedness was defined in terms of a Stanford-Binet Intelligence Quotient of 136 or higher. The following

¹Carl W.Pignato and Jack W.Birch, 'Locating Gifted Children in Junior High Schools - A Comparison of Methods', Exceptional Children, Vol.25, No.7, March, 1959.

methods of screening for referral were used :

1. Teacher Judgment
2. Honour Roll Listing
3. Creative Ability in Art or Music
4. Student Council Membership
5. Superiority in Mathematics
6. Group Intelligence Test Results
7. Group Achievement Test Results.

As regards to 'Teacher Judgment,' the teachers were asked to name the children they consider mentally gifted and make a statement for each child as to why they judge the child to be mentally gifted. No definition was given; each teacher was free to interpret the term 'gifted' in his own way. No limitation was placed on the teachers' access to records on the children.

With regards to other six methods, teachers' help, school records, objective tests etc. were used.

Lists from all the seven screening methods were combined and analysed. One of the most important finding may be given as follows :

1. By combining the Group Intelligence Test list and Group Achievement Test list into one screening procedure, 96.7% of the gifted children were screened. Taken together the two group tests resulted in the most effective screening procedure.

Summary

The methodology for collecting data for gifted children is the same as that used for dull backward children.

The Intelligence Test and the Achievement Test, as taken together, results in the most effective screening procedure.

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As said above, page 23 , some of the opinions from the literature regarding location of gifted children have been felt worth noting. In the present study, as location of dull backward students is an important factor, the views cited below might prove their usefulness in the present search.

Opinions Regarding Location of Gifted Children

R.A.Martison and L.M.Lessinger¹, while discussing problems in the identification of intellectually gifted pupils, summarised their views as follows :

'The problem of identification is one of using the best available measures in order to arrive at an assessment of pupil potential which is as accurate as possible. Screening should be thought of as a preliminary step toward identification, in which multiple measures including group intelligence and achievement tests, teacher judgment, teacher check-lists and others are used.'

¹Ruth A.Martinson and Leon M.Lessinger, 'Problems in the Identification of Intellectually Gifted Pupils,' Exceptional Children, Vol.26, No.5, January, 1960, p.231.

Discussing 'How can gifted children be Identified'
 Ruth Strang¹, Professor of Education, Columbia University,
 concludes :

'Teachers who are familiar with the characteristics of gifted children and who have a chance to observe in an informal environment can give valuable evidence for identifying the gifted. Everyday teachers can observe how skillfully children use language, how quickly they see relations, how sensitive they are to things in their environment, how readily they learn, how easily they remember...Identification of the gifted is best achieved by a combination of methods.'

Hill et al² reported the use of teacher judgment, cumulative grade averages, and I.Q.scores for identifying gifted students. Of the 24 students 90% had been identified by teacher judgment alone. It shows that high correlation exists between teacher judgments and objective test scores.

Stressing the important role of human observation and judgment in identifying gifted children, Robert F.DeHaan³ remarks :

'Two general approaches can be used to identify gifted children: Standardised tests and systematic

¹Ruth Strang, 'How Can Gifted Children be Identified,' Psychology of Exceptional Children and Youth, William M. Cruickshank(ed.), (London:Staples Press Ltd.,1956),p.478.

²George, E.Hill, Reta J.Lauff and John E.Young, 'Identifying and Educating our Gifted Children,' Pupil Services Series No.1, The Centre for Educational Services, Ohio University, Nov.,1957.

³Robert F.DeHaan, 'Identifying Gifted Children,' The Exceptional Child, Edited by J.F.Magary and J.R.Eichorn, (New York:Holt, Rinehart and Winston, May, 1961), p.503.

observations. Some abilities are best identified by use of objective tests; others can better be discovered through observations; and still others need an approach combining both methods. Some educators prefer one approach over the other, but, in general, best results are obtained from a maximum use of both.'

The same author¹ further states :

'The role of human observation and judgment in screening and selecting is a major one. Almost every program of identification includes teacher observations and judgments among the procedures.

Summary

Identification of the gifted is best achieved by a combination of methods such as Intelligence Tests, Achievement Tests, Teachers Judgments etc. Teachers observations and judgments have got due place in the programme of identification.

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In the preceeding pages, some studies related to backward as well as gifted children have been reviewed. Some of the opinions about the location of gifted children from the literature have also been cited. In the following pages, attempt has been made to study some of the works done with reference to backward children in India. Opinions of the Indian educationists and psychologists regarding some basic terms related to the present study have been found worth noting.

¹Ibid., p.505.

II. WORK DONE IN INDIA

In India, the educationists and the Government of India are not indifferent to the problem of backward or failing students. They are concerned about clarifying the various categories of failing students, so that the educational programmes be thought of. It is encouraging to note that some efforts have been done in this direction by the Government as well as by some of the Indian Universities.

(A) Work Done by Indian Government

The Government of India is, recently interested in organising Seminars on national basis, entirely devoted to the study of the backward child. One such Seminar on the Education of the Backward Child was organised at Bangalore in May-June 1963, by National Council of Educational Research and Training (NCERT), New Delhi. Experts from the Training Colleges in various parts of India were invited to participate in the Seminar. They discussed some basic concepts and definition of related terms and the various aspects of education of the backward child.

Simplifying Cyril Burt's definition of a backward child and giving the definition of the same in Indian situation, the Report of the above said Seminar, published by NCERT, New Delhi reads as :

'In the Indian situation...we might well define the Backward Child as one who, being more than one year older than the average age of his class, is nevertheless experiencing difficulty in the work of the class.'¹

It was observed that several complementary definitions become necessary. The Report² suggests the following three:

- (a) A Backward Child is one who is two years above the average age of the class, where this is the result of stagnation and not of late enrolment or interrupted schooling, and is experiencing difficulty in working up to the norms of the group in school subjects.
- (b) A Backward Child is one who is grossly under-functioning in one or more subject areas, although his age approximates to the class-average.
- (c) A Backward Child is one, whose average total-achievement score is less than minus one Standard Deviation.

The first complementary definition puts emphasis on the Chronological Age of the child as compared to the average age of the class. The second one emphasises the under-achievement in one or more school subjects, while the third definition is related to the total achievement which might depend upon the mental capacity of the child. Thus, the yardstick of backwardness is failure in grade examinations.

¹N.C.E.R.T., Education of the Backward Child (New Delhi: Publication Unit, NCERT, Dec., 1964), p.19.

²Ibid., p.22.

It is worth noting here that the Report does not use the term 'retarded' alone. It has been always prefixed by 'educationally' or 'mentally.' It has been suggested that mentally retarded children may also be educationally retarded. But educationally retarded children may not be mentally retarded. In the context of educationally retarded children, the Report states :

'These children...are average or above in intellectual capacity and their failure, therefore, is neither mainly nor partly due to lack of innate ability.'¹

It has been, thus, very clearly pointed out that educationally retarded child may not be intellectually inferior.

The same Report clarifies the term 'dull'. The dull group has been described as having I.Q. range 70 to 85 approximately and capable of considerably higher standards of attainment than the mentally retarded group.² Thus, the term 'dull' may be considered in relation to not only mental abilities but to scholastic attainment also.

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After reviewing the work done by the Government with reference to the Education of the Backward Child, the effort has been made in the following pages to review the work done at the University level in India.

¹Ibid., p.41.

²Ibid., p.84.

(B) Work Done at University Level

The work done at the University level in the field of Education of the Backward Child is not very encouraging. The latest report¹ published by NCERT in 1963 has given information about the Thesis and Dissertations approved for the Doctorate and Masters Degree in Education in Indian Universities, since 1939 upto December 31, 1961. The following table gives the relevant figures of the work done with respect to the 'Backwardness' and other related topics like Giftedness and Delinquency, in the Indian Universities.

TABLE NO.A: NUMBER OF THESES AND DISSERTATIONS APPROVED FOR THE DEGREE OF M.Ed. and Ph.D. IN INDIAN UNIVERSITIES WITH RESPECT TO BACKWARDNESS, GIFTEDNESS AND DELINQUENCY.

University	Backwardness or retardation	Giftedness	Delinquency
1. Agra	-	-	-
2. Aligarh	1	1	-
3. Allahabad	9	6	2
4. Andhra	1	-	-
5. Bombay	3	2	2
6. Calcutta	2	-	-
7. Delhi	2	-	-
8. Gorakhpur	-	-	-
9. Gujarat	-	-	-
10. Jabalpur	-	-	-
11. Kerala	-	-	-
12. Lucknow	3	1	1
13. Madras	5	2	1
14. M.S.Univ.of Baroda	3	1	-

¹ N.C.E.R.T., Educational Investigations in Indian Universities (New Delhi: Publication Unit, NCERT, August, 1963).

Table No. A ...(continued)

University	Backwardness or retardation	Giftedness	Delinquency
15. Nagpur	-	-	1
16. Osmania	2	-	-
17. Punjab	-	-	-
18. Patna	2	-	-
19. Poona	-	-	-
20. Rajasthan	3	2	-
21. Sagar	-	-	1
22. Shri Venkateshwara	-	-	-
23. Utkal	-	-	-
24. Vikram	-	-	-
Total	36	15	8

A glance at the table clearly shows that comparatively more efforts have been made by the research students, in the field of 'backwardness' than that of 'giftedness' or 'delinquency'. At the same time, it can also be said that very few persons are interested in the problem of 'backwardness' academically and scientifically because the efforts have been made only in half of the total universities(12 out of 24) in India.

Again, it is disappointing to note here that how little this effort is ! The total number of Doctoral Theses approved by Indian Universities since 1939 till December 31,1961 is 83. Out of these, only ONE thesis submitted by R.M.Lohithakshan

who took Doctorate in 1961 from Madras University, is related to the area of 'backwardness.' The title of the thesis is: 'An Analytical and Experimental Study of Backwardness at the Primary School Stage.' This was the only thesis in the area approved for Doctorate in Education, in India, till December 31, 1961.

In some Universities a thesis can be submitted for the Degree of Master of Education in full satisfaction of the requirements of the degree. The number of such theses approved since 1939 till December 31, 1961 is 114. Out of these, not a single thesis is related to the field of 'backwardness.'

The total number of dissertations, in partial fulfilment of the Degree of Master of Education, approved till December, 31, 1961 is 2744. Out of these, only 35 (36 minus 1 Ph.D. Thesis), dissertations, as shown in the Table No.A, page 33 , are related to the area of 'backwardness'. Thus, it is obvious that whatever little efforts have been done in the field of 'backwardness,' they are at the M.Ed. level and that too in the form of dissertations and not Theses ! And, most of these dissertations are related to specific backwardness in different school subjects.

A look at the Table No.A, page 33 , clearly indicates that till December 31, 1961, in the Gujarat University no attempt is made to study 'backwardness' in any form. In the

M.S.University of Baroda, only three attempts have been made to study specific backwardness in different school subjects till 1961. Recently H.H.Shah's thesis at the M.Ed. level have been approved by the M.S.University of Baroda, which is related to backwardness.

In brief, it may be said with confidence that very little attempt has been made by research students to study backwardness.

It should be made clear at this junction that, as India is a vast country, the Universities are at far distances from one another. It was not possible for the investigator, for many reasons, to visit the different universities and study the dissertations related to the present search.

Under these circumstances, the investigator was not in a position to study a good deal of researches. A few researches studied by the investigator are discussed in the following paragraphs:

UDAY SHANKER

Uday Shanker, Reader in Psychology and Head of the Psychology Wing in the Central Institute of Education, Government of India, New Delhi, published his work¹ on 'Problem Children' based on case studies of Indian children, in 1958.

¹Uday Shanker, Problem Children, (Delhi: Atma Ram and Sons, 1958).

The purpose of the study was to impart such information on various common problems of children to parents, teachers, social workers or to the students of child psychology.

In the beginning, the investigator attempted to clarify the terms like mental deficiency, dullness, delinquency and backwardness.

According to Uday Shanker, the mental defectives may be identified to fall in any one of the following categories¹ according to their intelligence quotients :

Idiots	:	Below 25 I.Q.
Imbeciles	:	From 25 to 50 I.Q.
Morons	:	From 50 to 75 I.Q.
Borderline and dull	:	From 75 to 90 I.Q.

Thus, according to Uday Shankar, the term 'dull' represents one of the categories of the mentally retarded. He further writes :

'The term dull is applied educationally to those in whom the rate of intellectual development is slow compared with children of their own age, but not so tardy as to amount to feeble-mindedness. In the dull, the I.Q. ranges from 75 to 90, overlapping at the lower level with the feeble-minded and with the average at the upper level.'²

Modifying the term 'backwardness,' he writes :

'Although backwardness by definition is an intellectual

¹Ibid., pp.6-7.

²Ibid., p.10.

or scholastic condition, but it is at bottom a psychological characteristic arising from and affecting the pupils' entire personality. Scholastic failure is essentially the psychological failure since the simple intellectual experience cannot be isolated from the total mental life of the child. In that respect backwardness is not merely an educational problem; it is equally a personal and social problem, since the educationally backward feel deep frustration in life and some of them easily relapse into delinquency and other antisocial ways of living.¹

Thus, he gives new dimensions to the term 'backwardness' in considering it a personal and social problem. Summarising the discussion regarding backwardness he states :

'A backward child may be dull, normal, superior or gifted since high intelligence is no guarantee against emotional imbalance and social maladjustment which impedes progress in school subjects.'²

Uday Shanker studied the problem children with reference to various aspects like delinquency, backwardness, disorders like aggression, lack of concentration or restlessness, obstinacy, shyness or recessive behaviour, anxiety and nervous states and speech difficulties, sex perversions and sex problems etc.

The illustrative cases studied were those the investigator dealt with in the Child and Youth Guidance Clinic at Forman Christian College, Lahore and the Child

¹Ibid.,p.58.

²Ibid.,p.60.

Guidance Centre at the Central Institute of Education, Delhi. The sample of delinquents was drawn from Children's Home, the District Jail and the Women's Colony in Delhi.

He prepared case history of each problem child under study. Data were collected by contacting parents, teachers and children themselves, by visits to their homes and surrounding vicinity. The investigator collected information about the child's early life, his relationship now and in the past with parents, siblings, other relation and the teacher, the economic and social conditions in the home and the neighbourhood under which the child has been living.

Some of his observations may be cited here :

1. Backwardness in school is caused by plurality of factors. These factors are physical, intellectual, emotional, economic and social in nature and some lie more within the individual himself and some are entirely environmental.
 2. As many as 70% of these who are educationally backward are found to be subnormal in some way in physical development.
 3. Defective vision and faulty hearing, the most common defects are found to be in 29% and 5% respectively among the normals as against 42% and 19% among the backward.
 4. Backwardness may also be caused by lack of attendance or by prolonged absence from school because of illness or late admission.
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5. 83 percent of the delinquents were found having I.Qs. below 100. The average I.Q. of the delinquent group was 83. 40 percent had I.Q. between 70 and 90 which indicates that the great majority of the delinquents were rather dull than defectives.
6. The causes for delinquent behaviour were found to be maltreatment by parents, indulgence and over-protection, step parents, broken homes, death of or desertion by parents, poverty, over-crowding, bad companionship, unemployment or uncongenial working conditions and lack of adjustment in school.

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In the following pages, review of two theses, one at M.Ed. degree level and the other at Ph.D. degree level and an M.Ed. Dissertation, submitted to the M.S. University of Baroda, have been presented. The theses and the dissertation are related to the study of children who are below average in I.Q. and in school achievements. All these three studies are confined to the area of South Gujarat, the area where the present search is also confined to.

H.H. SHAH

H.H. Shah submitted his research work¹ in the form of a thesis in 1960-61. He made an endeavour to study educationally backward children.

The sample was drawn from the two high schools in Petlad, South Gujarat. The sample was confined to Standards VIII to X.

¹H.H. Shah, A Critical Study of the Educationally Backward Children in Secondary Schools in Petlad, Unpublished M.Ed. Thesis, Faculty of Education and Psychology, M.S. University of Baroda, 1961.

Out of total population of 835 students, 125 (i.e. 14.9 percent) were listed as educationally backward.

He attempted to develop the yardstick of backwardness in the light of the subjects in the curriculum, weightage given to each subject in terms of time and marks allotted, the examination system and the promotion rules followed in the particular area. In selecting the sample, he laid down the operational criteria of backwardness, solely on the basis of academic achievements. According to him :

1. Any student getting less than 18 percent marks in any of the subjects from Mathematics, Science and Gujarati would be considered backward.
2. Any student getting less than 23 percent marks in any two subjects out of Mathematics, Science and Gujarati would be listed as backward.
3. Any student getting less than 30 percent marks in any two subjects out of Mathematics, Science and Gujarati and any one or more subjects of the remaining subjects would be called backward.
4. Any student failing in more subjects than he passes i.e. getting less than 35 percent marks out of all the subjects in the curriculum would be regarded as backward.

Following tools and techniques were used for collecting the data mentioned against them:

- (a) K.G.Desai's Group Test of Intelligence : To measure intellectual ability of the students in terms of I.Q.
- (b) School Records : To know attendance, Health, Physical defects of the students.

(c) A Questionnaire : To gether information regarding locality, social status of the students and their home conditions.

(d) Interviews with pupils and their parents and Home Visits : To collect personal information and other relevant data.

Some of the important observations made by the investigator may be given as below :

1. 44 percent backward pupils work in unfavourable home conditions.
2. 27.2 percent backward pupils were socially maladjusted and 17.6 percent emotionally disturbed.
3. 33.6 percent of the backward pupils come from very poor families. The income per head per month in these families is less than Rs.20.
4. Educationally backward pupils suffer from the defect of hearing to an extent of 10 percent while 5.7% of pupils suffer from defect of sight.

M.S.SHAH

M.S.Shah¹, in 1959-60 made an effort to study some of the factors connected with backwardness of students of Standard X in secondary schools of Baroda, in the State of South Gujarat.

The sample was drawn from 11 Secondary schools in Baroda. It consisted of 51 backward students (37 boys and 14 girls) and 110 normal students (81 boys and 29 girls). In selecting

¹M.S.Shah, 'A Study of Backward Pupils of Std.X of Secondary Schools of Baroda,' Unpublished M.Ed.Dissertation, Faculty of Education and Psychology, M.S.University of Baroda, 1960.

the sample three criteria were considered, viz.,

- (1) I.Q.
- (2) Teachers' Judgment, and
- (3) School Achievements of the two previous years.

The I.Q. range was set from 65 to 85 for selecting backward students and 86 to 110 for normal students. Thus, the students selected for study were not only educationally backward but were also low in intellectual capacity. In selecting students Group Test of Intelligence prepared by T.P. Lele et al was administered to nearly 1200 students.

Data regarding personal information, physical history, family and home conditions of the students under study were collected by a questionnaire to be filled up by the investigator himself. Interviews were arranged with parents, pupils and teachers to collect information required for the study.

The investigator's important observations may be given as follows :

1. One of the most important reasons for under-achievement in school attainment is truancy or absent from the school.
2. Majority of the backward pupils, generally, fail in Mathematics and English.

H.D. BADAMI

H.D. Badami, a Ph.D. student of the M.S. University of Baroda, studied various factors of juvenile delinquency during 1959-1961.

He studied 150 juvenile delinquent boys. They were drawn from the Certified Schools and Remand Homes which admitted and educated the Juvenile^e offenders, from Surat, Broach and Baroda districts in South Gujarat. Only boys served as the subjects.

The delinquent boys had been comp^ared with equal number of non-delinquents and their similarities and differences had been studied. The investigator, thus, introduced an experimental control by keeping age, intelligence and socio-economic status constant in both the groups. The non-delinquents were selected from the normal school-going population. In selecting the control group, rating method was used. The child was considered non-delinquent on the basis of opinion of three teachers for each and his school conduct record.

Data for delinquent group were obtained from records in the certified schools and also by interviewing the child, the probation officers, superintendents of the said schools and also wherever possible parents and guardians of the child. The data for non-delinquent group were gathered from their school records as well as from interviewing the child and the teachers. In collecting all possible data, an information sheet specially prepared for this purpose was used. Information regarding the child, the siblings, the father, the mother, the home, the delinquency was sought for. The investigator used the 'Family Relationship

Questionnaire' and 'Character Evaluation Forms' devised by Dr.A.S.Patel and 'Adjustment Inventory' standardised by H.S.Asthana.

Frequency of incidence of a given factor was found out for both the groups. A Chi-square test was used to find out whether the given factor was statistically significant or not. The differences in family adjustment, general adjustment and character traits were studied statistically. Whether the differences in both the groups were significant or not was determined with the help of 't-test.'

Some of the important observations made by the investigator may be given as follows :

1. In quite a large percentage of delinquents poverty was found to be the predominating factor.
2. 75 per cent of the delinquents had their I.Qs.below normal.
3. Failure in school was found the chief determining factor in certain delinquent behaviour.

* * * * *

SUMMING UP

Review of the studies and literature lead to the following conclusions:

1. Backwardness is an outcome of Complex forces.
2. The term 'backward' and other related terms are relative in nature.

3. The term 'dull' is related to not only mental abilities but also to school attainment. Though classification of 'dull' in terms of I.Qs. alone be technically correct, it may be doubted for its practical value - This kind of group having I.Q. range 70 to 85 will have pupils with varied educational achievements and hence heterogeneous. So, the consideration of scholastic achievements in the concept of dull will make the term more specific which might be applied for practical use for organising school programmes and will lead to a more homogeneous group for further work.

In the light of the review of studies and literature, the investigator felt it better to use the term 'dull backward' in the present study, which is less confusing than the 'dull'. The term 'dull backward' obviously denotes its relation to both the aspects, viz., mental abilities and school achievements. In the present inquiry, a dull backward child is he,

- (a) whose I.Q. range lies between 70 and 85 and
- (b) who is under-achiever in the scholastic achievements.

4. In most of the works where the personality traits or the education of the backward, delinquent or gifted children are studied, their background factors such as home, family life, school life, personal history etc. have been essentially examined, and found to be related to.
5. G.F. Lightfoot, in his study about personality differences, included SELF-RATING by the students.

6. In such studies, the tools and techniques generally used for collecting relevant data are as follows:

Questionnaire, Rating Scale, Intelligence Tests, Attainment Tests, Information Sheets, Home Visits, Interviews, etc.

TENTATIVE PLAN FOR THE PRESENT RESEARCH

On the basis of the clarification of the basic terms of the problem, opinions from the literature, and the studies discussed above, the following tentative plan for the present research have been shaped:

1. The dull backward students and comparable normal students be selected on the basis of the following three criteria :
 - (1) Intelligence Quotient
 - (2) School Achievements
 - (3) Teachers' Judgment
2. In using the first criterion the information about the exact age is essential. It is assumed that the date of birth entered in the General Register of the school is correct.
3. As regards the second criterion, in the absence of widely applicable (in the sense of age, area and language) Standardised Attainment Tests, school examination marks may be taken as indicating the student as the over or under-achiever.
4. The character traits of the dull backward children be studied by a Rating Scale and interviews.
5. Teachers be requested to rate the traits. Self rating by the students be also used.

6. Parents be interviewed for knowing the pupils' life at home.
7. Teachers, students and parents be interviewed so as to get insight into the educational problems of the dull backward students.

SUMMARY

In this chapter, some researches related to the present work, have been critically examined so as to get insight for the design and procedure of the present search. Some opinions useful for the present study, from the literature have been cited. In light of all these studies and opinions a tentative plan for the present work is sketched. This tantative plan is discussed in detail in the next chapter.
