



CURRENT PROBLEMS IN EDUCATION

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Understanding Mentally Retarded Children

by

Harriet E. Blodgett, Ph. D.

and

Grace J. Warfield, M. A.

BOTH OF THE SHELTERING ARMS

MINNEAPOLIS



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Foreword

INDIVIDUAL DIFFERENCES in ability to adjust to circumstances have existed as long as there has been more than one member of the human race. Every society has had to accommodate to these differences.

How society can make better and more effective accommodations to individual differences as they are seen in the mentally retarded is described in this book. Its publication is timely in that it coincides with a heightened public awareness of the social and survival implications of the utilization of mental abilities; concern with the maximum development of unusual ability is matched by increased social pressures for services to mentally retarded children within the community.

How society is to help families care for their mentally handicapped members is a lifetime community concern. As the building of institutions has failed to keep pace with the demand for care, questions related to the desirability of keeping many of the retarded in their homes and within the community have become more acute. Such questions call for concerted school and community effort aimed not only at education of the retarded child but of his family as well; retardation is so unusual an event for the individual family that it has seldom had prior experience in adapting to the problem.

The Sheltering Arms, in Minneapolis, A Day School and Research Program for Mentally Retarded Children, was created through an unusual co-operative venture which brought together a public school system and a private charitable organization having strong social service concern. It has been possible here for a highly-trained professional staff to devote itself to intensive study of retarded children, their characteristics, their educability, and their adjustment within the family and community setting—in other words, to study the problems relating to the optimal development of each retarded child's individual potential. By making private resources available, The Sheltering Arms has

made it possible for the Minneapolis Public Schools to examine some problems of teaching methods and curriculum in an on-going situation; at the same time, the provision of teaching staff and equipment by the Minneapolis Public Schools has provided the educational setting within which basic research can go on.

Dr. Harriet Blodgett came to direct this program with a background which combined basic understanding of psychological processes with extensive first-hand experience in clinical psychological diagnosis, family counseling, and education of both normal and retarded children. Her graduate training in child development and child psychology was done at the Institute of Child Development and Welfare of the University of Minnesota, where she completed the Ph.D. degree. Her work as a state traveling psychologist gave her familiarity with community problems and institutional programs for the mentally retarded. For eight years, Dr. Blodgett taught graduate courses in child development, mental retardation, problems of exceptional children, and mental testing at the Institute of Child Development and Welfare of the University of Minnesota. During these years, she was also actively engaged in parent counseling and the study of children as a member of the staff of the Parent Consultation Service. Later, she worked as a member of a team doing basic research and family counseling in a medical-psychological-social study of Huntington's chorea.

The co-author, Mrs. Grace Warfield, came to The Sheltering Arms project at the beginning of its operation with an extensive background of teaching experience as well as experience in a state institution for the retarded. She has done graduate work in child development and special education at the University of Minnesota.

Recent legislation in many localities has made additional money available to establish or to expand educational programs for the retarded. For many schools, this is a new responsibility. For these and for others who already have programs in operation, this book offers a comprehensive and realistic examination of the multiple problems related to mental retardation. Educators, teachers, professional workers, and students will find in it sound theoretical and factual material. Parents and other relatives of mentally retarded children will find extensive information about

the capacities and limitations of these children, as well as a multitude of practical suggestions for daily living and future planning for the welfare of the mentally retarded.

EVELYN D. DENO, PH.D.
Consultant in Special Education
Minneapolis Public Schools

Preface

MENTAL RETARDATION has been an area of major professional concern and activity for both of us over a period of several years. Experiences in state-wide psychological services and clinical psychological work with children, university teaching in the areas of handicapped children and mental measurement in a wide variety of situations, employment in a state institution for the mentally retarded, and many opportunities to participate in local and state groups engaged in reviewing problems and planning projects are some of the factors of our "pooled" experience which have contributed to our interest. The privileges of studying with some of the earlier professional leaders in the field of child development, particularly Dr. Florence Goodenough and Dr. John E. Anderson of the Institute of Child Welfare of the University of Minnesota, and Dr. Frederick Kuhlmann of the Department of Public Institutions of the state of Minnesota, have been succeeded by more recent opportunities to work with current leaders, including Miss Mildred Thomson of the Minnesota Department of Public Welfare, Dr. Maynard Reynolds and Dr. Dale Harris of the University of Minnesota, Dr. Evelyn Deno of the Minneapolis Public Schools, and many individuals in the Minneapolis Association for Retarded Children. Special thanks are due Dr. Deno and Dr. Harris for preliminary reading of the manuscript and for their encouragement.

This book, consequently, is a crystallization of thinking stimulated by earlier experiences and an outgrowth of a specific school and research program for mentally retarded children. We are grateful to the Board of Directors of The Sheltering Arms and to the Minneapolis Board of Education for the unusual degree of farsightedness and social concern which created their partnership and developed the program.

Every member of the staff has made major contributions to the content. Although our appreciation of their continual assistance goes far beyond verbal acknowledgement, we would like to ex-

press our thanks to: Mrs. Marian Hall, Mrs. Edith Reynolds, and Mrs. Lois Schochet, the other members of our teaching staff; Mr. John Gregg, our business administrator; Mrs. Jane Griggs, our research assistant; Miss Mildred Lohr, our social worker; Mrs. Alice Anonsen, our secretary; Dr. Elaine Chong, our medical consultant; The Reverend Ernest Campbell, our chaplain and physical education assistant. Other members of our building staff—Mrs. Lydia Maday, Mrs. Martha Shuk, Mrs. Elvira Tevik, Mrs. Helen Larson, Mr. Harry Kjenstad, and Mr. Ellis Wilson—have contributed constantly to our on-going program not only through their daily help but also through their interest in the children and their problems. Our volunteers deserve a special word of thanks, for without their help, our program would be severely restricted. We are especially grateful to Mrs. Lois Schochet for her help in descriptions of the educable class included in Chapter 7.

The parents have contributed interest and active co-operation constantly; their eagerness to learn and understand has been important in our motivation from the beginning.

Last to be mentioned, but far from least in importance, we are indebted to the children of The Sheltering Arms, whose needs, lacks, problems, capacities, limitations, responsiveness, changeableness, pleasures, inconsistencies, and charms continue to hold us all enthralled as together we seek to understand the dilemmas of mental retardation.

HARRIET E. BLODGETT
GRACE J. WARFIELD

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I

Introduction

SOCIAL CONCERN ABOUT MENTAL RETARDATION

INTEREST IN and concern about the problems of mental retardation have increased rapidly throughout the country in recent years. The development of the National Association for Retarded Children, organized in 1950, has, above all, reflected the determination of parents of mentally retarded children to face their problems more openly and to attempt to arrive at more satisfactory solutions. Efforts of this group have been directed toward suitable legislation, development of community facilities for education and recreation, improvement of institutional programs, better public understanding of the problems, and toward support of research and teacher-training programs. Educators, psychologists, and social workers have similarly been giving greater attention to the field of mental retardation. Meanwhile, medical advances have stirred renewed research endeavors to secure greater knowledge of causation and new attempts at prevention and treatment. In the recent period, legislation, appearing almost universally in this country, has given schools responsibility for providing special classes for the mentally retarded. Special classes for the "educable" group of mentally retarded children (generally defined in IQ terms as from 50 to 80 IQ) are not new; for about half a century the special educational needs of this group have been recognized, but the recent expansion of such classes reflects an increased determination to meet these needs more adequately.

The upsurge of interest in mental retardation has greatly intensified the demand for these classes. In Minnesota, the state legislature in its 1957 session made provision for special-class education mandatory for children classified as "educable." By 1956, legislation for education of "trainable" retarded children,

defined in IQ terms as from about 25 or 30 to 50 IQ, had been passed in nineteen states, including California, Illinois, Ohio, Massachusetts, Tennessee, Wisconsin, and New York. Since 1956, several other states have followed this trend. Despite these expanded programs throughout the country, school responsibility for the "trainable" child is less clearly defined than is that for the "educable" child. There is more widespread acknowledgment, however, that society has a responsibility to make some community provisions for this group of children, even though there is not yet full agreement as to what provisions are the most useful. Various patterns are being tested in many localities. One of the most common is the formation of special classes within the framework of the public school. Most of these classes are still too new to permit adequate evaluation of their contribution to the problem.

BREADTH OF THE PROBLEM

Mental retardation is a term which embraces a wide variety of symptoms and problems. Consequently, it becomes a meeting ground for many professional groups—educators, doctors, teachers, psychologists, social workers, lawyers, vocational rehabilitation workers, nurses, speech therapists, recreational workers—to mention only a few. The task of combining the various professional approaches into an integrated whole, with the soundest thinking and planning for the welfare of the individuals concerned, for their families, and indeed for all of society, is one of great magnitude. At the present time, many schools are inadequately prepared for the job of providing special classes for both educable and trainable children. The shortage of trained teachers is a problem at all levels of education, and it is especially acute in the area of special classes for the mentally retarded. Many members of professional groups who have worked intensively with the families of mentally retarded children in other settings (such as social workers and staff members of state and private institutional facilities) report that, in their judgment, contact with the parents is of great importance in helping to work out suitable long-range plans.

PARENT EDUCATION

Adequate interpretation of mental retardation to the parents of retarded children is one of the most difficult problems in the entire field. Sarason's statement on this point¹ is representative of the opinion of most professional workers in the field. He says: "The failure adequately to communicate to parents the nature and implications of a diagnosis of mental deficiency probably causes more unnecessary problems and suffering than any other factor, with the obvious exception of those factors which originally produced the mental deficiency." Sarason goes on in his book to discuss what information is of importance to parents, and how it can best be presented.

The concern of professional workers with the general problem of parent education is reflected in many articles and reports in professional journals. Some of these are listed in the Selected References at the end of Chapter 2.

Generally speaking, schools have for many years recognized the importance of parent-school relationships in the total process of education of children. The growth of parent-teacher associations bears evidence of the concern of both teachers and parents with the problems of mutual interpretation and understanding. Schools devoted to the needs of normal children have demonstrated, through the general P.T.A. program, that the mutually interpretative process is an on-going one, taking place on the plane of a time dimension rather than occurring within a relatively short period of time. With normal children, as with the mentally retarded, the role of school and parents undergoes some changes as children become older, and a continuing process of thoughtful consideration yields the best results.

INTEGRATION OF PROFESSIONAL APPROACHES

Since the problems of mental retardation are very complex, involving the meeting and merging of several professional groups, few public school systems outside those of the larger

¹S. B. Sarason, *Psychological Problems in Mental Deficiency*, rev. ed. (New York, Harper & Brothers, 1953), p. 331.

cities can be expected to include, in their own personnel, representatives of all the professional fields with specific information about retardation. Many school systems, for example, do not have on their staffs psychologists, social workers, or doctors of medicine. They may have arrangements for securing special diagnostic services as needed for their mentally retarded children, but not be in a position to make full use of these professional groups in a program of parent education or interpretation of special education.

This book presents information concerning causative, psychological, attitudinal, and behavioral aspects of mental retardation, facts about child development, and interpretations of education and of mental retardation of interest to teachers and of assistance to parents in everyday aspects of child-rearing, and also in the long-range development of the most realistic, yet accepting, attitudes and the wisest plans for each child. The specific aspects of experience in the parent-education program at The Sheltering Arms, made available in the Appendix, are given as examples of one approach to parent education. We believe, however, that programs for parents, while based on factual information as far as possible, need to be "tailor-made" to fit the needs of the individual group. It is our hope that all the material will help schools and other agencies in fulfilling their responsibilities not only to mentally retarded children but to the parents as well, and will aid parents themselves in reaching a more complete understanding of the problems involved in mental retardation.

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Childhood Education, Association for Childhood Education, 1200 15th St. N. W., Washington, D. C. Quarterly.

Children Limited, National Association for Retarded Children, 129 East 52nd St., New York 22, N. Y. Attempts to cover nation-wide developments in the field of mental retardation; especially planned for parents, as well as for professional workers.

Exceptional Children, Council on Exceptional Children, 1201 16th St. N. W., Washington, D. C. Contains research reports and other articles of educational significance.

Mental Hygiene, National Committee for Mental Health, 1790 Broadway, New York 19, N. Y. Quarterly.

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REYNOLDS, Maynard C., Chairman, *Report of the Sub-committee on Trainable Retarded Children* (Minneapolis, University of Minnesota, 1958), dittoed.

Various Approaches to Parent Education

PROFESSIONAL PEOPLE working in the area of mental retardation are generally in agreement that parental acceptance and comprehension of the implications of mental defect for the child's future life are of the highest importance for working out adequate plans. Acceptance and comprehension, however, stress somewhat different aspects of the parent-education problem; these differences are reflected in the various ways in which parent education has been handled.

Comprehension implies that the parents must have adequate factual information about mental retardation—facts about its causes, differing degrees of mental handicap, reasonable expectations, methods of training, facilities for school experience, and the outlook for adult living. Acceptance denotes concern with the attitudes and feelings of parents, the recognition that having a retarded child creates some emotional conflicts for them, and the importance of helping them understand and handle their feelings.

Parent-education programs that stress the comprehension aspect are likely to be primarily concerned with presenting and interpreting factual information; those which stress the acceptance aspect tend to place major emphasis on the emotional component and on encouraging parents to express their feelings. Many parent-education programs make an attempt to deal with both aspects. A brief description of some published reports of programs for parents indicates the variety of approaches in use.

The Dixon State School in Illinois¹ held a series of classes for parents, using a lecture, question-and-answer, and discussion

¹ Norma L. Bostock, "How Can Parents and Professionals Coordinate for the Betterment of All Retarded Children?" *Amer. J. Ment. Defic.*, Vol. 60, No. 3 (January, 1956), pp. 428-432.

approach to consider such topics as the nature of mental retardation, historical information, types of mental deficiency, plans for education and training, and research.

In New Jersey, the home-training plan utilized teachers who made regularly scheduled visits to the children's own homes, worked with the child, and simultaneously demonstrated methods and discussed goals with the mother. For the most severely handicapped children, the goals of training were modest; at the trainable level, the teaching sessions were more frequent and the goals were raised in accordance with the ability level of the child. This plan was developed partly because of the waiting time necessary before a child needing institutional care could be placed, but as parents learned to understand and accept the child more realistically, their feeling of need for immediate institutional placement was often lessened and many parents decided to keep their child at home longer.²

In Washington, the problem of parent education led to the whole question of public relations of state institutions; the program developed included a monthly meeting for parents whose children were awaiting institutional placement, and was expanded to include special institutes, radio programs, movies, group visits to the institution, and individual parent counseling.³

Minnesota's Department of Public Welfare published three pamphlets especially written for parents of mentally retarded children: *Teach Me, You Are Not Alone*, and *Looking Ahead*. The last two were based on the work of a committee which included professional people and parents of retarded children. They were designed to provide information about mental retardation and about facilities for help.

Many local parent associations and schools invite speakers of special competence to address their meetings on the subject of retardation.

Some schools pioneering in work with trainable children have tried the use of written reports of the children's progress;

² V. Cianci, "Home Training," *Amer. J. Ment. Defic.*, Vol. 60, No. 3 (January, 1956), pp. 622-626.

³ T. M. Barber, "Better Parent Education Means More Effective Public Relations," *Amer. J. Ment. Defic.*, Vol. 60, No. 3 (January, 1956), pp. 627-632.

such reports can contribute meaningfully to parental comprehension of the child, although the process of acceptance is likely to be more individualized. A good example of a thoughtfully developed report form is that presented by Evelyn Disner.⁴ The traits stressed there include: sociability, participation in class activities, consideration for others, tenacity of purpose, trustworthiness, reaction to authority, and self-control. Progress in various areas of learning is also reported.

Programs of working with parents that emphasize the acceptance aspect may be formalized as group-therapy experiments, as was Rankin's⁵ in which twenty-one sessions were held over a period of six months. The purpose of the sessions was to provide opportunity to explore parental feelings and to express and "ventilate" emotions. Typical problems of the parents were their feelings of loss of self-esteem as a result of having a retarded child, and their tendency to overprotect the child. The results among the parents were varied, depending partly on the severity of their emotional conflicts, but the sessions were generally considered helpful.

Acceptance aspects are also stressed in the individual social worker-client relationship. Attitudes of parents and the multiple roles of the case worker are discussed in many articles in the professional journals; those of Kelman⁶ and Begab⁷ are examples.

Probably most programs of education for parents attempt to combine the informational and emotional aspects involved in problems of mental retardation. Coleman's report of group therapy with parents of mentally deficient children⁸ describes

⁴ Evelyn Disner, "Reporting to Parents," *Amer. J. Ment. Defic.*, Vol. 61, No. 2 (October, 1956), pp. 362-367.

⁵ J. E. Rankin, "A Group Therapy Experiment with Mothers of Mentally Deficient Children," *Amer. J. Ment. Defic.*, Vol. 62, No. 1 (July, 1957), pp. 49-55.

⁶ H. R. Kelman, "Some Problems in Casework with Parents of Mentally Retarded Children," *Amer. J. Ment. Defic.*, Vol. 61, No. 3 (January, 1957), pp. 595-598.

⁷ M. J. Begab, "Factors in Counseling Parents of Retarded Children," *Amer. J. Ment. Defic.*, Vol. 60, No. 3 (January, 1956), pp. 515-524.

⁸ J. C. Coleman, "Group Therapy with Parents of Mentally Deficient Children," in C. L. Stacey and M. F. DeMartino, eds., *Counseling and Psychotherapy with the Mentally Retarded* (Glencoe, Ill., The Free Press, 1957), pp. 446-451.

the development of the program as growing out of three factors: the need for co-ordination of efforts between school and home; the requests of parents for assistance with specific problems; and the many common problems of concern to parents.

One difficulty in the use of outside speakers at meetings for parents is the problem of integration of the information presented in a series of meetings into a coherent or consistent philosophy or point of view. Although all the information may be entirely accurate and valuable, it may still remain a number of compartmentalized or "pigeon-holed" facts for the listeners.

PARENT EDUCATION AT THE SHELTERING ARMS

At The Sheltering Arms, the viewpoint of the staff has been from the beginning that parent education and continuous parent counseling were equal in importance to direct work with children. Our initial group meetings explained that the purposes of the school and research program included not only attention to the educational needs of mentally retarded children as currently outlined and understood, but also a research approach, exploring ways of meeting needs already somewhat understood but, in addition, discovering and defining needs and purposes as they were revealed in day-to-day operation. We indicated our interest in learning more about the total problems of mental retardation, as these affect the parents, the other children in the family, the neighborhood, and the whole community. In developing a new school program our efforts would be directed toward meeting children at their points of individual development, rather than imposing on them an already structured program, which might or might not be suitable. We interpreted the purposes of research in mental retardation, and outlined some of the responsibilities of the parents in assisting with research.

Many programs for parents plan the presentation of various topics about which professional workers think parents should be informed. At The Sheltering Arms, this procedure was modified slightly. A list of topics considered important by the staff was prepared, and the parents were asked to check the list in the order of interest. The great amount of interest shown in the topics of mental development, discipline, negativism, and leisure-

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the development of the program as growing out of three factors: the need for co-ordination of efforts between school and home; the requests of parents for assistance with specific problems; and the many common problems of concern to parents.

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time activities then shaped the program for much of the remainder of the year. During the second year, parent meetings continued on a once-a-month basis, with some broadening of the topics. Further specific details of the parent program will be found in the Appendix.

OBSERVED EFFECTS

We were interested to note some shifts in the direction of the parents' thinking as reflected in their choices. Whereas discipline ranked first in the original choice of topics, at the end of the second year it had dropped to ninth place. This suggests: (1) that parents had improved their methods or shifted their attitudes so that discipline problems no longer loomed so large in their thinking; (2) that perhaps they had developed more interest in some of the broader aspects of child personality—concern with the child's self-confidence, independence, and the problems of normal children; (3) that their interest had expanded to include the total field of mental retardation, reaching beyond aspects of immediate significance to their own child.

Over the three-year period of our experience, we observed many changes in the ability of parents to enter into discussion, to ask useful questions, and to help each other through exchanging viewpoints. We found our group of parents eager for facts and information, interested in learning not only about the kind of retardation represented in their own child but in learning about other kinds, too. We found them increasingly able to accept their child, and themselves, as he and they were. They could be more objective, laugh at what was funny, be less defensive about themselves. They were eager for information, the "real stuff," not watered down or sentimentalized, but objectively and fairly presented. We found them—not invariably, but nearly so—able to listen to things about their own child which were true but which initially they hadn't wanted to hear. Despite the economic and educational variety represented in the group, they succeeded in creating a group atmosphere in which all the parents felt comfortable.

Further evidence of the identification of the parents with the school has been seen in their fund-raising program. Each year

the parent group has undertaken two or three fund-raising projects and has built a healthy treasury, in terms of the size of the group, which is made available to the school for equipment and supplies.

Comparison of the parent-education program at The Sheltering Arms with programs of similar purposes, conducted by other schools and agencies, reveals some differences which may be quite significant. In contrast to the common practice of drawing speakers from differing fields of work, The Sheltering Arms has been able, because of the variety of professional training represented on its staff, to make use of speakers with some variations of background who are still closely identified with a specific school program. This, theoretically at least, should mean that the content offered to parents can be coherent and consistent, making for a more fully integrated interpretation and viewpoint.

Results of parent-education programs, as reported in the literature, are generally favorable; how much parents benefit from them, it is pointed out, varies with the seriousness of the emotional disturbances in the parents; in other words, problems of mentally retarded children affect parents in all walks of life, with all degrees of capacity to adjust and to meet unusual strains and demands. Many of the reports are based on groups described only as composed of parents of mentally retarded children. Logically, we would expect that results of educational programs could eventually be scientifically described in relationship to the characteristics of the group being studied, to the extent that we are able to measure the important and pertinent personality characteristics.

SOME TENTATIVE JUDGMENTS

Some tentative judgments can be made of the value of the kind of parent-education program offered at The Sheltering Arms. First, the consistently high attendance (70-75 per cent of the families represented at each meeting) and greater participation by the parents point to a belief on their part that the content of the meetings is worthwhile. Second, their interest in contributing to the research aspects of the program has continued to be high. Third, they have become increasingly accepting and

understanding of the problems other parents meet and have made more efforts to be directly helpful. They have taken full responsibility for organizing and directing the Cub Scout program at school and have taken advantage of the opportunity to see their own youngsters in a group setting. Fourth, as the program has progressed, they have been increasingly able to bring their problems out into the open and to take positive action on them. Several families have placed a retarded child in a boarding home, without undue conflict or feeling of guilt. Several other families have moved ahead in their consideration of state guardianship and planning for the future. On their own initiative, with no suggestion from the staff, they organized and carried out a field trip to two of the state institutions. Later, members of the staffs of these institutions commented to our staff members on how well informed these parents were and what sensible attitudes they had. Several other families, which have not yet reached a decision about state guardianship, have been able to face and discuss their doubts and anxieties.

The published reports on programs of parent education indicate generally positive results; possibly the fact of having some attention given to the family problems in an accepting situation is in itself useful. Our experience with a continuing program confirms what we had believed in advance on theoretical grounds: A broadly based educational program, which emphasizes factual information and attaches great importance to the goals of improving total family adjustment through increased understanding, decreased defensiveness, and helping parents take further steps toward greater emotional maturity, is of continuing value to the parents of mentally retarded children, and enhances the ability of the parents to meet their problems constructively and satisfyingly.

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Mental Development and the Measurement of Intelligence

DISTRIBUTION OF ABILITY

THE CAPACITY for growth and development is a basic biological characteristic of all living organisms. Variation, or "individual differences," or the fact that no two people are exactly alike, is equally basic. Measures of all sorts of human traits show that for any trait measured in a large population, the scores will fall into a curve of distribution known as "the normal curve of distribution" or "the bell-shaped curve." This curve also applies to the distribution of general intelligence among the population; the extremes of the curve represent the most extreme deviates of ability, with the most highly gifted intellectually falling at the extreme right, and the most severely handicapped intellectually falling at the extreme left. The further one goes from the "average" group in the middle toward either the right-hand or the left-hand extreme, the smaller is the number of individuals who would be found at any given point on the scale. Thus about 50 per cent of the population is regarded as falling in the "average" category, with 25 per cent above the average and 25 per cent below the average. The most highly gifted and the most severely retarded, however, are found more rarely; on the curve of distribution they are represented by the most extreme points. Figure 1, showing the curve of normal distribution, illustrates the theoretical distribution of general intelligence among the total population. This is "theoretical" because in practice it is impossible to measure the total population. When groups of individuals are tested for various research purposes, the curve showing the distribution of their scores will vary somewhat from



Fig. 1. The curve of normal distribution, illustrating the theoretical distribution of general intelligence among the total population.

the theoretically expected normal curve; the larger the size of the group, in general, the more closely the curve of their scores will approximate the normal distribution. Figure 2, for example, is based on the entire standardization group used for the Revised Stanford-Binet Scales, a total of 2904 individuals. Figure 3, on the other hand, is based on only 226 individuals and shows an unexpectedly large number of cases scoring toward the right-hand extreme of the curve; this group of subjects included more than the generally anticipated proportion of intellectually gifted individuals. This happened partly because this was a follow-up study undertaken several years after the original study of the group, and the individuals of higher ability were more able to appreciate the reasons for the study and more willing to take the time to participate in it.

RECOGNITION OF INDIVIDUAL DIFFERENCES

Mental development, or the growth of intelligence, occurs on a time dimension, as does every kind of growth—physical, social, emotional. Human intelligence is a complex concept, but one which is familiar to everyone in terms of its everyday meaning and use. Long before psychological tests were developed, parents were aware of differences among their children and expressed the awareness in their descriptive comments: "School is lots harder for Larry than it is for Sue," "Sally learns so quickly; she hears something once and remembers it forever." Differences within the individual, as well as differences between individuals, have also been observed in everyday life. High schooler Henry finds math courses a delight, but struggles hard to get a passing

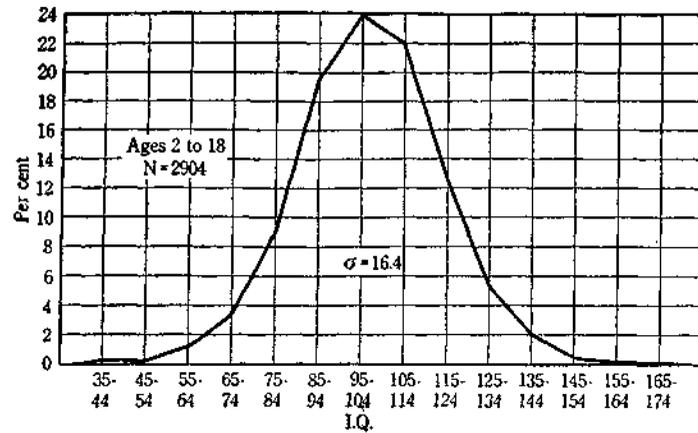


Fig. 2. Distributions of composite L-M IQ's of standardization group for Revised Stanford-Binet Scales. By permission, from L. M. Terman and Maud A. Merrill, *Measuring Intelligence*, Boston, Houghton Mifflin Co., copyright, 1937.

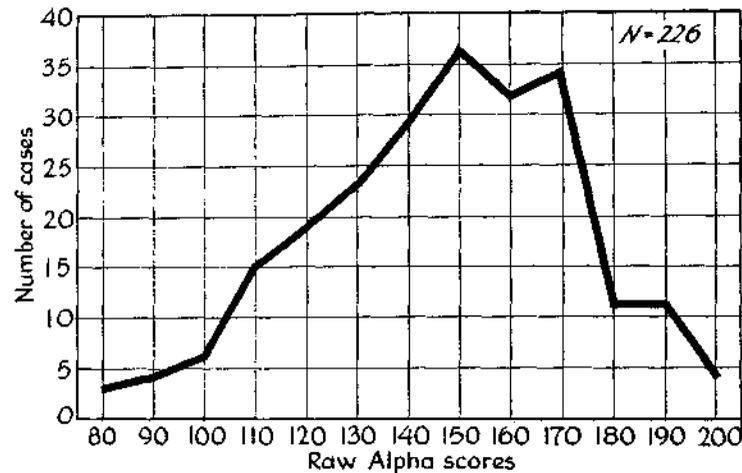


Fig. 3. Distribution of alpha scores of total group tested. By permission, from Katharine M. Maurer, *Intellectual Status at Maturity as a Criterion for Selecting Items in Preschool Tests*, copyright, 1946, University of Minnesota. Published by the University of Minnesota Press.

grade in English. Intelligence as a concept encompasses many kinds of abilities, and some life situations require more of one kind than of another. Among the attributes of intelligence of which people are generally quite aware in children are traits such as curiosity, quickness of learning, early interest in numbers and words, good vocabulary, ability to remember, being quick to "catch on," to see the point, or to understand something.

People are also generally appreciative of age differences as they are related to expectations of children in behavior and maturity areas. The difference in general maturity between a one-year-old and a two-year-old is so striking that the most casual observer would not confuse the ages of the children. At later ages, however, a one-year difference in age becomes much less conspicuous because the rate of development has become less rapid. A good-sized ten-year-old might easily be judged to be eleven, in terms of physical size or of behavioral maturity. Expectations in behavior areas reflect what we expect children to be able to understand and to perform at various ages. Of the toddler, we are tolerant; his mistakes are often accepted on the basis of "He didn't know it would break." We are also protective and don't let the two-year-old cross streets by himself. At a later age, the child of perhaps six or seven hears phrases like "You know better than that."

Figure 4 illustrates the theoretical curves of mental growth; as we look at mental development on a time continuum, it is clear that at early ages it progresses at a rapid rate. With increase in age, the rate decreases, although the child is still progressing in mental development. It is somewhat analogous to moving from a forty-mile-per-hour speed zone into a thirty-mile-per-hour zone; the direction is still forward, but the rate is less rapid. In physical development, there is another period of accelerated growth—the adolescent "growth spurt." Evidence for an adolescent spurt of mental growth has not been found, but the adolescent does show in the intellectual areas some of the effects of his shifting self-organization in terms of emotional maturity, interest development, longer-range goals, and motivational patterns.

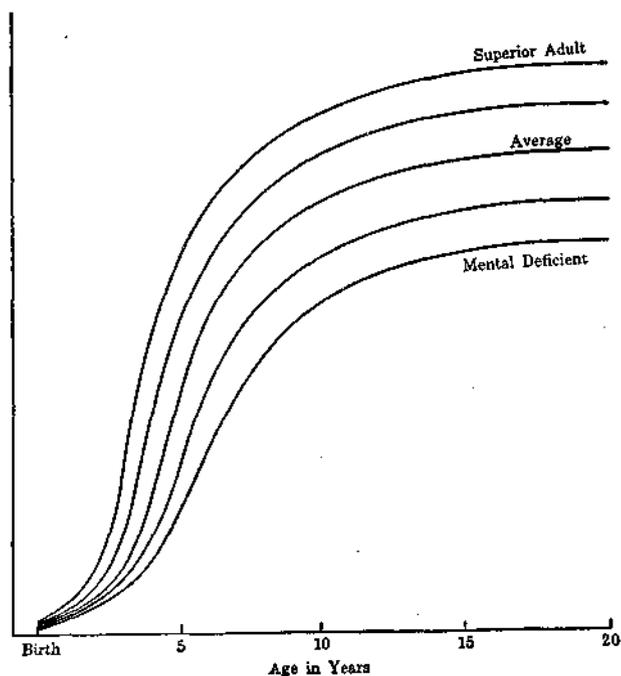


Fig. 4. Theoretical curves of growth in absolute capacity. By permission from *Modern Clinical Psychology*, by T. W. Richards. Copyright, 1946. McGraw-Hill Book Co.

TECHNIQUES OF MEASUREMENT

The development of effective ways of measuring intelligence in objective fashion was closely linked to a very practical problem—educational concern for children who did not make normal progress in school. Alfred Binet, a French physician, is the person credited with devising the first useful type of intelligence test. Previous attempts at measurement of intelligence, in the latter years of the nineteenth century, had been made more often in the psychological laboratory than in a “real life” situation; various psychologists had experimented with the use of a number of kinds of test items to see if these would measure general intelligence. They were chiefly physical, sensory, or motor (such as measuring the rate of tapping) in type. Results were uniformly negative. Although they revealed differences

among people (generally college students), the tests did not show any meaningful relationships to intelligence as reflected in school grades or judgments by teachers.

Binet's approach to the content of the test items was quite different. He thought of intelligence in terms of qualities such as being able to make adaptations, being self-critical, and being able to assume a task-oriented attitude and persist toward a goal. He consequently explored more general kinds of content, which had more to do with everyday living situations and which involved comprehension, judgment, and reasoning processes. Making comparisons, seeing similarities and differences, making use of familiar information to solve a new problem, generalizing, and working out solutions to tasks of a typical realistic nature were the kinds of tasks he developed. Children's answers to a question like “What should you do if you are going some place and miss the street car?” proved useful. Differences among children revealed in their test performances sorted out the children meaningfully in terms of the criteria by which intelligence is recognized and rated—actual life performance. He used age progress as a basis for knowing what should be expected of children; a task was judged appropriate for a six-year-old when large numbers of six-year-olds, in general, were able to do it successfully.

PROBLEMS OF MEASUREMENT

Intelligence has to be measured indirectly, by what it does. Intelligence is not a solid object to be subjected to measurement in inches or in pounds; it shows itself in accomplishments. There are many problems involved in accurate measurements even of things directly measurable; very fine instruments and repeated measures are necessary in situations where great accuracy is required, as many an amateur carpenter has learned to his sorrow. The difficulties are obviously greater in measuring a non-object such as intelligence. What a test of intelligence does is to place a child (or an adult) in a standard situation and present him, in a standard fashion, with a standard series of tasks. The latter are of various sorts, but all have in common the requirement of some aspect of general intelligence to permit

adequate solution. Four-year olds may be given test items requiring the matching of simple geometric forms, or answering a question of general comprehension, such as "What do we do with our eyes?" A seven-year-old might be presented with some pictures and asked to point out the incongruous element in each one. A twelve-year-old might be asked to describe and interpret a pictured scene. Vocabulary items begin at the earlier ages with words of a concrete sort, such as "What is a bicycle?" At higher age levels, the words become more abstract, such as "What does 'connection' mean?" Thus the examiner elicits from the child a series of samples of intellectual behavior. No single individual item carries the whole burden of evaluating the child's ability; many items require more than one variety of thinking skill. A task which appears to be a rote memory item also requires ability to comprehend the directions, to appreciate the task, and to give attention on a sustained basis, as well as the ability to remember the material itself. The content of the items is selected very carefully to furnish either a very novel sort of task, for which no one has had specific training or teaching, or else a very familiar and ordinary sort for which everyone has had previous practice. Each of the samples of intellectual performance furnished by the child's answers to the questions is then compared with the "norms," standards established by the process of standardization so that all examiners in scoring test responses will be using the same criteria of adequacy. The standardization of a test is a process that involves administering the test to many children at each age level in the same way and subjecting the children's answers or performances to evaluation, so that the criteria of "success" and "failure" can be developed for each task. In each later individual examination, therefore, the child's performance is being compared with the performances of many other children of his age.

RELIABILITY OF MEASUREMENT

The measurement would be of little value, even if it did show differences among children, unless it had some consistency. If a child tested on Tuesday were to perform entirely differently than he had the previous week, the "reliability" of the measure

would be too poor to give the test any value as a measure of intelligence. Determining how reliably the test does its measuring is therefore an important part of the standardization process.

VALIDITY OF MEASUREMENT

The other important aspect in developing a test is its validity. Does it really measure what it is supposed to measure? With an intelligence test, the problem is whether the test shows a meaningfully high relationship with other standards by which intelligence is judged. Success in learning, judgments by teachers, evidence obtained from other tests are some of the criteria for judging whether or not a newly developed test is valid. Another important part of the validity problem is the question of prediction. A test is of little value unless what it tells us continues to be true for some period of time. If we think of intelligence as developing with age, obviously a test, no matter how good, if given at a very early age cannot measure with complete accuracy those parts of intelligence which as yet have not developed. To the extent that earlier-appearing abilities are correlated with later-appearing abilities, a test given at an early age can predict, with some accuracy, at what level the later-appearing abilities will be. Tests given to very young children—roughly, under the age of four—cannot be used to predict adequately, for example, which children will be successful in college. This is too specific a sort of prediction, and even if intelligence measures could be made with enough accuracy, there are too many other factors involved in success in college. Predictions based on intelligence tests designed for broader purposes—for example, to identify mentally retarded children—can be made much more adequately. In general, the more severe the degree of mental defect, the earlier the age level at which it can be recognized.

THE DEVELOPMENTAL PROCESS AND TEST CONTENT

The problem of test content which will be predictive is related, then, to the developmental process of the growth of intelligence. Tests for young children, especially before they have acquired much language, rely on the use of abilities related to intelligence,

but not as closely related as some abilities which appear later. For example, a simple three-piece formboard with a circle, triangle, and square to be replaced in the appropriate spaces can be done by the average two-year-old. This kind of item requires the ability to appreciate the task, to pay attention to it, to discriminate between the different shapes of the pieces and match them to the appropriate spaces, along with being able to manipulate the pieces into place. This is obviously a different kind of task than asking a child to listen to a brief story and then answer some questions about its content. The test items which can be used with very young children generally rely on motor and perceptual skills, because these appear at early ages. With the emergence of useful language, items involving more thought and reasoning can be selected; the "general" kind of intelligence which we think of at the adult level is predicted better by items having more in common with it. Motor abilities and skills are specific things and may be quite unrelated to each other (witness the relative rarity of the "natural" athlete who wins letters in all sports with equal ease); intellectual abilities, however, especially in the more abstract areas involving language, abstract thought, memory, reasoning, vocabulary, comprehension, attention, persistence toward a goal, self-criticism, and adapting past experience to a new situation, are much more closely related to each other and to the conglomerate concept of general intelligence.

BASIC ASSUMPTIONS

Tests rest on two assumptions: Intelligence increases with age, and hence graded series of tasks or questions, which increase in difficulty with the age to which they apply, can be used to reflect increase in ability. Second, since the tests must have content, this content must be drawn from children's "common experience"—not from specifically "taught" material but from the ordinary environment which we might expect would be familiar to children in a given culture. This is the reason that a test developed in one country usually needs to be restandardized if it is to be administered in another country of markedly different culture. It is also why measurements of handicapped children, such as blind or deaf youngsters, are more complicated; the life experi-

ence of such children, because of their sensory defect, has been different. Within a broad range of "normal environment," however, most children, especially after they reach school age, can safely be assumed to have had the basis of common experience on which the test content was established.

LIMITATIONS OF INTELLIGENCE TESTS

Many criticisms have been made of psychological tests as measurements of intelligence, but most of them vanish when the critics come to understand something of the nature of intelligence and the kinds of performances related to intelligence, and when they appreciate more fully the developmental process involved. A good many criticisms are made of tests because they do not measure everything about a child; obviously, this is an unfair criticism. They were not intended or built to measure everything. Measures of other aspects of individual differences perhaps need to be developed, but intelligence tests should not be burdened with the responsibility of measuring these other aspects, even though frequently observations of the child in the test situation do indeed contribute greatly to understanding some of the personality characteristics that affect his behavior. Tests of intelligence really need no defense; the almost innumerable practical applications made of them since their development in the early years of the twentieth century furnish overwhelming evidence of their usefulness.

DEVIATIONS IN INTELLIGENCE

For most people whose ability falls somewhere around the average, measurements of ability may not be especially important. It has always been the deviates, those who were different enough from their group to be conspicuous, who presented special problems to society. At the highly gifted extreme of the normal curve of distribution, there are the people of such unusual intellectual talents that they may create new things for which society as a whole, geared to the average, is not yet ready. Highly gifted children, generally found to be superior in all traits, still may have some problems of fitting into a group

whose general level is much different. The nine-year-old who builds his own radio may not find many common interests with other nine-year-olds. A highly gifted three-year-old of our acquaintance gets along beautifully with his age mates in active outdoor play but has trouble understanding why the other three-year-olds don't want to play card games and word games with him. At the other extreme, individuals markedly less capable than average also have many special problems. Society sets up certain general standards of competence and adjustment; individuals unable to meet these standards because of lack of normal intelligence have problems of their own, in their own lives, and also create problems for the rest of society.

THE CONSTITUTIONAL BASIS

Basically, the mental potential of the individual is a function of his nervous system. Genetic factors in intelligence have repeatedly been shown to exist, even though the mechanisms of human heredity are as highly complicated as the composition of "general intelligence." The individual's native endowment must clearly be an outcome of hereditary operation; the situation is further affected, of course, by what goes on in the individual's experience and environment—prenatally, at birth, and postnatally. Correlations of significant size between parents and children in intelligence are the general finding; gifted children are found much more frequently in the families of professional men, for example, than in the families of day laborers. Such is the law of human variation, however, that in individual cases a day laborer might very well have a gifted child. It just happens less frequently. It is important to keep in mind the difference between a general expectation of something that would hold for a large population, and the individual case. A prediction entirely valid as a general law may be completely inapplicable to the individual situation.

CONSISTENCY OF DEVELOPMENT

Another point of special significance in connection with the field of mental development is that development tends to be

consistent; the rule apparently leans toward correlation of all favorable traits. This is not in keeping with the "rule of compensation" that people sometimes believe *should* operate. The rule of compensation, if it existed in the field of human development, would see to it that a child handicapped in one area, such as general intelligence, would have compensating abilities somewhere else. This has been disproved in every area in which it has been examined. Gifted children as a group turn out to be superior in all other measurable characteristics, although not equally superior in all of them; mentally retarded children, again as a group, show inferiorities or defects in other measurable areas, too. Again, this is a finding to be applied to groups rather than to individuals. A gifted child may be crippled or ill; a retarded child may have exceptionally good health, but for large groups of gifted or retarded children, the average findings bear out the relationship among favorable characteristics.

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4

Mental Retardation

BASIC CONCEPTS

FOR THE PARENTS of mentally retarded children, learning to understand the meaning of the concept of mental retardation is an important foundation for their continuing efforts to do their best for the child. Some information about the conditions that are known to cause retardation, and awareness of some fields in which further research is now in progress and from which new information may result, are useful to parents in helping them take a "long view" of their own situation and objectifying their thinking about their own child. Parents have a major role to play in the whole problem area of mental retardation; their participation becomes more effective when they are better informed.

The basic characteristic of mental retardation is a lack of capacity for normal intellectual development. This capacity may be lacking to a greater or a lesser degree; reference to the curve of normal distribution shown in Chapter 3 makes clearer what the situation is in terms of frequency of the differing degrees of defect. Ability levels vary from just below the normal range to far, far below. At the higher ability levels of the group falling below normal, more individuals are found; as the degree of defect becomes more severe, fewer individuals are found. Although educators and psychologists have traditionally grouped the mentally retarded in three or four categories, for convenience in discussion and in group planning, it should be remembered that there is little or no real difference between a child at the top of one category and a child at the bottom of the next highest category. While the use of such categories is necessary for practical grouping purposes, the distribution of ability is along a continuum.

CHANGING TERMINOLOGY

Traditionally, in the history of the scientific study of mental deficiency or mental retardation, the groupings have been based on real differences in the ultimate levels of development reached by members of the group. The "idiot" group was the lowest, distinguished by lack of sufficient ability to acquire useful language or to be independent in self-care. In IQ terms, this lowest group included individuals whose mental ages at adulthood were under three years, and whose IQ scores ranged from 0 to about 25. The imbecile group, the next highest, generally acquired some language of perhaps a rudimentary level; almost universally, this group showed defective speech. Members of the imbecile category were able to acquire basic routine habits of self-care and to perform some useful work, but under the close supervision of a home or institution, never independently; they could not make progress with ordinary academic learning. The final mental age reached by the imbecile category ranged between three years and about seven to seven and one-half years; the IQ range was from about 25 to about 50. The next category of retarded persons was known as the "moron" level. These individuals were able to acquire language, routine habits, and to learn to perform more, and more difficult tasks, with less supervision but still requiring some supervision; they could learn academic work at the level of difficulty expected from about second grade to about fifth grade; their chief sphere of intellectual limitation was the inability to carry on abstract thought, and their greater need, in learning, for more concrete experiences and specific teaching. Although they were able to acquire some academic information, they did this at the level of their mental ages rather than their actual ages, so that school attainments did not reach their final levels until the individuals were fifteen or sixteen, or sometimes even older.

More recently, changes in terminology have been sought, particularly by the parent associations. Standard terms, such as *mental deficiency*, *feeble-mindedness*, *idiot*, *imbecile*, and *moron*, seemed distasteful to many. In a way this is unfortunate because the older terms did have a clarity of significance and definition in the professional field. Newer terminology substitutes the term

mental retardation for *mental deficiency* most often; the *moron* group becomes the *educable* group; the *imbecile* group is called the *trainable* group; the *idiot* group is generally known as the *total care* group. The newer terms, once people are familiar with their significance, do succeed in relating the level of ability of the child to the educational objectives reasonable for him. In Minnesota, classification by the State Department of Education considers classes for the educable as Group I classes, and classes for the trainable as Group II classes. At this time, it is still important to define terminology as it is used, since otherwise there may be confusion as to which group or ability level is being discussed.

Above the *moron* category, in the older terminology, another group of retarded individuals was considered as being of *borderline* intelligence. This group, ranging in IQ from about 70 to about 80, has final mental ages of about ten and one-half years up to twelve years. Many in this group needed special attention in school, but as adults were able to be reasonably self-sufficient in terms of making a living.

MULTIPROFESSIONAL VIEWPOINTS

There are some differences between the educational, the psychological, and the legal definitions of mental retardation which should be understood.

The Educational View

The educational view concerns itself with meeting the educational needs of the children. Theoretically, most children in the educable group, which includes the IQ range of 50 to 80, benefit by school programs designed to match their mental-growth rates and to protect them from the continual academic failure and the consequent social problems of the regular classroom. Typically, as special-class children in the educable group move into junior high and high school special programs, efforts are made to broaden their social experience through developing some classes in which special-class youngsters are "integrated" with youngsters in regular class. These courses are apt to include manual training, physical education, arts and crafts, and music,

areas where intellectual ability is not as heavily stressed as it is, of necessity, in mathematics, science, English, languages, social studies, and the like. Schools, as public service agencies, are not directly concerned with the supervision of mentally retarded adults. Their interest is in the child's total development and adjustment, and of course specifically in his learning progress.

The Psychological View

The psychological view of mental retardation has in the past been directed primarily at mental measurement and careful study of ability differences, the scientific problems of prediction of mental growth and final ability level, developing more adequate measurement devices, and analyzing learning difficulties. More recently, all the professional workers interested in mental retardation have broadened their concern until now professional workers are trying more and more to combine their resources and to study, understand, and help the "total child."

The Legal View

The legal view is based on a broader societal definition of mental retardation. Definitions of mental deficiency used in state-guardianship proceedings, for example, stress the social inadequacy of the individual and define a mentally defective person as one who, from birth or from an early age, has had a mental defect sufficiently severe to prevent him from being able or becoming able to handle his own affairs with ordinary prudence. In other words, society's concern is for the protection, by law, of the inadequate person who is unable to meet life's day-to-day problems in our social world.

The Social Criterion

Because society's expectations of people vary at different ages, there will be some shifting of individuals from one category to another during their lifetime. A child may be viewed as mentally retarded from both the educational and psychological concepts; he may need special education from the beginning of his school attendance. Let us assume that he has an IQ of 60; when he is six years old, his mental age is about three and one-half years; he reaches a mental age of six when he is ten years old;

at adulthood, his mental age will be about nine years. Assuming some further characteristics that he may have—a stable family background, understanding parents, good health, a pleasant, co-operative personality, and some economic "good luck" in finding a routine sort of job with adequate supervision—he may move into adult life as quite a self-sufficient person. If he does not meet too frequent crises (such as losing his job, or assuming responsibilities he can't successfully carry), he may not be included in society's legal definition of a person in need of protection. Even though he seems to have shifted from a "protected" to an "unprotected" classification, however, it must be kept in mind that basically he is limited in his ability to cope with social living, and his status of being adequate is partly a function of the adequate situation in which he is living. A shift in the situation might very well shift society's view of him. This is one reason that guardianship and supervision offer valuable safeguards even for the adult retarded who at any given time may be adjusting satisfactorily.

INTERPRETATION TO PARENTS

Sometimes parents wish that psychological tests of intelligence had never been developed; they have fallen into a trap of circular reasoning, in which their feeling is that if it weren't for the test, no one would know that their child was retarded. This obviously is very fallacious thinking. The retardation is demonstrated in the child's behavior; the test is a short cut to long life experience in demonstrating the causative factors underlying the difficulties in adjustment. It is the parents' anxiety about the child's unsatisfactory development that leads them to seek professional help, often first from their doctor, and usually later from a psychologist. The parents already know that the child is not developing normally; they can only hope that the deviation is a temporary phenomenon, but in seeking help they have already faced at least the present evidence of retardation. The psychological test does not, of course, create the retardation; it measures the amount of deviation in intellectual development shown by the child.

The psychologist is often in a position to explain to parents

the reasons for the use of tests, to explain not only the amount of retardation now shown but also what this means in terms of expectations for the child and his capacity for later development. Many times, with young children and especially with children showing more than one kind of handicap, prediction must be somewhat guarded; in effect, the parents should know how much retardation the child now shows, because this helps them in setting standards and expectations. The amount of retardation in his rate of mental growth is shown by the ratio of his chronological age to his mental age. The parents also need to know what to expect of his mental-growth rate in the future, and it is at this point that the prediction problem is important. The general rule is for consistency of developmental rate within the individual; consistency, however, does not mean an absolute "sameness" of growth rate. Some variations in test performance at early ages may be related to extended periods of illness and consequent environmental and experiential limitations. Small variations in test performance are to be expected, because the child varies from time to time and perhaps has "good days" and "bad days," and also because the test content changes with the age of the child, tapping different abilities, catching some perhaps which are just emerging at one time, and at a later time tapping the same abilities then more fully developed.

We have two major purposes in measuring a child's ability: to determine his present standing in comparison with others of his age, and to predict his final ability level at maturity. The evidence from many careful research studies shows that tests given at preschool ages are considerably less stable in their predictive value than tests given after a child has reached school age. This is partly because the organization of intelligence before school age is more fluid, with many new abilities developing at rapid rates because the growth process is proceeding faster, and partly because school age generally means school attendance, and this more consistent situational experience helps to iron out some of the environmental differences children have in their home situations. Despite the fact that prediction for an individual child cannot be absolutely rigid at early ages, both research and clinical experience have shown that when adequate measurements are made of school-age children, the shifts that

do occur are rarely of sufficient magnitude to change markedly the total outlook for the child. A differentiation needs to be made between differences which may be of "statistical" significance, in that they can be shown to be greater than chance expectation, and differences which are of "life" significance, in terms of their effect on planning for the child. Further evidence has shown that changes in test score are less frequent, and of smaller magnitude, among retarded children, while variation is greater among superior children.¹ Many times changes which do occur in an upward direction are best explained on the basis of the child's improved capacity to co-operate; his level of functioning may show some change because he is better able to make use of his ability, not because his ability has necessarily really changed in terms of rate of growth. Changes in a downward direction, as retarded children reach the later childhood years, are often best explained in terms of the cessation of mental growth, a "leveling off" of the mental developmental process, while their actual age continues to increase, producing a downward shift in the IQ or ratio result of the relationship between actual age and mental age.

INCIDENCE OF RETARDATION

It is difficult to secure reliable evidence as to the number of mentally retarded children. Most authorities currently deal with estimated numbers, and the most commonly accepted estimates state that about 3 per cent of the population have IQ's below 70. Since the number of individuals at any given level increases as one inspects the curve of normal distribution moving toward the middle, or "average," there is a larger percentage of children falling in the IQ range of 70 to 80; in the standardization population of the Revised Stanford-Binet Scale, 5.6 per cent of the group fell in this range of ability. The 70 to 80 IQ group is included in the "educable" category; some of these children are able to adjust adequately without a special-class placement, but probably most of them would make better educational progress in a program more specifically designed for them. At adulthood,

¹L. M. Terman and Maud A. Merrill, *Measuring Intelligence* (Boston, Houghton Mifflin Co., 1937), pp. 44-47.

many members of this group are able to be self-sufficient and hence do not meet the legal or societal criterion of mental deficiency. Estimates of the percentage of children falling in the trainable group are generally about $\frac{1}{2}$ of 1 per cent. Estimates of the number of adults who should be classified as mentally retarded, from the societal point of view, are usually made at around 2 per cent.

INCREASE OF SOCIAL CONCERN

Several factors of importance are involved in the increased attention now directed to the problems of mental retardation. A major one is the development of the National Association for Retarded Children, with its many local and state groups of parents with a vital interest in their handicapped children. Another factor is found in recent medical advances, especially neurological diagnostic skills contributing to improved understanding of causation, and in the development of medications of assistance in behavior control, thus aiding the child in making use of his ability. Also, advances in medical knowledge save many babies who in earlier years would not have survived; a higher general standard of living and better medical care for the whole population also contributes to a lower mortality rate among defectives, as it does for the general population. Increases in the birth rate among the general population also increase the number of the mentally retarded. Shortages of institutional facilities and expanding costs of new construction, plus our higher standards for the kinds of staff and programming that institutions should provide, increase the pressure on communities to provide supplementary sorts of assistance to the families of retarded children. The greater availability of financial assistance for research programs stimulates further scientific efforts to study and learn more about all the aspects of mental retardation. The generally favorable economic climate of the country permits increased concern on the part of the general public for all sorts of handicapping conditions. As a consequence of these factors, recent progress in the study of mental retardation has been markedly accelerated, and future progress promises to be even greater.

CAUSATIVE FACTORS

Parent Concern

Parents are nearly always anxious to understand, as far as possible, the causative factors in their child's mental retardation. Sometimes it is possible to demonstrate the specific causation; often it is not. A number of the causes which are fairly well understood medically are relatively infrequent in incidence, but better information about these, even though they are rare, paves the way for better information about other causes as well.

In general, the lower the ability level of the retarded child, the more frequently it is possible to demonstrate associated and/or causative physical or physiological factors producing the mental handicap. Physical defects of all sorts increase in frequency as the IQ is lower. Severe effects of birth injury, prenatal damage, or congenital defects are seen in the "total care" group of children and nearly always in the trainable group; also, other defects are apparent which tend to label these youngsters as "accidental" cases of mental retardation. From the viewpoint of family planning, many parents want to explore rather carefully the possibility that genetic factors may be involved in their having had a retarded child.

There are a few centers for genetic counseling, such as the Dight Institute at the University of Minnesota; usually the state university medical school or department of biology would have information as to the local availability of such counseling. Unfortunately, too many individuals raising questions about hereditary aspects of retardation have had their fears brushed aside by poorly informed advisers who assured them, falsely, that they had nothing to worry about, that "lightning never strikes twice in the same place." This isn't true even for lightning, to say nothing of a complex field such as human heredity. As genetic studies are continued in the light of newer medical knowledge, more definitive information can be expected to appear. It is known now that some varieties of retardation do involve genetic factors; among them Mongolism, retardation resulting from RH blood incompatibility between the parents, some kinds of seizure conditions, and the more straightforward "familial" retardation when one or both parents may be retarded to some degree.

Generally speaking, we must keep in mind the biological nature of the human organism to understand that mental retardation can occur as a result of "chance" assortments of the hereditary mechanisms, the genes, into unfortunate combinations; presumably some genes themselves are defective.

CLINICAL TYPES

Several conditions related to mental retardation, generally at the lower levels, have been studied and recognized for a long time; partly this has been because there were similarities of physical characteristics which made it easier to group the cases together and identify them as having something in common.

Mongolism

Mongolism is one of these "clinical types," which has been intensively studied for many years. We know that the average age of mothers who have Mongoloid children is considerably higher than the average age of mothers in general; we know that Mongoloid children fall into a rather narrow range of intellectual ability, usually the imbecile range and occasionally lower; we suspect that endocrine factors are involved in this condition; we know also that genetic factors are involved. The generally accepted view of the causation of Mongolism is that maternal age is the single factor most closely associated with it, although occasionally a young mother has a Mongoloid child. It should be noted here that relationship or association of factors does not necessarily imply causation.

Microcephaly

Microcephaly is another of the "clinical types" which has been extensively studied. Evidence suggests that X-ray treatment of the mother during pregnancy may be related to the incidence of microcephaly; again, genetic "chance" factors may be part of the picture. The small head size and characteristic shape are outstanding characteristics; the mental level is generally very low; motor skills are generally relatively good in relation to the total ability pattern; imitative abilities have been stressed in reports of this condition.

Cretinism

Cretinism and various degrees of retardation related to thyroid dysfunction are quite well understood; treatment, by administration of thyroid extract, generally produces some physical improvement; what it does for mental development depends partly on the severity of the condition and partly on how early it is begun. Evidence indicates that treatment should be started in infancy, the sooner the better, for greater effectiveness in modifying the intelligence level.

Hydrocephalus

Hydrocephalus, with the outstanding characteristics of excessively large head size and typical shape, is another of the clinical types which has been much studied and is now yielding, in some instances, to medical treatment. Produced by defects in the circulation of cerebrospinal fluid which result in the accumulation of fluid, the damage to intelligence may range from minor to extreme; surgical techniques are improving the outlook for this condition.

Brain Damage

As a cause of retardation, brain damage has become almost a "wastebasket" term. Although neurological techniques such as the air encephalogram, the electroencephalogram, the skull X-ray, have made possible considerable progress in relating defects in intellectual functioning to demonstrable injury to the brain tissue, we are still a long way from understanding all the varieties of brain damage that can and do occur. Lack of oxygen produces brain damage, as may illnesses such as encephalitis; injury at birth and some illnesses of the mother at certain stages of pregnancy (i.e., German measles) may produce brain damage in the child; there may be nutritional, circulatory, metabolic, or other conditions existing in the mother, either as permanent or as temporary conditions, which predispose the developing fetus to injury either prenatally or at the time of birth. Accidents that occur postnatally may injure the brain, and when the brain is still in a rapid developmental stage, affect mental development which would normally occur. In general, the earlier the accident, the more extreme will be its effect on

intelligence, since the growth process is interrupted or interfered with at an earlier and less differentiated stage.

A valid criticism of some of the publications relating to the education of brain-injured children is that brain injury is at the present stage of our knowledge a very general term. It is not always possible to relate the characteristics shown by the child to the specific area damaged; in fact, it is not always possible to determine what area has been damaged. Our understanding of brain function is far from complete, and in some ways the special educational techniques being developed for brain-damaged children might well turn out to be suitable for some of these youngsters, yet far from suitable for others. Some behavior characteristics associated with the general area of brain damage are hyperactivity, difficulty in controlling attention, distractibility, and visual-motor-perceptual problems. Some children known to be brain-damaged show these traits in varying degrees. Brain damage is, in short, not a complete diagnostic statement; at the present time, it cannot be. As with other varieties of mental retardation, what is good educational or family treatment for one child may not be proper for another, and the professional danger lies in overgeneralization from insufficiently complete data.

Convulsive Disorders

The whole area of seizure conditions may also be related both to brain damage and to mental retardation. Whether structural damage produces the seizures, as seems to be true for some children, or whether the seizures produce the brain damage, which can also happen, is, from the point of view of practical handling, rather beside the point. We do know that control of the seizures is of major importance for the child's future development, and that often the newer drugs, which permit better control of seizures and interfere less with intellectual functioning, can change the outlook for the child's adult life from negative to positive, even though he remains mentally retarded.

THE PROBLEM OF DIAGNOSIS

Generally, knowing what produced the retardation is of real

importance to parents, but is a problem for the diagnostic team (medical specialists, psychologist, social worker) rather than for the school. It is not always possible to determine causation; many times the possibilities can be explored and considered with the parents, and this very process helps them in arriving at an acceptance of the realities of their situation. The more important concern of the school is with the behavior development and total adjustment of the child, and part of the school's job is to orient the parents to the task of coping with the day-to-day process of child development. The school should also, however, recognize the causation factors as part of the total parent problem, and try to be of aid to parents in arriving at as much of the "basic causes" as can be done in the light of present-day diagnostic skills and tools.

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5

The Total Problem of Mental Retardation

ALTHOUGH VERY MANY professional disciplines impinge upon the problem of mental retardation, and although each field has special significance to some aspects of the problem, it is within the family that the chief problems are faced. Medicine has the major task of isolating causes, developing preventive methods, and, perhaps some day, of advancing curative methods at least for some of the causes. Psychology has as its most important responsibility the study and assessment of individual differences, the development and interpretation of psychological diagnostic techniques, behavior theory, and personality modification; to education is assigned the broad task of the development, through teaching, of useful abilities that the individual does have; social-work duties involve service aspects of helping families meet problems and evolving better ways of doing this; but in the individual situation it is basically the family unit which is most directly concerned.

PARENT ATTITUDES

Attitudes of the parents are of importance in studying the various patterns by which families cope with their individual problems. Whether attitudes are regarded as "tendencies toward behavior" which are really genuine and basic, or a more critical view is taken of them as verbalized expressions which may to various degrees fail to express the genuine underlying feelings, the fact remains that parents' practices and goals will be shaped by the way in which they look upon the "differentness" of their child.

Many attempts to study and measure attitudes of parents with regard to normal children, as well as mentally retarded children, have, if nothing else, demonstrated the tremendous difficulties of methodology and of theory in this area of behavior study. Authorities in the field of mental retardation have tried to explain the attitudes of parents of retarded children in terms of "stages" of acceptance. Exposition of such stages will probably always remain somewhat artificial; the process of emotional growth in adulthood remains obscure, and the limiting "fences" between artificially verbalized "stages" must continue to be, at least for some time, quite ambiguous. Nevertheless, some evidence is at hand about parent attitudes toward their children's retardation—from general clinical experience and observation, if not yet from statistical data.

Parenthood is a very broad category; the only thing we can be sure parents have in common is that they have had a child. The fact that any parents might have a child who is retarded shows clearly how broad the field is. Trying to describe, as a group, parents of retarded children is a little like trying to describe, as a group, people who buy groceries. In general, however, parents react to the fact of a child's retardation on the basis of their total personalities and patterns of reacting to any critical life events. Those who are realistic and practical consider the child's situation realistically and practically; those who are anxious and insecure are anxious and insecure in their reaction to the retarded child; those who are basically defensive continue to be defensive, and their relationship with the child, as well as with others concerned with the child, may be tinged by this quality. Yet, in the long-range process of bringing up a child, human relationships shift. Attitudes and habits are modified by life experience; *the critical life event of having a retarded child is a continuing critical event, not one that happens and then is over and ended.*

Parents in this situation represent all ranges of intellectual level themselves, with extensive variation in educational background and intellectual knowledge about retardation, and with widely different life philosophies. To people working directly in the area of retardation, it is sometimes helpful to consider other complications which can enter the parent-child relationship, in

order to provide a little more perspective on the parent with a retarded child. Having a child of normal ability who is severely handicapped physically, or who has a severe sensory defect, also presents problems to the parents; there may be, however, a compensating factor in that the parents, through their own increased efforts, can help the child learn to handle the handicap more effectively. Having a child who becomes, along in adolescence, involved in serious delinquency also throws the parents into a situation that is emotionally "charged." The specific problems presented by a retarded child are different, but retardation is far from being the only difficult event that parents may be called upon to face.

SOCIAL VALUATION OF CHILDREN

In our society, children are highly valued both in the basic structure of society and in the family unit itself. Parents see their children partly as "backward reflections" of themselves; watching the child, they partially relive their own childhood years. They also project themselves, through their children, into a future they will not live to see. Some of their own unfulfilled ambitions and desires are handed on to the children (often, it should be noted, inappropriately). Occasionally parents create problems for themselves with normal children by having too rigid a notion of what interests the child should develop; witness the father whose son must measure up to his athletic hopes and dreams or be a "disappointment" to the father. In emotionally healthy parents, the hopes and dreams are modifiable by the child's own development and his acquisition of individuality; little by little, the parents accept the child's selfhood, release their hold on the inappropriate goals they previously had in mind, and come to appreciate the child for what he really is instead of what they thought they wanted him to be. This develops, however, as a result of the whole interaction and interrelationship process. The child's development and behavior influence the direction of the parents' thought and feeling.

In our culture, parents also use children as part of their own motivation, part of the American "up-the-ladder-of-success" philosophy. Parents achieve partly for their own satisfaction,

but partly in order to "give the children a better start." It is expected that the children in turn will be able to take advantage of childhood opportunities and make progress which will be "rewarding" to parents.

A mentally retarded child is not able to fulfill his parents' expectations, nor can he shape satisfactory substitute interests and achievements to replace those the parents had in mind; neither is he able to make good use of the standard sorts of "advantages" and "opportunities" that parents try to provide. Although the contribution parents make to the lives of their retarded children is of the highest importance, their expectations of the child must be sharply modified from their original expectations, to match the potentialities of the child, or their own disappointment and frustration will create additional handicaps both for themselves and for the child.

PARENT ANXIETY

The early shock to the parents is apt to be a gradual one. Their concern is aroused little by little because of the child's failure to develop as they expected. The greater availability of child-development information to the general public in recent years has had the undesirable effect of creating overanxiety in parents whose children's progress may not exactly match the "norms" of development, but whose temporary deviations are of no long-range significance. With so many parents worrying without reasonable cause, it is hardly surprising that many professional people, including doctors, have fallen into the trap of offering false reassurance. Since the mentally retarded child is numerically an "exceptional" child, more parents of normal children are rightfully reassured than parents of retarded children are falsely reassured. The point is, of course, that the basis of reassurance needs to be carefully and thoroughly considered in order to avoid this kind of error.

The gradual growth of parental anxiety is apt to culminate in their seeking professional help to find out what the trouble is. Even though their concern is well founded, they hope to find that the difficulty is temporary or curable. The most difficult point in interpreting the total diagnosis of the child's retardation

is that of the permanence of the mental defect. After all, the parents reflect, every child is a different and separate individual, and maybe the developmental laws, the scientific findings, and the carefully based and carefully explained predictions just won't apply to him. Many parents who accept the fact of retardation but not its permanence make the comment, "Maybe he'll surprise us after all." They know that mental deficiency exists; almost everyone has had some casual encounter with the fact of its existence; yet the initial reaction may be one of "It can't happen to me."

PARENT REACTION

Parents differ a good deal in their reaction to the interpretation of mental defect in their child. The way in which the parents do react to the interpretation will color their handling of the child and will often create some sorts of "secondary" behavior problems, which need not have appeared at all on the basis of the retardation by itself but are inevitable outcomes of the interaction processes between parents and child.

One reaction is to reject the diagnosis, refuse to believe it, and take the child home with a firm determination to make him somehow be normal. This is apt to lead to parent "pressuring" of the child to learn things, to talk, to "develop." We have seen a number of trainable children whose early school reaction just to having books in the classroom was to tear them up; their past experiences of having someone try to force an interest in books, stories, and reading produced violently negative responses to the whole realm of books.

Another reaction of the parents may be to half-reject the diagnosis. They know, in a way, that it is true, but on the other hand, they think that if they can protect the child from having to meet life face-to-face, the defect will not be evident to other people. These parents are apt to overprotect the child, expecting nothing of him, doing everything for him. This forces the family into a secluded sort of existence and keeps the child more immature than he need be.

Still another possible reaction is seen in parents who believe the diagnosis and cannot tolerate their acceptance of it, and who

consequently reject the child, perhaps neglecting him fairly openly, perhaps more subtly.

Still others act as though they were trying to pretend there was no problem; they ignore the difficulties as completely as possible and for as long as possible, in ostrich-like fashion.

As one result of the great progress made in recent years in the general understanding of mental retardation, however, with increasing frequency the reaction is one of honest intellectual acceptance. "How can we help him?" is a response indicating the parents are prepared to face facts and willing to try to act on them. These parents, too, may have many emotional problems within themselves. Nevertheless, in our experience, these problems are better handled on a basis of intellectual acceptance, when the parents themselves develop healthy problem-solving attitudes and awareness of the emotional conflicts.

OTHER INFLUENCES ON THE FAMILY

Attitudes of the parents are not the whole story, however. There are other complicating human aspects of family relationships. Parents do not necessarily agree in their views. The father may be realistically accepting, the mother highly over-protective. The maternal grandparents may flatly refuse to face the facts, while the paternal grandparents are more reasonable about it and can discuss the situation. Aunts, uncles, older brothers and sisters of the retarded child, close friends of the family—sometimes it seems that everyone gets "into the act," complicating the difficulties and creating new ramifications of the basic problem. If the parents are generally fairly mature and in basic agreement with each other, they can usually summon the ego strength needed to take a reasonable stand and live their lives according to it; if, however, the parents—one or both—are emotionally immature, dependent, or fearful people, it is surely unreasonable to anticipate that they can be strong in this crisis.

PROCESSES OF DEPENDENCY

One of the reasons, in our opinion, that continuing parent counseling and efforts at longer-range planning are so important

is that people are dynamic entities, that relationships do not stay the same. Living with a retarded child makes changes in the lives of the adults. One kind of process that can develop we have called "circular dependency." To start with, the parents are concerned with meeting the needs of the child. He needs them; he needs their care, their help, their protection, their understanding. This is true normally for all infants; human relationships within a family proceed with a back-and-forth reciprocity, usually. The child's need for his parents shifts with age; the "sentimentalizing" about the first day of school for a child finds most mothers with mixed feelings, a touch of regret that the child needs them less and differently, but also a pride in his progress and his growing up. With a retarded child, the period of the child's needing his parents in the "preschool age" sense of the word *need* becomes greatly prolonged. For a long time, he needs more physical care, more careful supervision, more total parent time devoted to him. This is not the expected course of events; parents do not continue this entirely naturally or comfortably. In the course of time, in order to maintain some sort of emotional balance, the parents themselves may become dependent on the child's greater and more long-lasting need of them. When and if the relationship gets reversed in this fashion, it is the parents who cannot face making a plan for the child that might actually meet his needs better than they can. They may be unable to let him go to an overnight camp, for it is their strong belief that he cannot get along without them (when the underlying fact has become that they cannot get along without what they think is his need of them). They may be totally unable to think in terms of a residential school for a period of training, even when it is the residential school which has the most to offer the child at that stage of his growth and training. Chiefly, the reasons underlying this "circular-dependency" phenomenon are emotional, but there are also some practical reasons. In meeting the child's needs perhaps not wisely but too well, the parents may have sacrificed so much of their own living, invested so much of themselves, that, deprived of the activities which have centered around the child for so long, there is little left in their own life situations.

HOW PROBLEMS DEVELOP

The Trainable Child

Some problems of retarded children are a direct outcome of the retardation itself and its interaction with the expectations of the culture; others arise, as do behavior difficulties in normal children, as a result of emotional and attitudinal factors. Young children of preschool age are generally allowed more "leeway" in all branches of behavior expectation. There are problems for the parents of the retarded child to handle not only emotionally, but practically, in the child's behavior as related to his slower development. These problems are especially acute during the early years with the more severely retarded child because, for one thing, the parents are still likely to be somewhat confused in their understanding of the problem, and for another, the contrast between the child's progress and the expected progress is conspicuous by the time he reaches the age of three or four years. At the same time, however, the social pressures for the child's conformity are considerably less than they will be a few years later. While the child is still quite young, parents' problems are apt to be in the areas of routine training. The child is slow in acquiring the basic skills; he walks at a later age, shows less interest in learning to feed himself or help with undressing and dressing. His ability to comprehend and co-operate in toilet training is later in appearing. He does not make the expected progress in learning what he can play with and what he must leave alone; when he does learn to walk and expands the size of his available environment, he requires even closer supervision than before because he fails to appreciate ordinary dangers, and because, being generally less well co-ordinated than the usual child, he literally "falls into" harm's way. Meanwhile, his parents, especially his mother, are trying to instill in him the basic rudiments of socially expected behavior. One method does not produce the expected results, so another is tried. The most typical answer a parent gives to a question about a training method in practically any area is that she's tried "everything." Such shifting of approach, although understandable from the point of view of the parent who really is conscientiously trying to help the child, may well add to the child's confusion as to

what is expected of him. Besides this, there is the parent's frustration and feeling of failure. She has done everything she could think of, and the child has "let her down" by his lack of response. Her disappointment is two-fold—in herself as a mother, because the evidence indicates she is inadequate, and in her offspring, for his manifested inadequacy. She is not sure which of the two—herself or the child—should receive the blame, and this ambivalence only adds to the emotional conflict.

The child's reaction. Not only are the parents frustrated; the child is frustrated, too. He cannot find outlets for his energy that are compatible with the experience of success; he can't pile the blocks up, and quite naturally he either becomes enraged or quickly loses interest in trying. He tries hard to turn a doorknob and it won't turn; he is not intelligent enough to solve the problem, but he is emotional enough to be upset by the failure. Learning is going on, although the process is slow in rate and retarded in level. The child will learn to react to his frustrations by temper tantrums, by aggressiveness, by withdrawal, by negativism. Difficulties in communication with others, as well as in comprehension of what others are trying to communicate to him, add to his frustration. He says something, makes an effort to communicate, and is not understood.

Problems in social relationships. As the child in the trainable group grows a little older and perhaps has some contacts with other children, normal or retarded, his social development is affected by his intellectual level. Normally, two- to three-year-old children are beginning to be "socialized." They hit and attack each other, and modern nursery school theory points to the reasons for this—their inadequacy of language in asking for a toy, their limited time concept which requires more development before they can appreciate taking turns or that their turn will come, their general self-centeredness leading to their thinking, at this stage, that the world should go their way. Normally, permitting children to settle their differences under supervision but pretty much "on their own" leads them most quickly to the development of more co-operative relationships with others, and we see four-year-olds moving smoothly in the direction of larger play groups, more interrelationships, longer duration of contacts, and more interaction in their play as well as increasing structure

in the activities. Aggressiveness among trainable children with eight-year-old bodies but perhaps three-year-old mental levels, and perhaps two-year-old social experience, looks more alarming to the adult. By the age of eight, a fairly healthy child can inflict considerable damage on another child. If the aggressive behavior is completely thwarted or prevented by adult control, whether by prevention of social contacts or interference with social conflicts, the child's capacity for developing meaningful social skills even at his intellectual level is blocked. If, on the other hand, sensible precautions and supervision are not provided, there are indeed many possibilities for injury both because of the children's greater size and because of their inadequate judgment and failure to appreciate how much they are hurting each other.

The Educable Child

Problems of parents with educable-level children are not entirely dissimilar to those of the trainable children, but there may be some differences in degree of the problems and some age differences. Depending on causation factors, there may also be some different problems. The child's mental handicap is less likely to be noticed at preschool age, because it is less extreme, unless he also presents some behavior deviations which give the parents cause for alarm. The typical child whose behavior is reasonably in line with expectations and whose mental growth has proceeded at perhaps 65 to 75 per cent of the normal rate may not be conspicuous until he is faced with the requirements of school learning which demand a level of mental capability he lacks. Then the teacher or the school will likely be the ones to call attention to the child's "differentness," and will request measurement from the psychologist to try to find the explanation. Among the factors, aside from the level of intellectual functioning, that may call attention to his deviation are handicaps in speech, and hyperactivity. At any level of apparent retardation in functioning, it is important to check carefully for the presence of causative factors other than mental retardation. For example, with a speech defect, the cause might be defective hearing, which again can be a matter of degree. A child need not be totally deaf in order to be quite handicapped in dis-

crimination of differences between speech sounds. Also, in attempting to carry out any sort of "differential diagnosis," it is important to keep in mind that the presence of one sort of handicap does not exclude the presence of another kind of handicap. Finding some defect in hearing does not mean that the child may not also be mentally retarded, and vice versa.

Problems Related to Organic Damage

Hyperactivity, difficulty in attention control, and distractibility are behavior traits often associated with brain injury as a cause of retardation. These traits have become more prominent in discussions of mental retardation in recent years as a result of improvement in medical practices. Many brain-damaged babies who in former years would not have survived now live to contradict the stereotype of the high-grade mental defective as sluggish, slow, but steady and reliable—traits more often found in the high-grade retardates whose causation lies in the genetic area or stems from simple biological variability of inherited traits. The hyperactive child is not limited to the high-grade or educable range of ability; one also finds hyperactive children in the "total-care" group, the lowest ability range. At the lowest level, hyperactivity, plus the almost total lack of mental development, generally adds up to early recognition by the family of the impossibility of handling the child at home for any extended period of time. Hyperactivity, stemming from brain damage, is also conspicuous in the trainable group of children. Here it also often acts as one handicap too many and makes it difficult, sometimes impossible, to provide group educational or training experiences for the child. At the higher levels of ability in the retardation range, however, there are some possibilities for more conspicuous improvement in behavior control. Among the questions not yet answered about brain injury as causation is the extent to which damage evident in behavior, ability level, and neurological examination is overcome by time, growth, and possibly reorganization of mental functioning. As children make progress in learning, their own interest and drive gradually help take over control functions; to what extent this is true and for what kinds of brain damage are not yet understood. Another factor in control is found in the various new sorts of medica-

tions, basically the "tranquilizers," which are being found helpful. Theoretically, at least, if a tranquilizing drug helps calm a child down so that the learning processes can get under way, his own interest development and motivation for learning may gradually provide a more solid basis for helping to control the hyperactive behavior.

Resistiveness

Another type of problem found in both trainable and educable children, regardless of causation but not unrelated to experiential factors, is negativism or resistiveness. Normally, children "go through" a so-called stage of negativism between the ages of about two and three and one-half years. Child-development studies relate this "No, I won't" phenomenon to several factors: the child's development of a feeling of separate selfhood and drive for self-direction; his limited language skill, which makes what may be a temporization with a parental request sound like a refusal, and elicits response from parents as though it were a refusal; overdirection by parents which gives the youngster too little self-freedom; the chance discovery by the child that this is a remarkably effective way to control his parents, etc. We would expect retarded children to reach this stage later than normal children, but because of their slower rate of development to stay in it longer. This seems to be true, but it is not the whole story. The most frequent error that parents make in dealing with a retarded child is in pressuring him or trying to force what they regard as more normal development. The reaction of children to this constant kind of pressure is negative. The pressure may actually be in only one or two areas; the negative reaction is more likely to spread until it takes in all the areas in which anything may be requested of a child. This is a major reason for our belief that the more effective ways of helping retarded children at early ages should stress more rather than less freedom, fewer rather than more demands; should provide constructive, suitable experiences, but should avoid overdirection of the child.

Destructiveness

Related to negativism is antisocial and/or destructive be-

havior. Retarded children present many problems at home, as well as elsewhere, because of their greater destructiveness. Antisocial behavior usually means aggression, and aggression has already been discussed as part of the delayed social-development process. Destructiveness may be of two sorts: antisocial feelings directed at things instead of people, so that the child wilfully breaks toys out of a feeling of anger, resentment, hostility against the world; or it may be out of ignorance—the child breaks things because he does not understand clearly which things are easily breakable, and because he is playing with toys designed for younger ages, and he gives them rougher treatment than they were manufactured to survive.

AGE CHANGES IN PROBLEMS

For the Educable

Problems in the home are different at different ages. This again is a point which parents may not appreciate in advance of their own experience unless it is presented to them. For the educable child, the age changes of problems might be viewed as follows: At preschool ages, the child's deviation may be inconspicuous unless he is hyperactive or has speech problems. At school age, unless special education is available to him, school failure is inevitable. If his behavior is more than ordinarily conforming, he may be tolerated in school for a long time but this does not mean that school is meeting his needs or preparing him for his adult life. We can only hope that he is getting "something" out of it. Children do not ordinarily, however, live with constant failure year after year without showing some outward reactions of frustration. As the school requirements become more rigid at the higher grades and in junior high school, he is increasingly unable to meet them, and his failure to meet them is decreasingly viewed with tolerance. Not only the adult world but his age mate world makes negative judgments of him. He meets increasing problems in his social relationships; the increasing complexities of group activities and organized games label him a failure as much as, and perhaps more importantly than, his academic difficulties. He isn't chosen

to be on the team; the frustrations spread into more areas of his living. Sooner or later he must give vent to the emotional unrest increasing within him. If he turns his resentments inward, he may become more withdrawn and go in the direction of personality deviations of a solitary, self-punishing, or neurotic sort. We see in our educable children some of the "nervous habit" sorts of patterns. Or he may become increasingly a "behavior problem," or a "predelinquent," finding outlets in active, aggressive attacks on a world which has failed to provide him with opportunities to feel good about the results of his efforts. Meanwhile his parents may well be pressuring him increasingly and saying out of their limited appreciation of his problem, "If he would only try." A school system which provides special education for the educable retarded child through the high school age program is doing society's present "best" to give the educable group the training they need. Follow-up studies of graduates of special classes indicate successful community adjustment, as adults, for about two-thirds to three-fourths of the group studied. Among the failures are apt to be: those at the lowest end of the ability group included—higher ability even in the 50 to 80 IQ range shows a relationship to job and life adequacy; those with more than one kind of handicap; and those whose personality traits interfere with acceptance by other people. If special educational facilities are not provided, the problems or difficulties of the educable child are apt to become more severe at earlier ages—around the age of ten instead of the age of fourteen—presumably because there are more frustrations to accumulate faster.

For the Trainable

When we consider the age changes in problems for the trainable child, the situation is somewhat more clear than it is for the educable. At the early ages—up to about six or seven—the major problems center around routine training, provision of suitable experiences, physical care. As children move into the age range where normally they would be branching out into more community activities—eight, nine, ten—it becomes increasingly more difficult for parents to provide adequate experiences in the home setting which provide for the child's constructive occupa-

concepts that children should "love each other," without adequate recognition of the basic two-directional aspect of emotions in general (such as love-hate, jealousy-guilt, success feelings-failure feelings), the more complex the emotional environment in which the child is placed. The very difference in parental behavior expectations must arouse some feelings of unfairness in the normal child. The ability of parents to explain the retarded child's defect in terms suitable to the normal child's age and comprehension level is an important factor in the normal child's ability to accept the situation. In general, children adopt attitudes which their parents are living out, and make these their own. Conflict in the parents, attitudes of overcompensation, overprotectiveness, over-attention to the retarded child, will inevitably produce problems for the normal child. How well he is able to handle these problems is partly a function of the total situation. The older normal child may also suffer very directly at the hands of an aggressive or hyperactive retarded younger brother or sister. No possessions are safe from his depredations; no retaliation of a direct sort is possible without consequent feelings of guilt.

The Normal Younger Child

When the normal children are younger, the problems are different but still present. Again, the question of different behavior expectations may be confusing to the normal child. "How come I have to do that when he doesn't?" is a very natural question. The best policy for parents to follow is one of honesty and straightforward explanation—"He can't help doing the things he does that are wrong; you can" expanded as time goes by to include more explanation of the reasons will help but not solve the problems. They are basically insoluble. One of the unfortunate ways in which parents may try to cope with the situation of younger normal children is to relegate the retarded child to the role of a "baby" and pass on this concept to the normal children. While this may be an easier idea for the normal child to grasp, it does injustice to the retarded child through permitting him to remain more infantile and irresponsible for his own actions than he would need to be in terms of his intellectual level. There are problems of explaining defects to

other children, and these beset the child far sooner than the parents think. A normal five-year-old may well say to the normal sib of the retarded child, "Hey, what's the matter with your brother, anyway?" Wise parents will try to give their children a useful answer to questions of this sort. Children are far from oblivious to individual differences, although they may not understand them; in fact, a good way to get extra insight into an individual child's differences is to put him in a group of children and observe their treatment of him and reactions to him. Whether children use awareness in a primitive, aggressive way or in a more socially mature way depends a lot on the adult attitudes, explanations, and suggestions given them at home.

Conflict Between Parents

One other area of family conflict needs to be considered—conflict between the parents in their attitude toward long-range planning, or at any stage of the problem. Many times fathers seem less accepting and less willing to admit the need for any outside help; often this seems to be because fathers in general have less direct contact with the child and less awareness of the ramifications of his handicap. Partly it may also be because of "masculine pride" which (falsely, from a professional point of view) dictates independent solution of the problem—"This is my child, and I will take care of him." Sometimes, however, it is the father who is able to be realistic and wants to make wise plans, and the mother who is protective and unable to face the implications of the child's defect. Probably here as elsewhere the important factors are found in underlying personality characteristics of the parents as individuals; professional workers need to be careful, however, to explore the feelings of both parents in their attempts to be of assistance in planning.

FACING THE PROBLEM

An oft-quoted but, to our way of thinking, somewhat empty statement is the familiar idea that there is "no one right solution to the problem of mental retardation." We feel that while there is something in this, as far as it goes, in that different family patterns permit different amounts of modification, and

different communities offer different resources for assistance, the basic idea of the statement is erroneous in implying that there is or can be a "solution" to the problem of mental retardation. By definition, the problem is a problem of society's acceptance of individual differences when they become so great that general levels of self-competence cannot be reached by the individual. In society as we know it there can be no "solution" to this problem other than improvement in the ability of the individual, which at the present stage of our knowledge is an impossibility. The best that we can offer, even combining all the professional skills in the patterns of the wisest thinking that we can learn from the past or carry on ourselves in the present, is an increasing flexibility of patterns which in the future will probably continue to increase, especially in the larger communities, but which will still not solve the problem but only offer some amelioration of its effects. Further discussion of these patterns will be presented in the final chapter.

Essentials of Assistance

From the point of view of the problems of the family, these things seem to be of primary significance: Adequate medical and psychological study, and adequate interpretation of the evaluations to the parents, at whatever level of complexity and completeness they can make use of; honest interpretations, and explanations of reasons in the individual case for realistic limitations of prediction; repeated evaluations and interpretations while the child is in the early years of maximum developmental rate and change; sensible, realistic thinking on the part of the parents, with the help of people in the related professional fields; and continuous counseling carried on with regard not only to the problems of the retarded child but also to the personality characteristics of the parents and their patterns as individuals; and community education to assist in raising the general level of awareness of and understanding of the problems faced by the families of retarded children.

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