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Possibilities in the social adjustment of cerebral palsied children

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Boston University
POSSIBILITIES IN THE SOCIAL ADJUSTMENT
OF CEREBRAL PALSYED CHILDREN

A Thesis

Submitted by
Mary Frances Kutz
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CHAPTER I

Introduction

The physically handicapped child has been a problem to society since the beginning of civilization. In primitive life this misfortune was believed to be visited upon the child because of the displeasure of the gods. The writings of the middle ages speak of the "hunchback" and the evil he symbolized. Slowly, people changed from the attitude of looking upon the affliction as a punishment and disgrace to an attitude of sympathy. Today there is a growing feeling that the crippled child has the same right to receive the same benefits - educational, vocational, and social - as the normal child.

When the writer was doing her field work in the Division of Child Guardianship, Department of Public Welfare, State House, Boston, Massachusetts, her interest in the handicapped child was first focused on the birth-injured group. A mother had brought to the Department her young son, age four years, who was unable to talk because of an injury received at birth. The question of his intelligence, the possibility of giving him instruction, the search for a school or hospital that would accept the child, were of importance when trying to find the best solution to the problem. The case aroused special desire to learn how the congenitally deformed child fitted into the ordinary home and into community life.

The objective of this study is to discover the ways in which certain physical conditions affect the social adjustment of the cerebral
palsied children. There will be an account of the work done by the Social Service Division for Crippled Children, with emphasis on its educational and counseling program, a medical interpretation of cerebral palsy, with the attention focused upon the athetoid group, followed by nine case studies. These case studies were selected as representing the degrees of disabilities found repeatedly in the behavior patterns of the athetoid. The family adjustment has also been indicated. The intelligence of the child in all the nine cases will be found to be average or above average.

Through the courtesy and cooperation of Miss Margaret MacDonald, Supervisor of the Social Service Division for Crippled Children, State House, Boston, Massachusetts, these nine cases were selected from the files of the Field Workers. For obvious reasons all names used are fictitious. In some instances, which will be noted, further information was obtained from visits to the homes and the clinic at the Children's Hospital, Boston, Massachusetts, and conferences with specialized authorities. There has also been extensive reading, as indicated in the bibliography.
CHAPTER II

The Social Service Division for Crippled Children

The Commonwealth of Massachusetts has been one of the first states to show interest in the welfare, both physical and educational, of crippled children. This fact is readily seen when one studies the General Laws of the State. For example, in 1908 the Massachusetts Hospital School was opened to care for the handicapped child. The law reads, "The Massachusetts Hospital School shall be maintained for the education and care of the crippled and deformed children of the Commonwealth". A statute of 1930 provided for the instruction of crippled children at home. It reads:

The school committee of every town shall annually ascertain under regulations prescribed by the department and the commissioner of public welfare, the number of children of school age and resident therein who are physically handicapped. In any town where, at the beginning of any school year, there are five or more children so physically handicapped as to make attendance at a public school not feasible and who are not otherwise provided for, the school committee shall, and in any town where there are less than five such children may, employ a teacher or teachers, on full or part time, who shall, with the approval in each case of the department and said commissioner, offer instruction to said children in their homes or at such places and under such conditions as the committee may arrange.

The commissioner, realizing that there was a need for a division which

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1 Mass. G. L., Ch. 121, s. 28
2 Mass. G. L., Ch. 71, s. 46 A
would be responsible that the above quoted law be observed, studied the problem. As a result, in 1930 the Social Service Division for Crippled Children was set up under the Department of Public Welfare. The law gives to this Division certain responsibilities. It provides that there shall be an annual census, to be taken by the school department, of the physically handicapped children who are unable to attend school, and it will be the duty of this Division to make investigations of these children in order that they might be recommended for home teaching.

It provides for investigations of problems of crippled children brought to the attention of this department from sources other than the annual census. Its two main functions are to maintain an index of all crippled children between the ages of five and twenty-one, and to act as an information bureau working with all interested agencies.

The policies of the Division are two-fold: first, to see that the crippled child receives treatment; second, to see that he has an opportunity for education. The agency works in a dual capacity. It acts as a referral agency to hospitals, clinics, schools, and social agencies, which in turn come to the Division with their problems, especially if these concern the question of education.

It will be recalled that the census is made up of crippled children of school age, starting at the age of five years although the compulsory school age in Massachusetts is seven. This might lead one to wonder what happens to the pre-school child who is decidedly handicapped. Again we see that there has been a provision made, for
there is a law\(^3\) under which such children are reportable. Doctors are required to report to the Department of Public Health any child who is visibly injured or deformed at the time of birth. At the present time there are on file the names of twelve thousand handicapped children of school age in Massachusetts, whose crippling disabilities range from complete invalidism to varying degrees of independence. The group includes birth-injuries, infantile paralysis and other orthopedic cases, the cardiac, and other chronic medical conditions such as diabetes and asthma. The Division is an advisory agency rather than a case work agency and with its limited staff cannot give as much follow-up in these cases as one might expect. The staff consists of a supervisor and her two assistants. All are graduate nurses specially trained in public health with some experience in social work. As many of these children are able to go to school after the initial contact has been made, the Division maintains its relationship through the school and through correspondence.

The Division works with any crippled child who cannot attend public school. The child may be home for a few months or a year because of an illness or accident, or he may have a more permanent disability so that he can never attend regular school classes. The children to be considered are cerebral palsied or birth-injured with a motor impairment. Their disabilities may be very slight or very severe. In the latter case they may be repulsive to society in general. Any

\[3\text{ Mass. G. L., Ch. 326, s, 1}\]
child so handicapped from birth is limited in his chance to participate in many activities because he is considered different from his companions.
CHAPTER III

Medical Interpretation

In order to make clear the problems that confront the cerebral palsied children it seemed necessary to give a medical background which would interpret the crippling conditions seen in these children. It must be realized from the start that this discussion is concerned with the motor defective youth whose mental status may be influenced by his motor handicap as a result of a birth injury.

For over a century the medical profession has been aware of the fact that birth injuries are permanent damages. Earliest studies on congenital palsy appeared in 1862, at which time an English orthopedist, Dr. William J. Little, described the consequences of the brain lesion at the time of birth. It was through his studies that the condition became known as "Little's disease." Generally speaking, the future outlook for such a child is not promising.

There is great variation in the estimates of the number of children injured at birth. Dr. Winthrop M. Phelps says, "There are at least six hundred thousand crippled children in the United States, victims of injuries to the brain at birth."1 Dr. Edgar Doll writes, "The number of children injured at birth is remarkably small. Adequate statistics are not available but probably less than three surviving children per thousand are seriously affected by congenital palsy and probably less than one

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third of these are also mentally subnormal."\(^2\) A physiotherapist, Miss Edna Blumenthal, states that there are "approximately seven cerebral palsy cases born each year per thousand population."\(^3\) According to Miss Mabel M. Miller, "A conservative estimate is that for every one hundred thousand born in each year, seven to ten are cerebral spastic palsy. At this rate, there are at least seventy thousand under the age of ten thus handicapped in the United States."\(^4\) These reports would indicate that there is a considerable number of birth-injured children who survive and who inevitably must go through life with the consequent markings of mental and physical handicaps which render them objects of universal sympathy.

The truth is that the athetoid is unattractive and repulsive. A description of such an afflicted individual would be somewhat as follows. If able to walk, the youth walks with a writhing, unsteady gait and his motions are apt to be grotesque and ungainly. He has little or no sense of balance and falls at the least provocation, simply because he has no motor control. His speech is usually labored, is more difficult to understand than that of a stutterer, and is slurred. In talking or even in listening, he is likely to drool because swallowing takes effort, and his facial expressions are grimaces which give the spectator the impression that the child is feeble-minded, or at least that he lacks intelligence.

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The public watches the youth with a mixture of dismay and curiosity, a natural reaction human beings display before any physical abnormalities. All this is very disconcerting to the athetoid, for, as Dr. Earl R. Carlson, himself a spastic athetoid, has commented, "they are born that way" and know no other motions. Usually the child does not become conscious of the true nature of his disability until he reaches adolescence, the time when he wants to manage things and begins to think in terms of the future. At this period emotional conflicts begin to come to the forefront.

The state of such crippled children is so pitiful that it is almost terrifying. In fervent hope that some physician will perform a miraculous cure, parents take their child from one doctor to another, always seeking for encouragement that the child will be normal. Priscilla Brockman, an athetoid, gives the following as her own experience, "My mother has always been firmly convinced that the doctors to whom she took me were never able to understand me." In many cases the parents are unaware of the injury until several months have passed. Gradually they begin to notice that the child is not as active as the neighbors' child who is the same age. The child is not sitting up, nor is he trying to talk. Mothers repeatedly reported that the infant was about eight months old before they thought anything was physically wrong with it. Mrs. Margaret Fischel, mother of two cerebral palsied children, in speaking of her first-born child, gives her reaction as this, "I, myself, was not so much shocked as

I was relieved when, after the unbelievably long term of three and one-half years of trying to secure a diagnosis of my first child's difficulties, a diagnosis as frustrating to hope as that of 'Little's disease' was given by a visiting pediatrician. More often than not the child is the first-born of the parents who are young and inexperienced in gauging normal development and growth of an infant. At birth all babies are without physical or mental control. Their movements are unco-ordinated and more or less at random. At birth the brain is unable to function properly and to be selective in response to the many stimuli with which the nervous system is bombarded. Until this selection is made possible through the development of the cortex, the baby drools, makes grimaces, and wiggles about quite unconsciously. It is only through periodic medical examinations of such a small baby that the spastic condition is recognized in the early months.

In many instances the specific or exact causes of the birth lesion are not known. Strictly speaking, a cerebral palsy injury refers to injuries occurring at the time of birth. Dr. Alpers defines cerebral palsy as "any injury to the brain or its coverings sustained during the act of birth whether such injury is the result of direct trauma due to the applications of forceps, or to indirect trauma resulting from forces exerted on the skull during normal or abnormal labor." Doctors describe it as a disturbance of the motor functions, and the damage to the brain may occur

6 Margaret Fischel, The Spastic Child, p. 16.
7 Samuel Brock, Injuries of Skull, Brain and Spinal Cord, p. 262.
before, during, or shortly after delivery of the infant. The actual causes of the injury may result from any one of a number of reasons, such as premature birth, too rapid birth, delivery injuries, disease of the mother, an accident occurring during pregnancy, and, in a few cases, inherited factors. Hemorrhage in the brain at the time of birth, however, is the most common cause.

In the disease itself there are found to be many combinations of impairment depending upon the location and severity of the hemorrhage. In every case the injury is a permanent one. According to Dr. Bronson Crothers there are three reasonably definite characteristics of the cerebral palsy that are found in all cases: first, the hemorrhage has done its work and is no longer operating; second, the lesion is likely to be diffused rather than localized; third, the damage has been inflicted on a growing organism. In the medical profession the word "plegia" is used to describe the disability of the cerebral palsy individual. For example, monoplegia indicates that one limb is affected; in hemiplegia, one half of the body is involved; in quadriplegia, tetraplegia and diaplegia, used interchangeably, four limbs are affected. In this study the word diaplegia is used in describing the latter condition.

Actually, cerebral palsy is a condition in which the normal pull of the muscle is increased because of a loss of the restraining or controlling nerve fibers of the brain. Dr. Charles Rombold explains the conditions in this manner:

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8 Elizabeth Lord, *Children Crippled by Cerebral Palsy*, p. 2.
Each muscle of the skeleton has two nerve centers controlling its function, one in the brain, the other in the spinal cord. These two centers are closely related and are interdependent for normal function. If the brain center is destroyed, as in the case of cerebral palsy, the spinal cord has lost its co-ordinator and master mind. As a result of its losing its master mind, the spinal cord center sends out disorganized impulses which respond in a disorganized manner.9

This quotation indicates that the consequences of the injury are evident in every conceivable type of muscular disturbance. Generally speaking there are five headings under which the disorders fall; namely, spasticity, athetosis, chorea, ataxia, and tremor. Spasticity and athetosis are the two most important groups. To the layman the one common nomenclature is "spastic paralysis," which is erroneous because the word paralysis implies a loss of motion or sensation. In these cases there is an overabundance of motion, which is exaggerated and wild in its performance. Doctors have found that the disease rarely occurs as pure spasticity or athetosis, but as a combination with one or the other predominating. This fact makes it necessary to include symptoms of both the spastic and the athetoid types in order to understand the handicap more clearly.

In spasticity, the pyramidal tracts coming from the cortex are affected. Because the control of voluntary movements comes from the cortex, a lesion here brings about a stiffness of the muscles with poor voluntary control. The limbs are rigid and the child moves as though he were a solid piece. His walk is known as the "scissor-walk" because the spasm of the thigh makes the legs cross each other at each step.

In athetosis, the extrapyramidal tracts arising from the basal ganglia path are involved. Injury here produces an even more chaotic change because the associated movements come from the basal ganglia. This location implies that the nervous system has developed normally but sustained an injury at birth which impaired the motor function in the subcortical center. The involuntary motion is the primary difficulty in athetosis as against the voluntary motion in the spastic and is more crippling in many respects. If the child walks at all, he walks with a twisted and distorted movement. Moreover, there are often indications that the throat and tongue are affected, causing drooling and guttural sounds when attempts are made to talk. For these reasons, such children are thought to be feeble-minded, though studies have shown they have more intelligence than can be judged from their facial and physical appearance.

The cerebral palsied youth requires a more specialized program than the ordinary crippled child, for a large majority of crippled children have one or more accomplishments that measure up to normal standards. The birth-injured youth has no such accomplishments to his credit because from birth he is surrounded by fears, — fear of physical discomfort, fear of falling, fear of being misunderstood, and many other fears that block his own progress. Also, in many cases, the athetoid youth has to have his world adjusted to him whereas the average crippled child can have the normal world brought to him. In addition, he requires remedial training peculiar to his special handicap. Medicine is giving more intensive study to the general well-being of the birth-injured youth. While the outlook continues to be a gloomy one, some progress has been made in the treatment
given to help the child adjust to his physical handicaps. For example, all authorities agree that the earlier the training can be started, the better it is for the child. The reason for this seems obvious, for if the child can learn ways of using his muscles, he will avoid acquiring bizarre habits in the use of his legs, arms, face, tongue, and his body in general.

Treatment consists of a series of physical exercises designed to relax the muscles and to bring them under voluntary control. The program usually consists of daily exercises done in a hospital, school, or out-patient clinic. This is generally under the supervision and instruction of a trained physiotherapist. There is no short-cut method of treatment, for it is not a question of a cure but an endeavor to produce co-ordinated muscle action. Dr. Crothers has made the statement that all training has two objectives: one, to prevent contractures; two, to encourage useful activity.

In general, there may be said to be two types of treatment: surgery, which is used for a few specialized cases, and motor re-education or muscle training. The more promising method is the muscle training. Emphasis seems to be placed on the fact that all the training should be correlated with education. For the most part, muscle training is a tedious process and, unless a child can be interested in the activity, he will not get the full benefit. Education, therefore, is essential in providing an incentive or motivation. Thadine Hedges in her article, "Born a Spastic Paralytic," says of the treatment which she herself took, that it was "a kind of unshackling process which let out her personality." 10 The under-

10 Hedges, op. cit.
lying success in any treatment taken by an athetoid comes from learning to relax, followed by relaxing at WILL. This fact, that the individual can learn to control his motions through the use of his will power, makes the treatment effective. It again raises the question of the intelligence of the athetoid, because, in cases where there is little or no intelligence, such training is of no value.

In the introduction to her book, "Children Handicapped by Cerebral Palsy," Dr. Lord describes the ordinary situation which confronts such a child. She says:

A physically handicapped child is a special educational problem. Except in cases of gross brain defect, there is a developing mind as well as a developing body to be considered. Near the handicapped baby stands the mother, doctor, and others concerned with its training, such as the nurse and physiotherapist. When the child reaches school age, the teacher may have the increasing role. What part will each play directly or indirectly in the development of the child's personality? In what way can each prepare him to adjust in adult years to the social and economic conditions of a competitive world? The diagnosis and plan for treatment of the physical condition is primarily medical; the successful outcome of the treatment may be in a broader sense psychological and educational.11

In discussing the problems of the athetoid, then, we see that there are three aspects - the physical, the educational, and the social - and yet these are not in themselves clearly defined and are more or less interdependent. The understanding by the cerebral palsied child of these three problems is most important if he is to be able to face his own disability. It is important for those concerned with his care to know if his condition has precipitated any unhealthy emotional reactions in his

11 Lord, op. cit., p. 12.
life. It is unlikely that birth injuries can ever be entirely prevented, and yet such a lesion is a permanent damage leaving a definite handicap, depending upon the size and location of the hemorrhage. Emotional disturbance is the price the afflicted person pays. He must face new situations and sudden changes, all of which mean new adjustments which he has difficulty in making. To depart from his routine is very disturbing to an athetoid because any excitement or over-stimulation prevents him from doing his best.

If one compares the athetoid to the infantile-paralyzed youth, one may more easily visualize some of the difficulties that the athetoid is up against socially and physically. For instance, the main difficulty of the infantile-paralyzed youth is the loss of motion, whereas the athetoid has an exaggerated and constant motion. He is seldom quiet and is really unable to sit still. Another factor is that the infantile-paralyzed child can be helped to walk with the aid of braces and crutches, but such devices are of little or no help to the athetoid, since his whole body is so contorted that he cannot manage interfering equipment such as braces, nor can he manipulate crutches, for since he has no control over his movements, he cannot judge where the crutch should be placed. Still another difference is the very nature of his disability and its causes. In general, the public is very sympathetic toward infantile paralysis, for it understands the cause of such impairment. With athetosis, however, the public finds it hard to understand such awkwardness and why it is that an athetoid cannot control his movements.

When considering the physical handicap of the child, we find that
most parents are chiefly concerned with this phase of disability, for they want, above everything else, to have their child walk, run, and generally care for himself. In many cases the parents wait for unexpected sources to come to their aid. During this time, quite unconsciously, the child develops many habits which later prevent him for making an adequate adjustment. This is seen in cases where the parents are too protective and attempt to shield the child from any unpleasant experiences. Of course there are reasons for this over-indulgence, for in the early childhood there is likely to be poor health. The child catches cold readily, is exceedingly nervous and excitable, and because of the enormous amount of energy he uses in all his movements, he tires easily. In fact all through his life he is faced with the problem of fatigue, which retards him in making school adjustments or, later, in qualifying for a job.

One of the important physical problems of the athetoid is his walking. Dr. Lord in her study\(^{12}\) has found that with the cerebral palsied individual the question of his ability to walk depends upon whether or not he has any sense of balance. By balance she means the ability to stand alone and move without support regardless of awkward movements he may have to go through to reach a desired place. Unless he can walk, there is no chance of his becoming an independent individual and sharing in the normal activities of a home or a community. Dr. Lord also says that all indications point to the fact that if by the age of six the child has not learned to walk, he probably never will walk. No absolute prediction can be made, however, for in some cases there has been little or no therapy

\(^{12}\) Lord, \textit{op. cit.}, p. 18.
given to the child to increase confidence in himself, and some children are never even urged to try to walk because their parents fear they may fall and hurt themselves.

There is another physical handicap that is of such importance that it should be brought to the attention of the public, for it emphasizes the difficulty the athetoid has in making his social adjustment. Practically all cerebral palsied children are left-handed. It is conceivable that in the case of the majority, their injury forces them to use their left hand when in reality they are right-handed. We know from studies made by educators that a confusion can result in forcing a normal child to use the unnatural hand. For the athetoid, it would add double confusion. Also there might be the additional confusion because equipment is usually made for right-handed people, hence all the way along the athetoid is placed under greater handicap whether at school or at work.

In considering the physical disability, an important question arises; namely, how the family and child accept the handicap. Many parents refuse to believe that their child will not "grow out" of his affliction, and live on in this false hope. As a small child, the intelligent cerebral palsied child is happy, however seriously he may be injured. He is not too conscious of the fact that he is physically different from his playmates because he has never known any other physical abilities than those with which he was born. Unless as he grows older it is explained to him that due to a birth injury, and because of this injury, he will be limited in his activities and later in his choice of a vocation, when the athetoid reaches adolescence he will most certainly be
faced with many serious emotional problems, and will most likely become a misfit. Many authorities point to the fact that he will develop morbid attitudes toward his handicap if at the adolescent period he first becomes aware that his injury is preventing him from realizing his ambition. Not only will he feel that he has been unjustly crippled, but he will silently suffer mental tortures because he does not understand himself. He may spend hours mulling over in his mind his strange behavior and even wonder if he is slightly feeble-minded. He develops a definite fear to ask questions. As a result, there is a tendency for him to become withdrawn, and to develop many phobias about his peculiarities. His one desire becomes to live apart from those around him in a world of his own. This may result in both a mental and physical deterioration unless a sense of personal worth can be established.

In a conference with Dr. Crothers he emphasized the fact that the adolescent period is the most critical period in the life of cerebral palsyed youth. It cannot be too strongly emphasized that the child from his earliest years should talk about and understand his disabilities so that his planning and future outlook will be based on a growing philosophy of life which will give him a sense of worthiness and of service within his limitations. If he lacks this philosophy the athetoid of superior intelligence often attempts suicide because of his overpowering feeling of despair and defeat. His ambition to do things and to share in normal activities forms a large part of his wishful thinking. Parents are, indeed, confronted with a grave problem!
Along with the physical problem is the problem of helping the child to lead a satisfying life. This brings us to a second major problem, that of education. Men and women who are themselves spastic athetoids repeatedly say that it is only through education that adjustment acceptable to society can be made.

What is the actual situation that the athetoid faces in this problem of education? To begin with the general school set-up does not provide for the specialized needs of this handicapped youth. The very nature of his disabilities makes it more difficult for him to fit into a school program. He is slow to adjust. Therefore his work needs to be simple and repetitious, which is obviously a drawback to the others in the classroom. He is constantly required to meet new situations which are particularly trying, and such a competitive group situation is detrimental to his success. He comes to school with other pronounced differences which start him off at a disadvantage, such as speech defect, poor hand co-ordination, uncontrolled facial expressions, jerky, unpredictable walk and movements, and fatigue. All this results in school work of unequal quality. In fact it is unpredictable what kind of work he will do. This is seen in the older group where one might expect to find more endurance and power to concentrate even under such adverse physical conditions. Often the youth himself gets impatient over this fact. For instance, one day he may be able to do his work, such as writing, while the next day he cannot do it at all. In spite of any mental capacity with which he may be endowed, his physical disabilities prevent him from participating in regular classroom activities. The teacher and the pupils are unable to endure his
peculiar behavior and, in many cases, the child is barred from the school as a disturbing element. Here in Massachusetts this is somewhat compensated for because of the provisions for home teaching.

This home teaching is recommended by the Social Service Division for Crippled Children. In cases where the child has been barred as a disturbing element, after a year or two of home teaching he may be able to re-enter school, first making an adjustment in the special class which many school systems provide. But in many instances a private tutor is the only means of education. However one may approach the question of education, it remains one of the main channels for providing means of social adjustment for the athetoid. It is the tool which will enable him to develop a philosophy of his own, to create interests and hobbies which will allow him to use his time in a constructive manner. Although such training may be useful only because of the personal enjoyment which results, it may have a real vocational value. In either case, education will give him a better chance to understand and face his limitations, will give a meaning to the philosophy which he has developed, will help him to understand people, and will thus enable him to make a better adjustment within himself.

In connection with education, as we have just seen, comes the matter of a vocation. When we speak of future plans it is usually in terms of training for some vocation, and this kind of training is specialized education. One might think of it in terms of college training, secretarial training, mechanical training, engineering training, medical training and so on. As has already been intimated, many of these children will never be able to be self-supporting. Therefore the purpose of their education
will be to enable them to live an adjusted life. To fit for a competitive job those who do go to school, in spite of the nervous strain put upon them, is not a simple matter. They simply cannot work under competition or under pressure. Again, much will depend upon the individual and the way his parents have interpreted his disabilities and limitations. The feeling of personal worth is measured by one's ability to be economically self-supporting and socially useful. Dr. Carlson has suggested that, in many instances where a vocational choice is unsuitable for the individual, his interest can be directed into a related field. He gives as an example the case of a young man who wanted to become an airplane pilot but was finally persuaded to take a job in a workshop with the view of becoming an airplane mechanic. To speak in terms of work always implies competition. Therefore, the ideal kind of education for the athetoid is the sheltered workshop which provides ample opportunity for the development of native talents, where the competitive phase is eliminated and there is no time element.

To sum up, the first fifteen years of the athetoid's life should be devoted to education and social adjustment. But, regardless of the skill which he may or may not develop, the sad fact remains that his vocational choice is bound to be extremely limited. With this fact in mind, his training from the beginning should center in fields where he can be happily engaged in keeping himself occupied, so that he will not drift along and when he reaches the age of maturity face the fact that he is a

13 Earl R. Carlson, Born That Way.
misfit and a failure. It is a most disheartening sight to see the intelligent athetoid approaching adolescence when in spite of the best muscle training he is becoming introspective because of his inability to adjust to his handicap. From his earliest years he needs to understand and learn to accept his physical condition, gradually absorbing the heart-breaking disillusionment of the vocational possibilities that will not be opened to him. The causes of his disease and his limitations should be discussed freely in the home so that he will not be tortured by unnecessary and ungrounded fears regarding his disabilities. Priscilla Brockman has clearly demonstrated the frustrations and inhibitions an adolescent goes through when he does not understand his handicap and his parents refuse to recognize the physical disability. She reached her twentieth birthday before she fully understood what caused her injury. She says, "It was a most heartening revelation to learn that instead of having a totally different handicap from anyone else there were thousands like me. This has taken much of the sting out of my predicament."\textsuperscript{14}

In a normal child the degree of his social independence is usually parallel with his intelligence. In the case of the cerebral palsied youth this is not true, for in spite of intelligence, his social adjustment is generally inadequate. One might say that his personality pattern is largely stereotyped because of his physical impairments. In general he is an individual who is governed by fear and as a result becomes an observer rather than a participant in the social life that surrounds him. As an ob-

\textsuperscript{14} Priscilla Brockman, "My Road to Achievement," \textit{Outwitting the Handicapped}, September, 1941, p. 12.
server he protects himself from meeting new and strange situations which frustrate him.

The ability of the athetoid to adjust to a social setting is made particularly difficult because of his contortions, which are disconcerting to watch, and his clumsiness whenever he tries to share in the normal give and take of society. These physical handicaps give him a feeling of great insecurity. Universally society knows why a child uses crutches, but it is hard to understand the weird motions of the cerebral palsied youth. It bears repeating that the individual must understand his disease and accept his limitations. When a child is young, he is more or less unconscious of his impairments. He is born with the disfiguring anomalies and is able to tolerate them as long as his mother loves him, in spite of his deformities. Throughout his childhood he will reflect the attitude of acceptance or resentment of his physical status, according to the attitude of his parents. He needs a feeling of personal worth, even if it is limited to a small social unit such as his own intimate family.

To enable the athetoid to take his place in society, adequate education seems to be the answer. A greater part of his happiness will come from his ability to enjoy in a vicarious manner the many experiences in which he cannot share. His education, for the most part, will be in the fine arts, for vocationally the majority of athetoids will be barred from entering a competitive world. By developing as wide a variety of interests as possible, boredom will be prevented and he will be able to live a happier and saner life. An example of how such interests can
develop and be a means of self-expression is a periodical called the "Spastic Review," which a group of "spastics" has banded together and organized. Any birth-injured individual has the opportunity to send in articles about the hobbies or interests which he has developed, whether music, poetry, sports, movies, travel, astrology, or whatever they may be. One girl who was very musical published a series of articles on different types of music and later became a critic of modern music. The value of an education for the athetoid lies in providing for him an adequate outlet for his interests and energies.
CHAPTER IV

Nine Case Studies

In the preceding chapter the physical limitations placed upon the athetoid were discussed. It was pointed out that these limitations prevented the child from entering into normal situations. The following nine cases, active with the Social Service Division for Crippled Children, were studied as typical examples of the problems which the cerebral palsied group have to face. In each case, as before noted, the child has average or above average intelligence. Attention will be drawn to the degree of disability, of schooling, of interests, and of present adjustment.

The presentation of each case gives a picture of the youth as he is today, relates his physical condition to his past history, and gives a simple interpretation of his social development. The writer visited six homes, in all of which she found the parents most willing to discuss their child and even to talk about the causes of his injury. In every case the parents told the same discouraging story of taking their child from one doctor to another, in the vain hope of obtaining some kind of a cure for him.

CASE I

Ruth, a tall, frail-appearing girl, is a nineteen-year-old senior, attending public school in one of the larger cities in Massachusetts. She has diaplegia which causes her to walk with a shambling, unsteady gait. In spite of walking difficulties she takes the bus to and from
school and manages these trips without trouble provided she does not have to hurry. She speaks hesitantly and gives the impression that she will not be able to say the word. When she does express herself, she has a clear diction with no slurring. She does not drool but does have the characteristic foolish grin which comes when she smiles. Both her hands are affected which makes it difficult for her to write. She therefore needs more time to do her written work than does the average student in the classroom.

Ruth was interviewed in her home. Throughout the visit the writer sensed the parents' sympathetic understanding of their girl's handicaps. They are trying to face the reality that she is limited in her choice of a vocation but apparently they do not fully realize just what the limitations are. At school she is taking the college curriculum, for she is able to do the mental work and it involves less manual effort. While she keeps up in her studies she admits that it takes her about four hours each evening to do her home work, especially when she has a paper to write. Because she is taking the college course and likes mathematics, her father is suggesting that she attend Teacher's College and plan for a teaching career. Ruth, however, is rejecting this plan, for she herself knows she cannot possibly talk before people. In our conversation it was brought out that the supervisor of the Social Service for Crippled Children has tactfully shown the parents that Ruth cannot become a teacher.

The value of the counseling service of the Division was clearly demonstrated when the supervisor substituted as an outlet for the girl's vocational training the Community Workshop, which is a private agency
where handicapped people are able to learn a trade in which they can more or less excel. At present Ruth's interests are in the direction of housework and during vacations and week-ends she shows this domestic trend. Her mother does not interfere and, therefore, Ruth is able to do a satisfactory job. She does not have many friends of her own age as most of the children whom she knew are away at college, so she depends upon her sister's acquaintances and her family for companionship. While she goes to the movies and the theatre occasionally, she does not have any group activity outside of the home. She is not sure where her greatest interest lies outside of housework, though she likes to embroider. This is usually a summer interest, as her studies consume all her spare time during the school year. As long as Ruth goes along at her own slow pace with no interference, she is able to meet normal situations.

Ruth is the older child of a family of two children. Early in infancy it was noticed that she was not acting as a normal child; as a result, for years she was taken to clinics for treatment. It was from the Children's Hospital, Boston, that, at the age of seven, she was referred to the Social Service Division for Crippled Children, because of the problem of education. The Division recommended home teaching which was tried for a year. This plan did not seem to satisfy Ruth, who wanted more social contacts than such a program offered, and so the Massachusetts Hospital School was suggested. She spent a year there but was so homesick that, on a visit home, she refused to return to the School and insisted on trying public school. She missed her little sister who would be starting school and wanted to go with her. In 1932 Ruth entered the
second grade in the elementary school near her home and has, since then, been able to continue her education in the public schools. In June of this year she will graduate from high school. During these years of public school the Division kept in touch with her progress through the school and a few home contacts. Now, as she is nearing her graduation, the Division is giving her definite suggestions as to where she might receive special training according to her ability.

All through the years of Ruth's education the value of the constant and wise counseling of the Social Service Division for Crippled Children has been demonstrated. From the time she refused to return to the Hospital School, she has made a steady gain in learning self-control. She has shown independence and assertiveness in her desire to live and be with normal groups. She has been able to make adjustments to the school regime. While she does not feel too sure as to what she can do to earn her living, she has recognized her limitations by not wishing to become a teacher as her father suggested. Ruth is looking forward to attending the Community Workshop where she will have a chance to explore different fields of activities, such as home management, clerical studies, etc. In this way she will, doubtless, find a job within her physical handicaps, in addition to getting a real place in community life.

CASE II

In this case as the writer did not have an opportunity to see David, the history is based on an interview with David's mother. David, aged fifteen, is a freshman at Boys' Latin School. He has hemiplegia,
his right side being affected. Because he has trouble in putting his heel on the ground, he has difficulty in walking and drags his foot, especially when he is tired or careless. Also, it is not easy for him to write, but if left alone he is able to do the necessary work in school. He is not greatly interested in his school studies and just manages to make passing grades. He is interested in sports, however, particularly in track, although he is unable to participate in it. He attends all the inter-class meets and is making a special study of sports, in general, as he hopes to become a sports reporter. Though sports are his hobby, he enjoys the movies and goes often with the boys in the neighborhood. His mother said that this year she is allowing him to enjoy the social functions of the community. In the past year and a half he has begun to dread his visits to the doctor. His parents have not discussed with him his physical disabilities, for, as his mother said, they are waiting until he is sixteen years old when they feel he will be old enough to understand the cause of his handicaps. David has not asked them questions so they feel that he cannot be mentally disturbed about his disease.

When talking of his early development, David's mother gave the following data. He was a premature child, very delicate and sickly. It was not until he was about eight months old that his parents became aware that there was something physically wrong with him. They took him from one doctor to another in the hope that someone would give them encouragement. For the most part, the early years of the boy's life were spent in hospitals and clinics, for he started muscle treatments
early. His mother said that he was examined by Dr. Crothers and Dr. Lord at the Children's Hospital, Boston, but neither would make any prediction as to his intellectual ability until he reached his eighth birthday. When it was recommended that he attend school, his mother said it was as though a "great load" had been lifted from her shoulders. He has attended public school from the beginning of his education, and David's mother stressed the fact that as long as he is left alone and allowed to go at his own rate of speed, he gets along easily and is able to do any required work. When he gets excited, he tightens up and it is impossible for him to do anything. When he reached the clinic age limit, his parents continued his yearly examinations, but for the past two years, because of David's increasing fear of doctors, it has been more difficult to get his necessary medical check-up. Here his mother gave the excuse that he is probably afraid of being hurt. At the present time the plans are to send David to college where he will specialize in journalism as a preparation for becoming a sports critic.

Three specific points in this case appear significant. One is that, from his earliest years, David has not had his physical handicaps discussed openly and naturally so that, now in adolescence, he is brought face to face with the realization that he is physically different from his friends and is unable to do many of the physical tasks which they do. It is possible that because of this sudden knowledge, he has become afraid of doctors and fears what he might be told. Especially is he fearful of their diagnosis of his awkward movements and his lack of co-ordination which prevent him from participating in sports.
of which he is so fond. The second point is, that the parent's attitude is reflected in the boy's behavior. They have been reticent and have only indirectly referred to his injury when the neighbors have discussed his handicaps. It may be that they do not realize that this very avoidance of interpretation is confusing to David, causing him to believe he has some very queer disease which he does not want people to know about. The third point is, that his parents are cooperating and guiding David in his plans, which are obviously more or less restricted. He has no speech defect according to his mother, and if he can become an authority on sports it will somewhat compensate him for his inability to be active in the games themselves. It is too early to make any prediction as to his adjustment, for much will depend upon his acceptance of the interpretation of the cause of his affliction. At least he has selected a vocation which should be within the limitations of his handicaps.

CASE III

It was possible to visit Jimmie, who is twelve years old. He is a clear case of severe athetosis. It is only within the last year and a half that he has been able to walk. Even today his walk is unsteady, with many unpredictable results and it takes a great deal of energy to execute one step. When he is in the house he falls back upon crawling because he then feels more sure of being able to reach his destination. When he talks he makes a gagging sound and it is impossible for a stranger to understand him. But his mother feels that his speech is wonderful since it has been only this past year that he has been able to speak
even this much. He has an attractive face until he smiles, when the
typical silly expression appears. In spite of this it is known that he
has above average intelligence, as was evidenced by the Hospital report.
He drools and flings his arms about in such an unexpected manner that
it surprises one to see him manipulate tools more or less successfully.
Jimmie has a brother six years younger than he with whom he plays and who
seems to be somewhat protective and eager to help him in any possible
way. Through the recommendation of the Social Service Division for
Crippled Children, Jimmie is receiving home teaching. He is doing the
equivalent of Grade IV arithmetic which he enjoys, and Grade III read-
ing and spelling which are more difficult because of his extreme speech
defect. At this early age he is most interested in vegetable gardening
and is urging his mother to buy seeds for him. When asked if he did not
want some flowers in his garden, he turned to his mother and told her
she could have the flowers. He has a hobby of collecting marbles which
he keeps in a large tin can. The writer was very much impressed by
the great ingenuity he used in opening and closing this can. He had
an odd-looking gadget which had a sharp edge and he used this edge to
pry off the cover whenever he wanted his marbles. He did not receive muscle
training as he lives too far away from the clinic and the doctors
felt that it would use more nervous energy to take him back and
forth than the results of the treatments would warrant. His mother
realizes his limitations and with the help and advice of doctors and
the supervisor from the Division for Crippled Children she is trying
to provide him with interests and activities within the scope of
his abilities.

Jimmie's history is similar to the others. He is a first-born child, prematurely born. Due to the severity of his injury, his mother recognized at an early age that something was wrong with him and he was placed under the care of the family doctor. At the age of seven he was referred by the school department to the Social Service Division for Crippled Children as a child needing special teaching. The superintendent reported that they had no teacher who could give such a handicapped boy instructions. Through the service offered by the Division, it was arranged to have Jimmie go to the Children's Hospital for a period of observation and during this time a home teacher watched the teaching technique which the hospital clinic used in the case of a "spastic" child. Because of this provision Jimmie was able to start his specialized education. It is noted in the record that he can dress himself except for fastening his buttons and tying his shoe laces, and he is able to feed himself. These factors would indicate that he is more or less independent.

At the age of twelve it is rather early to make any prediction as to Jimmie's social adjustment. There are, however, several interesting factors which should be noted. First, he learned to walk when he was in his tenth year. Generally speaking, as the writer has pointed out in Chapter III, unless a child learns to walk at the age of six, little hope is held out that he will ever do so. As it is, he will never walk easily, but to walk at all is an important factor in his becoming adjusted. Because he is a child of high average intelligence, when he reaches adolescence and attempts to use some of his inventive ability, he may
awake to a sharp realization of his true disabilities. Indications are that he is already aware that he cannot do everything he wants to do which, on the whole, may result in preparing him to accept the restricted life which is before him. Theoretically, Jimmie is independent as he can move about without aid. In reality, he will always be dependent for he will never be self-supporting. His education needs to provide him with as many outlets as possible to keep his active mind occupied. It has been suggested to his mother that she help him develop his interest in gardening as this may prove a valuable outlet for him.

CASE IV

As the girls in the following two cases lived too far away to make personal calls possible, their histories are taken from the field worker's reports at the Social Service Division for Crippled Children.

Betsy, a girl of fourteen years of age, is attending regular school. She is described as having diaplegia which results in difficulty in walking, talking, and writing. At the present time she is sharing in the activities of girls her own age and appears happy in her school surroundings.

Betsy is an only child. At the age of two years she began to receive treatments and has been continually under the care of a private physician. At the age of seven she was reported on the school census. A visit was made to her home in order to learn whether or not she should have home teaching. During this initial interview, the mother's attitude toward Betsy's afflictions was that "some day she will snap out of it."
She arrived at this point of view as the result of the folklore of her neighbors. Because of this attitude it has been difficult for the mother to accept Betsy's handicaps. In fact the mother's attitude has hindered Betsy from making even the usual amount of progress. Betsy, at seven, was unable to walk, could hardly talk, and had little hand control. She received home teaching but her progress was very slow. Her mother continued to be a disturbing element and was finally persuaded to take a position outside of the home. This move resulted in a maternal aunt taking care of Betsy. The aunt was more understanding and, while she accepted the girl's handicap, she also believed that there were things that Betsy could do to help herself and she expected her to do them. In a few months Betsy's teacher noted great improvement in her work. Because of her normal intelligence, it was decided that she would benefit from special speech lessons. Betsy received home teaching until she was eleven years old. Since then she has been attending regular classes and is making a scholastic average of eighty-two per cent. She still has difficulty in going up and down stairs, but due to the fact that she is allowed the necessary time to get to her classes, the school reports that it is satisfied with her progress. There is a notation that Betsy is gaining satisfaction from her school contacts and the friends whom she meets there. Her family is allowing her more social life outside of her home. There are no indications, thus far, that she has any morbid reactions because of her physical handicaps.

This study brings out three facts: first, the refusal of the mother to recognize Betsy's physical handicaps; second, the possibility
that Betsy is heading for disillusionment because of her mother's attitude; and third, because of her understanding aunt, Betsy herself is evidently not emotionally upset because of her deformities for she has been constantly gaining in her ability to participate in community activities. It is probable that she thinks she will continue to improve physically and be more like other girls. Lastly, much will depend upon her interests and the way in which she can relate these interests to her handicaps.

CASE V

This is the second case of the two which were not visited. Sally is a happy fourteen-year-old girl, in her second year of Junior High School. She has diaplegia and, as a result, has difficulty in walking and in talking. She also has a drooping eye-lid, and one eye is crossed. She loves to be with girls her own age and participates in many of the parties which the girls give. She is a girl scout and, in spite of her walking handicap, is able to go with her troop on overnight trips for she has a bicycle that her father has adapted to her special needs, which enables her to get about independently. She has shown leadership by taking responsibilities in her patrol.

She has a brother a year older and a sister a year younger. There is no report of jealousy or bickering among these three children. The record brings out the fact that her parents are most understanding of her physical handicaps and are trying to let her live as nearly as possible a normal girlhood life.

Sally is not the first-born child, as is apt to be the case with
children who have a birth injury. Otherwise the same pattern is observed. Her parents took her from one doctor to another in an eager search to find someone who could improve her condition. They were told repeatedly that there was no cure, but in desperation they continued visiting nerve specialists and orthopedists. They finally went to see Dr. Crothers at the Children's Hospital, Boston, who suggested corrective exercises and braces. Generally, braces are not as useful for an athetoid as for the infantile-paralyzed child because of his poor motor-coordination. At the age of seven Sally began to attend a small neighborhood school. During the first half year she held back the class because, physically, she could not keep up with the average child. In addition, her presence in the classroom was a disturbing element and it was found that her schoolmates were developing similar tics and grimaces. The superintendent reported her to the Social Service Division for Crippled Children as a school problem. Following this referral, a call on the family was made by the field worker to study the situation. It was decided by the family that Sally should go to private school. For a year she attended such a school in Putnam, Connecticut, where the curriculum was adjusted to her special needs. Though this arrangement was most satisfactory, it proved too expensive and a private tutor was engaged. Sally was most unhappy over this plan, for she wanted to be with other children and resented the segregation. Contact with the Social Service Division was again made which resulted in Sally entering a special class in the public school. For four years she remained in this class, constantly showing progress and two years ago she was able to enter Junior High School, where she is at present.
Sympathetic cooperation of Sally's parents is indicated here. The fact that they accept their daughter and her handicaps and recognize that she probably never will be able to work is a significant factor. It looks as though they will be able to help Sally face her misfortune. They have helped her to make social adjustments which will continue to be a valuable asset in the sharing of community activities.

CASE VI

The case of Joe was selected because he has completed his high school education and his case can be studied with the view of finding out what adjustment he is making in the business world and the community in which he lives. An interview was held with both Joe and his mother. Joe, aged twenty, is a tall man, badly crippled with athetosis. He has a staggering walk and has limited use of only his left hand, for the other is so paralyzed that he has no control over it. He has a speech defect which results in facial contortions when talking, which are most upsetting for a stranger to witness. In spite of this difficulty in talking, he can be understood and conversation can be carried on if the listener pays strict attention. At the present time Joe is working at the Massachusetts Institute of Technology at a job which is tiresomely monotonous for him as it involves only turning the handle of a machine. Although he is pleased that he is able to earn his living, he is not satisfied with this type of occupation. He would like to work at something which requires more mental ability. For example, he wants above everything else to become a book-keeper and with that in view he has tried to enter business college, but
he was refused admittance because of his handicaps. His reaction to this rejection is a feeling that if he could once get an adequate training he could overcome the objections to him because of his handicaps. He admits that he cannot work under excitement or pressure but if allowed to do his work at his own speed he can get it done. At school he was allowed extra time for his written work because he could not write fast enough to do it in the required time. At the suggestion of one of his high school teachers Joe was referred to the Division of Vocational Rehabilitation under the Department of Education. A radio course was suggested for Joe which he attended for only two weeks because, from the first, it was obvious to him that with only the limited use of one hand, such a choice was impossible.

At this crucial point the supervisor from the Social Service Division for Crippled Children, who had kept in contact with Joe, stepped in with her valuable counseling and is now acquainting Joe with the Community Workshop where he might find the kind of work which would not only use his mental capacities but might lead to a possible vocational training. While Joe likes to go to the movies with his friends he dislikes entering into their social life because he feels that his handicaps are so obvious and even repulsive that he becomes an object of ridicule and embarrasses the people with whom he is associated. His greatest interest is baseball which is a valuable outlet and does not require social contacts.

Joe's early history is similar to that of the other cases. He was a premature baby. For years his parents took him from one doctor to another, for they would not believe that there was no medical help for him. It was not until he was five years old that he was able to walk
and he did not talk until he was seven at which time he began to attend public school. He was reported to the Social Service Division for Crippled Children through the school census. A visit was made at the home where the problem was studied. Because of his severe handicaps it was suggested to his parents that Joe be sent to a school for crippled children. He did not like the idea of leaving home or his school and was so emotionally upset by this suggestion that the plan was rejected. As a result, for twelve years he attended public school where he managed to do the scholastic work and to make the honor society in high school. The Division kept its contact with Joe through the school and felt it was best to let him continue living in his normal setting as long as he could. Now that he is through high school the Division is again giving him wise guidance which should help him to make as permanent an adjustment as is possible within his limitations.

Joe is a serious young man. He has, in a sense, experienced the disappointment which would inevitably come to him because of his physical handicaps. While he realizes his limitations, such as his inability to do bookkeeping, he still is not willing to accept the fact that he cannot find work in some part of the office routine where writing, which he does poorly, is not required. As has been seen, he has not been able to make a complete social adjustment because he is afraid he will act in a disgraceful manner before people. He is fortunate, however, in that his parents are most sympathetic and cooperate in any way they can, which will help Joe to live and become a respected citizen.
CASE VII

Patsy, aged fifteen, was visited in her home in New Bedford, Massachusetts. She was found to be a lovely brown-eyed girl, whose beauty is marred when she smiles because of her uncontrolled foolish grin, although this is not as pronounced as in the majority of cases of cerebral palsy. She has a severe case of spastic athetosis, about which she is extremely sensitive. She is unable to walk, feed herself, or dress herself, and is entirely dependent upon the help of others. Her awkward speech is typical of this group. Patsy, however, is happy and has a keen sense of humor, readily noticed throughout the interview. It was seen that she also has a large amount of determination to carry out her own ideas. Obviously she has been unable to attend public schools, but because of the recommendation of the Social Service Division for Crippled Children, she has always received home teaching. At the present time she is doing the equivalent of Grade VII work, her special interest being history. Her mentality is above average and she is already expressing her wish to receive the equivalent of a high school education.

Patsy's interests are strong and varied. Chief among them seems to be an extraordinary liking for anything pertaining to the medical field, which would indicate that she is searching for an explanation for her disease. Yet parallel with this interest is a curious refusal to accept the fact that she is different from other girls. The mother has very wisely discussed with Patsy the cause of her "spastic" condition, and so this refusal of hers to recognize her hopeless physical condition is not based
on ignorance. She is continually making scrap books, one of them being filled with anecdotes about Abraham Lincoln, who is, at present, her favorite hero. Also, she has invented an ingenious filing system which is so complete that she can always quickly locate the various clippings, whether pertaining to medicine, current events, movie stars, or local activities. Because she is unable to go outside of her home to attend social activities, these social pleasures are brought to her. She told of two parties which were recently given in her home. Patsy, with her broad interests, and never-failing optimism, invariably attracts other people and so it is not hard for her to make an adequate home adjustment.

The early history of Patsy's life is as follows. She was a full-term baby weighing nine pounds. The cause of her birth injury is thought to have been due to her mother's long period of labor, of which she has been frankly told by her mother. Because her mother had no other children with whom to compare Patsy's development, she did not recognize that anything was abnormal until Patsy was nine months old. Again took place the hopeless effort on the part of the parents to find medical aid. After taking Patsy from one doctor to another, it was finally suggested that the child have special exercises for muscular development. These were given to her by her mother for a limited time only, because her mother's health was poor. Through the School census Patsy was reported to the Social Service Division for Crippled Children, with the result that she has been able to have home teaching. It was noticed that the home routine was completely adjusted to Patsy's daily program, indicating the whole-hearted cooperation of her parents.
It is obvious that Patsy will always be dependent upon others. While she cannot enter into large group activities, she has made a remarkable adjustment to a small social group. It should be noted that Patsy's adaptation was made possible not only because of determination to be like her friends, but also because of the understanding sympathy of her parents. Because of Patsy's desire for advanced education and the fact that she has the mental capacity, it would seem most important for her to have this continued education as a means of broadening her field of interests.

CASE VIII

At the home interview with Frank, aged ten, and his mother, we found that the boy was physically attractive and not as seriously handicapped as any of the other cases visited. He has diaplegia but it has not been as crippling as in the case of Patsy. He walks very well, with only a slight drag of his left foot, but because his movements are somewhat unpredictable, he is not sure of his balance and falls easily. He writes legibly but is so slow that he cannot attend the public school. Though his speech is clear and distinct, he is unable to talk fluently. Frank's parents are extremely cooperative, inventing ball exercises which have resulted in strengthening his muscles. Frank attended school for several years but the competitive strain was so fatiguing that the family doctor thought it best for him to leave school. He was referred to the Social Service Division for Crippled Children by the school census as a boy who needed home teaching. This he is now receiving, and at the present time is doing the equivalent of Grade IV school work. He is especially interested in geography. He is able to share in out-door games with the other
boys in the neighborhood. His hobbies are varied: sports, especially ball games, radio, and jig-saw puzzles. His ability to put the latter together is astonishing. Both he and his mother admit that under undue pressure or excitement he is unable to work. While his mother accepts her son's physical limitations, at the same time, due to the progress which he has already made, she is hoping that eventually he may become normal.

Frank is an only child and according to his mother was a full-term baby. Like Patsy, the result of his physical injury was not noticed until he was nine months old. Then began the hopeless round of doctors, with little or no encouragement. It has already been mentioned that Frank is receiving home teaching and it is hoped that because of his improvement in muscle control he soon will re-enter public school.

At the age of ten Frank is too young for any reliable prognosis. We see that he is participating in a more or less normal life, for while he is slow in his movements, he is able to take his part in group activities. Even at this early age there are two indications that he might become economically independent; first, his handicaps are not too severe, and second, he is not physically repulsive. For these reasons society will more readily accept him.

Case IX

The case of Bill gives another example of the functions of the Social Service Division for Crippled Children. Bill is a sixteen-year-old junior in high school. He has spastic athetosis which affects his walk and his hand control. Unfortunately his special interest is chemistry,
which he finds difficult because of his poor hand co-ordination, resulting in a large amount of test-tube breakage. Bill is showing signs of withdrawal, probably due to the fact that neither he nor his mother is willing to face his handicaps. With his mother's approval he is seriously planning to enter military service. The health director, who is interested in all the boys under his supervision, knows of Bill's hopes and realizes how impossible it will be for Bill to carry out this plan. In suggesting this impossibility to Bill and his mother, he has found that they refuse to recognize this situation and to accept his judgment. So the director has turned to the Social Service Division for Crippled Children for cooperation and advice, at the same time asking them to delay the initial call on Bill until he has prepared the family for this outside contact.

This case brings out the point which was noted in Chapter III; namely, the absolute necessity for each cerebral palsied individual to know as early as possible the extent of his injury and the limitations which it will always impose upon him. If this does not happen, the individual, as seen in the case of Bill, will of necessity be brought face to face with the cruel disillusionment that he is blocked in reaching his desired goal.
CHAPTER V

Summary and Conclusion

A cerebral palsy injury is one of the greatest motor impairments which occurs at the time of birth or shortly thereafter, and affects the individual throughout his life. While muscle training helps the youth to control his distorted movements, it does not result in a predictable control. Any undue excitement or emotional strain upsets him, and his will power to control his movements is weakened by this insecurity. Along with this physical instability is the pitiful fact that although the athetoid has a native ability to learn, his general appearance belies this fact because of the motor damage and society believes him to be not only physically but mentally inferior. This fact was clearly seen in the nine cases which have been discussed. In each case the boy or girl had intelligence and was receiving home teaching or attending school, doing satisfactory work. In the case of Sally, Case V, we saw that she had to leave school because of her behavior, due to her lack of muscle control, which was a disturbing element in her classroom.

This thesis has been concerned with the possible social adjustment which the athetoid can make, within his own disabilities, in his home and in the community. The world at large is conscious from a social standpoint, as well as from an economic and emotional one, that an educated individual has a greater chance of making an adjustment and of becoming a more satisfied member of society than one who has had no education. The athetoid has special needs because of his handicaps.
Throughout this study, we find two possible ways of solving this problem. First, from the moment the child begins to talk, both he and his parents should discuss naturally and freely the causes of his handicap. Along with this he should know that there are other children who have the same affliction. This frank discussion of his disease should help the child not only to accept his condition but should prove a valuable guide in his vocational plans and his related interests. It should save him when he reaches adolescence from the shock of realizing, for the first time, that his handicaps will always be hindering factors in his choice of a vocation. For example, we saw, in case IX, that Bill, at the late age of sixteen, is facing this staggering problem because neither he nor his mother is willing to accept his injury. The parents must accept this responsibility of acquainting their child with the cause and the extent of his disease.

The second suggestion for solving this problem of adjustment is education as a means of helping the child adjust socially. Education, whether extensive or necessarily limited, should open for the child new interests, possibly proving a valuable guide in the use of his many leisure hours. In the study of Patsy, case VII, we saw that she fully realizes the great worth of her education and, because of the new world it has opened up to her, she is using it as a means of helping herself to become an interesting and vital personality in her home. Here in Massachusetts, there are facilities for the education of crippled children, either in hospitals or in homes as well as in the schools. The Social Service Division for Crippled Children was established to
assure this education. The Division stands ready to recommend home teaching as well as to give information regarding the various resources which are available to meet the needs of this crippled group. Massachusetts is one of the few states which has adopted this valuable program of home teaching which is, indeed, a forward step toward solving the problem of education for the crippled child.

The social contacts of the athetoid remain a vital problem in spite of the research which the medical profession has devoted to it. Such a child, in the long run, must live a more or less sheltered life. Because the Social Service Division for Crippled Children has only a small staff of workers, the scope of its work is necessarily limited. This results in the impossibility of doing detailed case work in the homes. Because of this, it would be extremely helpful to include on the teaching staff of the local school department a trained case worker who would not only augment the work of the Division but bridge the gap between the school and the home. In cases where the parents were not squarely facing or even understanding their child's injury, the trained worker, with her wider knowledge of human behavior, would be able to interpret the meaning of the child's injury to the child himself and to his family. In case II, we saw that David, at the age of fifteen, because of his lack of understanding of his disease, has become a prey to ungrounded fears which are holding him back from possible improvement in his physical conditions.

Society is mercenary and measures success too often by the pay envelope. For the athetoid, it is obvious that such a measurement is impossible. On the whole, the business world takes an unsympathetic
attitude toward the athetoid group. Viewing the situation vocationally, it would seem that the personnel departments of large industries might well consider the possibilities of employing members of the athetoid group in positions where the time element is not the primary consideration. These athetoids could be employed in occupations where manual dexterity is not as important as mental alertness and accuracy. It is better for them to be allowed to perform their limited kind of work than to refuse them the right to earn their living and thus take away their self-respect.

Approved,

Richard K. Conant, Dean
Bibliography


Brockman, Priscilla, "My Road to Achievement," Outwitting the Handicapped, September, 1941.


Fischer, Frank, "Cerebral Palsy with Case Histories from Pickaway County, Ohio." Unpublished Master's Thesis, Ohio State University, Columbus, Ohio, 1940.

Gardner, Julian G., "Possibilities of the Spastics." (Paper loaned by the National Crippled Children's Bureau, Elyria, Ohio.)

Gill, Mary Elliot, "Place in the Sun," The Crippled Child, October, 1943.

Haskin, Frances Heathly, "The Broken String." (Autobiography loaned by the National Crippled Children's Bureau, Elyria, Ohio.)


Appendix
### SCHEDULE

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<th>Name:</th>
<th>Sex:</th>
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<tbody>
<tr>
<td>Present age:</td>
<td>Age of Referral:</td>
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<tr>
<td>Medical Diagnosis:</td>
<td>Specific Handicaps:</td>
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<td>Walking</td>
<td>Drooling</td>
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<td>Talking</td>
<td>Grimaces</td>
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<td>Dressing</td>
<td>Eye Trouble</td>
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<td>Writing</td>
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<td>In hospital</td>
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<th>Parents' attitude toward the disability:</th>
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<td>Acceptance or not:</td>
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<tr>
<td>Cooperative with those in authority (doctors, teachers, clinics, etc.):</td>
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<tr>
<td>Encourage the child to do things:</td>
</tr>
<tr>
<td>Talk freely and instructively with the child about his handicaps:</td>
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<td>Amount of social life child shares in the home:</td>
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<th>What plans, if any, the child has in regard to a vocation:</th>
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<td>The relation it has to any of his hobbies:</td>
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