# INCIDENTAL FACTORS RELATED TO STUTTERING

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# INCIDENTAL FACTORS RELATED TO STUTTERING

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Alyce Erwin Edwards, INCIDENTAL FACTORS RELATED TO STUTTERING (Under the direction of Dr. James W. Batten), School of Education, 1968.

The purpose of this thesis was to describe how stuttering was the result of existing circumstances concerning specific individuals, and how the degree of severity was decreased when certain problems were successfully identified and corrected.

This study was limited to three cases from low socio-economic environments who were enrolled in rural schools, and was limited by the lack of evaluative information on record. The cases cited involve stuttering symptoms and the degree of success noted during school therapy. The progress of the students, in relation to stuttering patterns, was studied again three years after the termination of therapy.

A review of related literature revealed similarities to other well known cases, and made reference to a wide variety of stuttering theories.

Studies of the case histories and the conclusions exposed certain incidental factors which caused the stuttering impediments. Other causative factors were also disclosed.

Recommendations were made concerning the need for the cumulation of scholastic, medical, psychological and personal data which would be of use in the diagnosis of stutterers.

Diagnositc sheets should be developed which would include profile information for each child so clinicians could ascertain facts necessary for perceptive procedures and prognosis. Further research is needed using a larger sampling in order to determine if other incidental factors are involved and, if so, their relative importance.

#### **ACKNOWLEDGEMENTS**

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To Dr. Bernard Jackson of the Communications Research Center of the University of Florida, I am indebted for his inspiration and encouragement to work with and further study the impediment of stuttering. I am also grateful to Dr. James W. Batten of the Graduate School of Education of East Carolina University for reading the contents of this study and for his special encouragement and invaluable advice. I am especially appreciative of the needed criticisms and untiring assistance of Mrs. Billie Daniel, Clinical Supervisor of Speech and Hearing at East Carolina University. Many thanks are due Dr. Gilbert Ragland, Director of Special Education at The University of North Carolina at Chapel Hill for his generous appraisals.

To my mother, Ethel Reaves Erwin, I am indebted for guidance through example toward life's higher goals. To the memory of my father, Howard Hurley Erwin, appropriate recognition is due; for he instilled in his daughters imagination to seek and try new ideas and dedication to a task if it is worthwhile.

May God Who Chose to Limit
Some of His Children
Guide Those of Us Who Would
Teach Them.

Amen

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# CHAPTER I

# THE PROBLEM AND DEFINITIONS OF TERMS USED

# I. THE PROBLEM

Statement of the Problem. The purpose of this thesis is to describe (1) how stuttering was the result of existing circumstances concerning specific individuals, (2) and how the degree of severity was decreased when their problems were successfully identified and corrected.

Importance of the Study. This paper was designed to show how effective therapy came through learning about and listening to the stutterers. They discussed their problems and realized possible solutions to these problems. The theories which concern stuttering as a learned behavior remain vague. Attempts are made in this thesis to cite specific case histories, and to be as exact as possible in recording the specific criteria related to the individuals concerned. More facts about stutterers must be assembled though, in order to determine what the stutterer does and why he does it. The cases in this thesis involve stuttering symptoms and the degree of success noted during public school speech therapy and for three years subsequent to the completion of therapy.

<sup>1</sup> Malcom Fraser (ed.), Speech Foundation of America, Stuttering - Training the Therapist (Publication No. 5 Memphis, Tennessee: June 1, 1966) p. 34.

Limits of the Study. This study was limited by several factors. First, the cases to be cited were from low to indigent economic environments. Secondly, they were enrolled in rural community schools with limited equipment and facilities for the therapy program were sparse. There was no special guidance service at the onset of the speech program. Thirdly, the cumulative folder information on these cases was incomplete and there were no medical evaluation records obtainable to guide the therapist in diagnosis and prognosis.

The emphasis of this study was to provide reference cases for students of speech correction and to engage in the pursuit of other professions concerned with the welfare of fellow human beings.

The interviews were actual cases, and occurred during the regular speech therapy program in the public schools of Halifax County, North Carolina. The speech program was begun in September 1962.

#### II. DEFINITIONS OF TERMS USED

Stuttering. Stuttering in the cases to be cited, was the release of tension learned psychogenically as the result of emotional problems associated with oral functions. Stuttering speech consists of hesitations, stoppages or blocks, repetitions and prolongations of speech sounds, as well as apprehension, anxiety, and avoidance related to the act of speaking. 1

Charles Van Riper, Speech Correction Principles and Methods (third edition, Englewood Cliffs, New Jersey: Prentice-Hall, Inc. 1954) p. 23.

Primary Stuttering. Primary stuttering describes speech patterns in which amounts of hesitations, repetitions, or prolongations exist that do not embarrass the individual and secondary behaviorisms no longer exist.<sup>2</sup> This type stuttering is referred to as Phase One by Bloodstein for it can be recognized as being episodic and is intensified by communicative pressure.<sup>3</sup> Chronic stuttering is referred to as Phase Two if the subject thinks of and reacts to himself as a stutterer, but continues to speak freely in all situations.<sup>14</sup>

Secondary Stuttering. Secondary stuttering differs from primary when the pattern is "one of interruption plus struggle and avoidance reactions with awareness, on the part of the case, that this way of talking sounds abnormal and constitutes difficulty. Bloodstein described this pattern as Phase Three stuttering as the difficulty constituted in conscious anticipation of words and sounds, and few feelings of fear or avoidance, are shown. Phase Four is present when the speaker fears and avoids certain speaking situations, and shows evidence of embarrassment when responding to various sounds, words, and situations. 6

<sup>&</sup>lt;sup>2</sup>Speech Foundation of America, <u>Stuttering Words</u>, p. 23.

<sup>&</sup>lt;sup>3</sup>Oliver Bloodstein, "The Development of Stuttering: II. Developmental Phases," <u>Journal of Speech and Hearing Disorders</u>, Vol. 25, No. 4, November 1960, pp. 366-376.

<sup>4</sup>Tbid., pp. 366-376.

<sup>&</sup>lt;sup>5</sup>Speech Foundation of America, op. cit., p. 27.

<sup>&</sup>lt;sup>6</sup>Bloodstein, op. cit., pp. 366-376.

Secondary Symptoms. Secondary symptoms is a descriptive term for "all the abnormal actions or movements exhibited by the stutterer when trying to talk."

Learned behavior refers to any relatively permanent change in behavior as the result of reactions to or interactions with environmental influences. For example, <u>subvocal rehearsal</u> also called <u>pantomine</u> <u>speech</u> and <u>phantom speech</u>, when it becomes part of the stuttering but making no sound. 9

Stuttering Pattern. The term stuttering pattern refers to the particular way the stutterer experiences difficulty in talking or the specific things he does which interfers with speaking. 10

Insight Approach. An insight approach to therapy for stutterers is referred to as directive counseling. This therapy is used to correct misconceptions and to influence desired changes in evaluations and attitudes through listening to and discussing with the stutterer his problem. 11

<sup>7</sup>Speech Foundation of America, op. cit., p. 27.

<sup>8&</sup>lt;u>Tbid.</u>, p. 22.

<sup>9&</sup>lt;sub>Tbid.,</sub> p. 18.

<sup>10&</sup>lt;sub>Ibid.</sub>, p. 30.

<sup>11 &</sup>lt;u>Ibid.</u>, p. 13.

#### CHAPTER II

## REVIEW OF RELATED LITERATURE

Related Case Histories. Similarities to other well known cases were found and are mentioned here.

Case A in this study was hit in the mouth with a baseball, and was slow to initiate a discussion about his teeth. Almost over night he began to participate actively in therapy. Practically the same description can be found in the write-up of "Louise: A Clinical Success" by Frank B. Robinson.

Case B in this study showed physical reactions or behaviorisms similar to Lon Emerich's "A Clinical Failure: Sherrie." Emerich wrote that his case appeared to go into a trance when she stuttered and her eyes glazed and her whole body became rigid. Another case similar to Case B was "Cora" by Hugo Gregory in that both "expressed the opinion that many people believed stuttering to be associated with a lack of intelligence. Therapy for Case B may be compared to Harold L. Luper's therapy in "A Clinical Success: Steve," in that they were both encouraged to reduce body tension by shifting from a tense body pose to a relaxed one and consciously led to adopt a more relaxed body tension level.

Speech Foundation of America, Stuttering Successes and Failures in Therapy (Publication no. 6, Memphis Tennessee: June 1, 1968). pp. 66-68.

<sup>&</sup>lt;sup>2</sup><u>Ibid</u>., p. 33.

<sup>3</sup> Ibid., p. 42.

<sup>4&</sup>lt;u>Ibid., p. 56.</u>

Factors described by Lon Emerich in his "A Clinical Success:

Mark" are comparable to Cases A, B, and C of this study in that the

clinician or therapist fulfilled the need to share the case's stuttering

problems apparently at the right time for these cases; and that honesty

was an important part of the relationship in therapy resulting in

successful progress and termination of therapy.<sup>5</sup>

Stuttering Theories. There are many theories that do not emphasize the environmental factors as the main causes of stuttering. Among these theories the traditional belief is that faulty behavior is caused by faulty physiological problems. For instance, Travis found that the brain waves of stutterers showed different signals from those of more fluent speakers. Therefore, he theorized that stuttering may well be the result of faulty signals to the brain or the fault of the brain in interpreting signals. More recently, an article by M. E. Wingate describes stuttering repetitions as "involuntary" and the movements of the speech mechanism as "spasms." Wingate defended this description by writing:

If instances of stuttering do not represent some incoordination of the peripheral speech mechanism, how else are these instances to be described objectively?

<sup>&</sup>lt;sup>5</sup><u>Ibid., pp. 28, 29.</u>

Mildred F. Berry and Jon Eisenson, Speech Disorders Principles and Practices of Therapy (New York: 1956) pp. 264-268.

<sup>&</sup>lt;sup>7</sup>M. E. Wingate, "A Reply:" <u>Journal of Speech and Hearing</u> <u>Disorders</u>, Vol. 30, No. 2, May 1965, p. 201.

<sup>8&</sup>lt;u>Tbid</u>, p. 201.

At one time stuttering was thought to be caused by an inner condition of the central nervous system related to handedness or the change of handedness. More recently support for this theory has waned.9

In another article Wingate discussed assumptions of the characteristics of stutterers as an object for evaluation. One common assumption was that:

Children who are penalized for normal nonfluencies are likely to develop stuttering in that the child interiorizes this evaluation of speech, develops anxiety and embarrassment about his (normal) nonfluencies and thus increasingly complicates the problem.

An important aspect of the evaluation theory is the etiological significance attributed to the <u>label</u> for the problem called stuttering. According to Johnson the word has potency in the sense that it serves as a vehicle for expression of high standards of speech fluency and also because it connotes something abnormal, particularly to the person who is said to stutter. 10

Common factors in the behavior of stutterers remain practically nonexistent for each stuttering problem reflects the individuality of the personality involved. Sheehan reported finding only two types of behavior common to all of the secondary stutterers he studied: these were repetitions and prolongations of a sound or syllable. 11

Cooper's method of reducing the complex behaviorisms associated with secondary stuttering was the "stuttering apple," a graphic

<sup>9</sup>Wendell Johnson and Dorothy Moeller (eds.) Speech Handicapped School Children (third edition, New York, Evanston, and London: 1967) pp. 250-254.

<sup>10</sup>M. E. Wingate, "Evaluation and Stuttering: II Environmental Stress and Critical Appraisal of Speech" (Journal of Speech and Hearing Disorders, Vol. 27, No. 3, August 1962) p. 245-254.

<sup>11</sup> Ibid., p. 245.

representation of the stuttering problem.

The therapist, by encouraging the child to verbalize these feelings of resistance can guide him toward an examination of those perceptions which precipitated the avoidant behavior initially. The stuttering apple has provided a 'handle' for the therapist to direct the child's attention to his feelings and attitudes. 12

Cooper did not offer specific cases in which the idea of the "stuttering apple" was successful in decreasing secondary behavior associated with stuttering, but it was feasible to assume the method works well for the young stutterers; and gave thought for possible usage as a guide for entry into an insight approach to stuttering for adults, if offered in a more sophisticated construction.

of all the choices presented to therapists prevention is the most valuable method. In our society certain behaviors become reinforced as desirable or acceptable; and Piaget theorized that a certain time period exists in maturation for the development of certain skills. To prevent secondary stuttering the maturation point must be recognized. Most children go through a period of stuttering between the ages of two and five. They hesitate or try repeatedly to utter the sound or word they want to use. The repetition may be of the initial sound of a word, or of a whole word. At the age of learning to use the delicate muscular balance needed to communicate orally, the repetitions and hesitations must be accepted as normal, because children are anxious for approval when they speak.

<sup>12</sup> Eugene B. Cooper, "Stuttering Therapy for Therapist, and Stuttering Child" (Journal of Speech and Hearing Disorders, Vol. 30 No. 1. February 1965) p. 76-78.

<sup>13</sup>Clinton Prewett, Reference to Piaget's theory of maturation: Education 405: Advanced Educational Psychology, East Carolina University, 1968.

Awareness of the close association between the child's emotional stability and his speech habits would be the main step toward reinforcing confidence and fluency. The following guides were listed in a child training pamphlet entitled Stuttering; and aid the child by relieving unnecessary emotional tensions brought forth by their negative counter parts "give him (the child) a chance to speak without interruption, and never hurry him in his attempts to talk, listen to him with patience" and fluency will come in most cases with the maturation of muscular ability and confidence. 14

Questions pertaining to proper diagnosis were listed in a bulletin entitled "N. C. Information on Special Education," July 21, 1964. Is the speech disorder the main and only problem and is the speech disorder incidental to another problem? Will the solution to another problem solve the speech problem?" Frequently, many therapists regard speech cases characterized by serious environmental and behavioral deviations as "lost causes," but the stutterer cannot be properly evaluated until a working therapy relationship has been established. Secondary behaviorisms will be obvious; but the etiology of the stuttering and how the handicap must be approached will not be so evident. The stutterer ought to be enrolled in therapy, and an attempt should be made to help him help himself.

<sup>14</sup> Human Relations Aids, Stuttering (Ottawa, Canada: Department of National Health and Welfare).

<sup>15</sup> Wendell Johnson and Dorothy Moeller, p. 11.

## CHAPTER III

#### CASE HISTORIES

#### Case A

In the fall 1962, Case A was referred to speech therapy by his ninth grade English teacher. He appeared reluctant to enter the therapy room and projected a passive attitude characterized by very poor posture while standing and sitting. This behavior alternated with an aggressive attitude when, occasionally he would sit straight and glare at the therapist.

A great many facial grimaces were recorded during this first interview. His eyes blinked excessively, his chin and lower lip quivered; and at times he pouted and formed a complete thought or sentence with his lips in a subvocal rehearsal. Occasionally he snapped his fingers to divert the listener's attention from his speaking difficulty at various points in sentences.

When he grinned, it was evident that one tooth was missing and another was broken. He stated that he had never seen a dentist and that he did not brush his teeth because he did not see any need to brush teeth which were half gone. He seemed rather proud that his teachers did not call on him in class because of his speech handicap. He considered his stuttering an asset when he was in school because his classmates called him a clown. At home he said he did not "need" to stutter very much, but that he did stutter some. When asked why he thought it much easier not to stutter at home he looked up at the ceiling,

and said that his parents did not care how he looked, how he acted, how he talked, or if he went to "hell," so why should he care?

He expressed a desire to end the interview and he returned to class with a remark that it was a waste of time to be in school.

Contrary to what he said to the therapist about not caring, his homeroom teacher stated that afternoon that Case A was excited about speech therapy in the school and that he thought he would like it.

Case A had labeled his speech pattern "stuttering" and during early therapy sessions referred to his secondary behavorisms as uncontrollable. No fluent intervals were recorded during the initial evaluation meeting. He displayed high levels of anxiety while stuttering and his eye control was irregular. His stuttering pattern was characterized by very hurried repetitions of syllables and words and non-words. He repeated these vocally and subvocally as many as eight times and as few as two times in all positions in sentences. His stuttering also consisted of prolonged words during which slight vocal tremors were recorded. Exaggerated pauses were used between oral speaking attempts, during which subvocal repetitions were noticed.

Case A was scheduled to attend therapy twice a week for thirty minutes with a group of five high school students. The group contained one other male secondary stutterer, and three male voice disorders. Case A came to therapy because he thought it was a good way to skip out of a few other classes. He did not participate in our discussions or exercises, at first. He pretended to read sports magazines and would occasionally interrupt the session to show a picture, or to complain that teachers were stupid. At these points of

interruption, the therapist listened to him and allowed him the full attention of the session. The group acclimated to the idea intuitively, and listened to his particular comments until he was silent again. Many times he tried to shock the group with remarks about sex and watched closely for their reactions. When the impact of his remarks ceased to be surprising to the group, he announced that he was quitting therapy. No one urged him to stay, so he stopped.

Two weeks later he returned to therapy and just sat, but he was listening and watching intently. On several occasions he tried to distract the therapist with gestures and loud, forced burps. When he was ignored, he pouted. No one expressed any outward reaction except one of understanding. He appeared one day for therapy with a thin board concealed in the leg of his jeans and swatted the therapist on the posterior. He was gently but firmly led to the principal's office and punished by the principal.

Case A did not return to therapy for the next two weeks.

When he did return, he apologized for the swatting incident and announced that he wanted to do some of the things we had been doing.

He also volunteered information about his teeth. One had been broken when he was hit in the mouth with a baseball.

Attempts were made to obtain Case A dental assistance through a school health program. The program provided dental care for indigent cases referred by the school nurse. This assistance was available until the child became sixteen years old, and Case A was then fifteen years of age. He said he would like to have his teeth repaired but it

did not matter whether the school provided the means or not because he was going to quit school when he became sixteen years of age.

Therapy goals for this case were to develop his personality and confidence in a more positive direction and to guide him toward a general understanding of stuttering. The ultimate goal for Case A was to decrease his stuttering pattern.

Therapy for Case A included discussion sessions using Myfawny Chapman's <u>Self Inventory</u> and <u>Know Yourself</u> as guides. The plan for therapy was to place Case A in various speaking situations which he had previously avoided such as telephone conversations and oral presentations in front of a group. Along with personal improvement, an easier stuttering pattern consisting of "bouncing" repetitions and better eye contact with his listeners was incorporated into Case A's oral deliveries.

It was noticed in therapy sessions in the spring of 1963 that he appeared much neater and his teachers began to comment on Case A's improvement in their classes. He now volunteered answers in class and his stuttering was smoother and not as distracting.

During the fall of the school year 1963, Case A tried-out for the school's football team and was selected as a team member. This success along with his increasing intrinsic feed back in speech production and overall maturation, accounts for the better attitude toward his school work, and the seriousness in which he began to participate in

<sup>1</sup> Myfawny E. Chapman, <u>Self-Inventory</u> (third edition; Minneapolis, Minnesota: Burgess Publishing Company, 1959) pp. 91-93.

speech therapy. Therapy sessions were designed to permit him to encounter speech situations rather than avoid them. As a result his fear of speaking was diminished and his ability to communicate broadened.

As he learned to cope with his feelings through role playing and selfevaluation of the various roles he projected, Case A found that he could be an effective "self-driver."

One memorable session involved the use of a play phone. He had never used a phone previously since there was no phone in his home. Almost immediately Case A displayed an ability to express himself orally on the phone; and told the therapist after this session that he never was going to be afraid to try to talk to anyone again. His new confidence which enabled him to speak in class was beginning to be rewarding because he received the attention of others in his peer groups.

An adult stutterer came to speak to Case A's therapy group, and related his many battles with his handicap. He told how many tricks he had tried and of his successes and failures in various speech therapy clinics. Case A told the guest speaker he did not believe him to be a true stutterer, because his stuttering pattern was so well controlled. Case A was convinced when the guest speaker told of how frightened he had been previously when he tried to use a telephone; and then, laughing at himself, demonstrated how he used to stutter. This speaker told Case A that if he wanted to make a telephone call, just to practice, he would be happy to listen. Case A used the example of the guest speaker and the success he now enjoyed as living proof of what he

<sup>&</sup>lt;sup>2</sup><u>Ibid</u>., pp. 91-93.

was going to do.

At the end of that current school year Case A asked the therapist to kiss him good-bye. The suggestion caused a shock reaction from everyone in the group. When the therapist refused, Case A apologized for having been out of line and thanked everyone for his patience with his silly shock game. He announced that he was going to work that summer with a building contractor and that he was going to save his money to have his teeth restored. The school dental program was unable to help Case A get his teeth repaired, because he was now too old and many eligible names were on the waiting list, and too little money.

The next fall, 1964, the first person to come to the therapy room at that school was Case A. It was difficult for the therapist to recognize him because he was very neatly dressed and had a neat haircut in a crewcut, and his smile produced new teeth. He seemed so anxious to tell how he obtained his teeth that the therapist anticipated difficulty in his speech pattern. However, the following story was told by Case A with very few repetitions:

I saved enough money to see a dentist and when I told him I wanted some more teeth he understood. I promised I would pay him every week until the bill was paid.<sup>3</sup>

The dentist called Case A's employer and agreed to restore Case

A's teeth. Subsequently the improvement in his appearance was very

noticeable and brought many compliments from his classmates and teachers.

His facial tics disappeared, and his popularity with the girls in his

class increased. He was released from therapy with an invitation to

<sup>3</sup>Statement made by Case A to therapist, September 20, 1964.

visit the sessions occasionally to report successes and to discuss problems if any developed.

Later reports revealed that his personality and speech continued to be acceptable, and his attitude toward school became one of a serious student. He played football on the school varsity team (his new teeth kept safely in the locker room) for his last two years of high school and graduated with average grades. Almost immediately after graduation from high school, he joined the Marine Corps and later received a promotion while serving in Viet Nam. 4

Before leaving for Viet Nam he brought a book on stuttering back to the therapist and summed up his opinion of his experiences in stuttering thusly:

All this material on stuttering just makes it complicated. I still would be stuttering like a fool if that dentist had not fixed these front teeth. Now I stutter like a grinning fool!

The therapist recorded that Case A's confidence in his ability to speak with a minimum of repetitions appeared strong enough to sustain him even in situations of stress.

News item in the (Roanoke Rapids) <u>Daily Herald</u>, May 1968.

5Statement made by Case A to therapist.

#### Case B

Case B was placed in a fifth grade class when her parents moved into the community. This placement was based on chronological age as she was at that time twelve years old.

Case B was referred to the Speech Therapist by her classroom teacher in the fall of 1962. The referral stated that Case B did not speak in the classroom, not even to the other children. It was observed that she was dirty and wore clothes much too small--(Her faded windbreaker was pinned together in front, over an undershirt and she wore slacks pinned in several places because the zipper was broken). This same clothing was worn every day until clothing was solicited by the principal and delivered to the family. Her blond, curly hair had never been cut and her expression was meaningless. When she appeared for the evaluation she was very stiff when sitting or standing. She moved, but only when told to sit or stand. She had to be led around the room. She stared occasionally toward the therapist but for the most part her eyes were glazed and trancelike in appearance.

She did not speak during the first meeting, nor at several meetings thereafter. Many techniques were incorporated to provoke reaction. The therapist asked questions, offered toys, games, and pictures, played music, read nursery stories, and suggested that she try to play follow-the-leader in making sounds, and performing simple head, leg, arm and finger movements. No visible reactions were recorded for three weeks.

Case B was tested by psychologists from the State Department

of Public Instruction and was placed in a special education class for educable children in the school, even though she had been evaluated as trainable, because the educable class was the only special education class offered at this school.

The therapist referred this case to the County Health Department. Dr. John Altrocchi of Duke University interviewed Case B. He concluded that she had Catatonic Schizophrenia and was the worst case needing institutionalization he had seen in the public schools.

Investigation of the home situation revealed that Case B was the eldest of five children. She and the next oldest child were illegitimate, born before the mother married the man who fathered her youngest three children. Her mother said that Case B did speak at home, but she was the least vocal child in the family.

The mother had never learned to read or write and expressed a desire for her children to get as much education as they could. The father was present in the home on weekends only. He provided very little money for subsistence since he spent most of his money on alcohol.<sup>2</sup>

Other conditions of the home environment were not conducive for learning. Heat in cold weather was obtained from a wood stove and wood was not always available. There was no electricity and bed clothing was insufficient. Water had to be obtained from a neighborhood open well and carried a distance back to their house.

<sup>&</sup>lt;sup>1</sup>Statement made by Dr. John Altrocchi, Psychologist, Duke University, Durham, N. C., October 1962.

<sup>&</sup>lt;sup>2</sup>Statement recorded in welfare records, Halifax County Welfare Department.

Therapy goals for Case B included teaching her how to relax, encouraging her to communicate orally, providing an atmosphere for speech, helping her develop a more acceptable self-image, and referring her to other appropriate agencies for assistance.

Case B began to smile at the therapist after about ten sessions. This was first noted during a hearing evaluation in which she had been listening to sounds and trying to signal with a nod of her head. She smiled when the therapist said that it would be necessary to repeat this same type testing many times to obtain an accurate evaluation. Her hearing was later found to be normal.

The school nurse made an eye examination and suggested that additional testing be attempted.

Some time later Case B came to the therapy room and was trembling. She sat down, looked at the therapist, and tried to speak. Her lips moved, but no sound came. One arm was bent at the elbow and her fists were clenched tightly. Tears began to flow from her eyes and she was unable to make an audible sound. When she was told that it was permissible to cry, sobs came out. The therapist touched Case B's clenched fist and encouraged her to cry until the fist was relaxed. She began to talk but the severity of her secondary stuttering made the message practically uninterpretable. Case B said she was afraid of her father because he might beat her after school. She referred to her father as "that man." She explained that the baby had been sick all week. If the baby cried for any length of time, Case B was blamed by her father and punished. The father bought one can of milk a week for the baby and

this was supplemented with feedings of sugar-water. Case B said that the father's temper was feared by the mother and children.

After this session the therapist called the county solicitor and welfare agency and asked that immediate investigation into the situation be initiated. The principal of Case B's school went to the home and upon seeing the father's drunkeness, reported the conditions to the welfare agency.

Case B initially was unable to utter sounds and these could be categorized as extensive hesitation blocks. When speech was initiated the therapist recorded repetitions of syllables in the initial and medial positions. Many starters or non-words were noticed--such as "uh" and "yuh." Her speech attempts were staccato in nature. Her eye contact was good once speech began. She was aware of her stuttering but did not refer to it as stuttering.

When Case B spoke to the therapist in later sessions she trembled and stiffened at various points of her conversation. Case B said that frequently "that man" (her father) had tried to "get" her and she was scared. On occasions he had locked the mother out of the house and had chased Case B until he was either exhausted, or passed out from the effects of alcohol. One time her mother ran for help and men came later to take the father to jail. Case B said her father had always told her not to tell anyone anything he did and in court she reported she was "too frightened to speak" and "everyone thought she was stupid."

Her special education teacher was now getting some response from Case B. Many discussions between the teacher, principal, psychologist,

and speech therapist concerning Case B, resulted in a working team for the improvement of Case B's circumstances.

After an examination by a county nurse from the health department glasses were prescribed.

The following year, 1963, the family was placed on welfare and moved to better living facilities. Case B was anxious to tell the therapist how all of this came about. Her stuttering had decreased and the overall speech pattern was much improved. The therapist noted in the records that the improvement resulted from the changed conditions surrounding Case B.

"That man" had hit the mother with a slat from the baby crib and instead of just standing there and getting hit too, Case B had gathered the other children into the kitchen away from the fight. She had pushed the table against the door and asked her sister to run for help. This coping behavior in time of emergency was considered a notable improvement for this case. The father was arrested, tried and sent to prison for his behavior.

Upon evaluation at the end of that school year, 1964, Dr. John Altrocchi indicated that he was amazed at Case B's overall improvement and that it was hard for him to believe she was the same child he had interviewed the previous year.

The welfare agency submitted a plea that the father not be considered for parole because it would be criminal to allow him to return to the home. Subsequently, the mother filed for and received a divorce from him. 3

<sup>&</sup>lt;sup>3</sup>Statement recorded in welfare records, Halifax County Welfare Department.

In the fall of 1965 the speech therapist diagnosed Case B as a very mild stutterer.  $^{\downarrow_4}$ 

Two and one-half years later records in the Halifax County
Welfare Agency showed that Case B was living in Danville, Virginia with
her mother and siblings. The report had a recommendation that Case B be
sterilized. At the time of the report she was still attending school
(in a special education class) although her mother did not understand
why she was never promoted.<sup>5</sup>

<sup>&</sup>lt;sup>1</sup>Speech evaluation, September 1965, Mrs. Balm, William R. Davie Schools, Halifax County, North Carolina.

<sup>5</sup> Halifax County, North Carolina, welfare records.

## Case C

Case C was referred to speech therapy in the fall of 1962 from the preliminary screening evaluation conducted in the Halifax County Schools by Dr. Bernard Jackson and a team of four speech therapists. This screening procedure was requested by the Superintendent and Board of Education in order to establish a need for an allocation of a speech therapist in the school system. The screening procedure involved the process of counting and word pronounciations. The numbers and words from zero were used which included most of the consonant and vowel sounds of our phonetic speech and two of the most difficult blends. According to Dr. Jackson this method was the most appropriate way to ascertain the most speech disorders in the least amount of time.

Case C was found to use only vowel sounds accompanied by four consonant sounds p, t, d, and w. This severe articulation omission and substitution speech disorder was accompanied by secondary stuttering and a voice quality characterized by nasal emission with no visible cleft palate nor the repair of one. This evaluation was made over a period of three, thirty minute sessions. Short sessions were used because of her limited attention span.

At the time of the speech evaluation Case C was ten years old and was enrolled in the second grade. She had spent three years in the first grade. The North Carolina Screening and Observation Record showed that she was a twin and that her co-twin was progressing normally in school and was then enrolled in the fourth grade.

Case C was aware of her inability to communicate but not aware of herself as a labeled stutterer. Her stuttering was only part of

or actually incidental to her severe articulation disorder. She repeated initial single sounds an average of five times in various positions of speech. Her speech was characterized by uncontrollable tongue movements during prolonged sounds. Her voice changed to a higher pitch with the duration of the prolonged sounds.

Speech therapy sessions were held in the school's library room where many attractive objects were displayed. The therapist attempted to incorporate maps, drawings, books, and student collection displays into constructive lessons to increase this child's ability to use the consonant sounds which she could utter and to use them in the proper words. This procedure was only slightly successful in that there were too many distractions in this room for Case C to concentrate on any one particular sound. The therapist then asked that an unused classroom next door to the library be cleared of all moveable objects with the exception of one small table and two chairs. Therapy for Case C was more successful in this room because there were fewer distractions and she became more attentive.

The therapy goals for Case C were to establish an atmosphere of relaxed speech improvement, to develop her ability to produce and use correct sounds, and to decrease the severity of the stuttering pattern by increasing her oral ability to a more acceptable level of comprehension.

The therapy plan included adjustive techniques and materials for the development of attention span, auditory discrimination, lip, jaw and tongue control, and exercises of sounds learned in language usage. Case C's teacher came to the therapist for a conference and agreed to cooperate fully with the elimination of stimuli. The child's desk was placed directly in front of the room facing only the teacher and blackboard. This resulted in a more attentive situation for Case C in that she reflected more poise in her physical gyrations. She stopped twisting her hands and rolling her eyes when she babbled and the stuttering pattern became a primary one.

Case C had been referred to the Halifax County Health Department previously; but it was not until December of 1962 that she was scheduled for an interview. Dr. John Altrocchi, Psychologist from Duke University, Durham, North Carolina gave Case C brief tests. His report showed that Case C had "defective functioning of intelligence with emotional problems." He also stated that she should receive individual psychological testing and neurological examinations through the pediatric clinic at Duke University or the University of North Carolina at Chapel Hill.

When Case C returned to therapy following the Christmas holidays she was very excitable and unable to control her physical movements. She was stuttering severely and making pointing gestures toward the therapist when she tried to speak. For five continuous sessions the little girl did nothing but kick, scream, and cause a general disturbance. The tantrums ceased when the therapist asked that this child be placed in a nonstimulating (as much as possible) position in her classroom again, for the room had been rearranged during the absence of the class and Case C's teacher had "forgotten" to place the desk back

Halifax County Health Department (write-up on file concerning Case C).

at the front of the room.

The therapist recommended that further testing be attempted and it was found that her parents would have to take Case C voluntarily to be examined because they were not indigent enough to be included in the county's free services.

Case C's mother came for an interview with the therapist and said
she was very concerned with the child's problems in school. She stated
further that the child had not been normal at birth and that she did not
know exactly what was wrong with her; however, she would take the child
for further testing. Inquiry revealed that she did not, and that the
mother was hostile toward the whole situation.

At a later date the therapist was able to obtain a qualified person to administer the Stanford-Binet Psychometric Evaluation. This test was given by a psychometrist from Tarboro, North Carolina who compiled the following information:

Psychometric Evaluation - April 3, 1963

Hobgood, North Carolina

Stanford-Binet, 1937 Revision, form L

Chronological Age - 9.9

Mental Age - - - 5.7 - Range from 4 years to 7 years.

Test Behavior: "Her inability to speak distinctly and her stuttering did not unduly upset her, and she was willing to repeat a word or phrase in an effort to make a statement clearer."

"Memory Span and Attention" - 4 year level.

"Visual Imagery" - below 6 years.

Her difficulty with "visual perception of form" and her great deficiency "memory span" suggest a deep-seated

emotional or organic disorder. She passed no tests above 6 years.

Conclusions: Recommend Special Education

Her family is very understanding, sympathetic, and willing to do anything to help her. She leans on her twin sister who is average and progressing satisfactorily in school.<sup>2</sup>

No special education classes were available for Case C.

In subsequent sessions the therapist used a schedule of short, varied, articulation exercises for initial consonant sounds. To keep distractions at a minimum for Case C, only one color was used in drawing, one sound as a stimulus and the venetian blinds to the window were kept closed.

The results were positive in that sound discriminations were improved, and her stuttering decreased. Two additional sounds were incorporated into Case C's speech (b and m) and she was calmer and seemed more attentive in therapy.

In August 1968 Case C's fifth grade teacher revealed that the child had not received any training in special education except speech therapy. Two speech therapists, Mrs. Balm 1965-66 and Mrs. Spence 1966-68, reported Case C's stuttering as very primary and not considered a problem, but that the articulation pattern continued to be severe.

These therapists had followed the instruction of minimum stimuli and her teachers had continued to provide her an atmosphere of minimal distractions.

<sup>&</sup>lt;sup>2</sup>Results of Psychometric Evaluation filed with Halifax County School system (1963) by Mrs. M. Fountain.

## CHAPTER IV

#### SUMMARY AND CONCLUSION

Summary. The secondary stuttering of the previously cited cases was the result of problem circumstances surrounding them, and when their problems were identified properly and dealt with, the stuttering patterns reflected the lessened pressures by decreasing in severity.

One thing that enables a person to survive any type of trying experience is his capacity to find "anchor" points in his environment. In a sense, an "anchor" point is someone that can be trusted beyond doubt, a provider of information that is realistic and true.

The role of the therapist in Cases A and B, and C might best be described as an "anchor" in their lives. The children were able to find someone whom they could trust and in whom they could place confidence.

If the therapist, clinician, counselor, or teacher is to be successful in therapy, he must remain flexible enough to allow pertinent behavior to evolve. This flexibility may establish the degree of trust, security and acceptance needed by individuals who stutter.

Conclusion. Case A's secondary stuttering pattern was the result of his being physically unacceptable to himself and therefore presenting himself in an unacceptable manner to others. His psychological need for acceptance was thwarted because he actually expected rejection from his listeners. Through insight, Case A realized that part of his problem could be solved if he directed his attention toward the positive

Clinton Prewett, "Baking at Low Heat" (East Carolina University, Greenville, North Carolina, 1968.)

goal of self-evaluation and improvement. The most noticeable decrease in stuttering came after Case A accepted responsibility for self-improvement. The desire to improve himself can be attributed to his budding interest in girls. Being able to finance his dental work, gave Case A the independence he needed.

The author concludes that therapy directed Case A to improvement through an insight approach; however, his decreased stuttering is attributed to the incidental factor of the dental repair.

The secondary stuttering behaviorism for Case B was the result of her inability to relieve the tensions brought on by the problems of her daily life. When the psychological need to communicate to an understanding listener was first realized, her relief was a "trigger" which started the release of built-up and repressed anger, frustration, and self-rejection. The severity decreased most noticeably after Case B had been relocated in an emotionally stable environment. The fact that she participated in a responsible way in the removal of the step-father from society was a carryover of newly learned self-confidence and contributed greatly to her self-image and ability to speak more fluently.

It is concluded that therapy helped direct Case B toward speech improvement and that her self-assertion is the result of therapy. The incidental factor of improved environment is the main reason for her decreased stuttering.

The secondary stuttering pattern for Case C was the result of the pressure and frustrations she felt because her physical impairments limited her ability to compete with others at home or at school. She became more fluent when pressure was lessened by placing her in less distracting surroundings. Secondary behaviorisms ceased when the proper atmosphere allowed her to practice exercises which would help control the speech mechanism and permit communication.

The author concludes that Case C's decreased stuttering is the result of the incidental factor of her reaction to a calmer education situation.

Need for Further Research. To provide information to guide therapists further research in stuttering is needed. The author suggests that statistics be accumulated pertaining to the causes of stuttering. These causes, when grouped, should be evaluated as to how many were incidental factors—directly related to the onset of or the increase in severity of stuttering. Another study which would be valuable to therapists would be the accumulation of statistics pertaining to incidental factors directly related to the decrease of stuttering severity.

Recommendations. Standardized evaluation sheets for diagnosing stutterers would be valuable for therapists and speech and hearing evaluation centers. This would have to be an extensive evaluation to cover possibilities.

Cummulative records should provide extensive scholastic, psychological, medical, and personal evaluation information about each student, for these records are the main source of material that help guide persons employed to meet the individual needs of the students.

The lack of information presently on these records handicaps the

primary goal of the schools to provide for the needs of the individual child.

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