An Investigation of the Change in the Self Concept of Stutterer

Lois Nelson

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AN INVESTIGATION OF THE CHANGE
IN THE SELF CONCEPT OF STUTTERERS

by
Lois Nelson

A Thesis Submitted in Partial Fulfillment
of the Requirements for the Degree of
Master of Arts

Graduate Division
Western Michigan College of Education
July 1955
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CHAPTER I

THE PROBLEM AND ITS BACKGROUND

The Problem

It is the purpose of this particular study to investigate through the methodology of Q-technique the self concept of a stutterer and to determine whether having to confront one's self as a stutterer changes that concept. The study, therefore, concerns itself with the changes in the self concept of stutterers produced by altering the judgmental frame of reference. To view the problem adequately we need to survey what is known about the self concept.

The Self Concept

The importance of the self concept in the adjustment of the individual to his environment is becoming of increasingly important concern to educators, guidance personnel, psychologists and others. That it is one of the factors contributing to the scholastic and economic success of the individual is probable. According to Merry and Merry\(^1\) failure of a child or an adult to make a proper adjustment may arise from conditions within himself or from external influences beyond his control.

\(^1\)Merry, Frieda K. and Merry, Ralph V., *The First Two Decades of Life*. New York: Harper and Brothers, 1950. Ch. 11
Whatever the etiology his adjustment or lack of it appears to be closely related to his conception of himself. Symonds, Morgan and Rivlin believe that adjustment is good when there is a reasonable agreement between what an individual thinks of himself and what others think of him. That "... the individual cannot behave entirely independent of the way he thinks of himself ..." was pointed out by Stephenson. He has ideas about himself, about how he has acted in the past and about how he might act in the future. These ideas, right or wrong, affect his behavior.

That the individual is conscious of himself is no longer questioned. Theories of the self in psychology have existed since the latter half of the nineteenth century. Amen has categorized them into three main types: the self of scientific psychology, the self of sensationalistic psychology, the self of self psychology. Whereas the scientific psychologists


6Amen, Elisabeth W., "An Experimental Study of the Self in Psychology." Psychological Monographs, XXXV (1926), 1-72
represented by Moore\textsuperscript{7} view the self as an organized sum total of all the experiences an individual undergoes throughout life, the sensationalistic philosophy according to James\textsuperscript{8} views the experiences of self chiefly as complexes of kinesthetic or organic sensation. In contrast, Calkins states, "The characters of the experienced self on which the self-psychologists lay their emphasis are, first, its persistence or self-identity; second, its individuality or uniqueness; third, the fact that it is fundamental or basal to its experiences, and finally, the fact that it is related to its environment, social and physical."\textsuperscript{9}

Present day concepts of the self include the idea that an individual may have more than one concept in respect to himself. There is the self he sees, and the self he would like to be, and the self others see and reflect back to him. According to Rogers the self concept is "the self the individual himself perceives, that is, his own attributes, feelings, and behavior as observed subjectively and admitted to awareness."\textsuperscript{10}

\textsuperscript{7}Moore, Jared S., \textit{The Foundations of Psychology}. Princeton: Princeton University Press, 1921. P. 75


\textsuperscript{9}Calkins, Mary W., "The Self in Scientific Psychology." \textit{American Journal of Psychology}, XXVI (1915), 495 - 496.

Development of these concepts whether self or ideal (i.e., the attributes, feelings and behavior the individual would like to have) and their relationship to his adjustment is being given ever greater consideration in counseling and psychotherapy. The philosophy of the concept of self is important to both theory and therapy of re-adjustment education. Rogers states that "... it is a part of the theory of client-centered therapy that one of the most marked concomitants of therapy is change in the client's perception of himself in the direction of becoming a self which seems more comfortable, more confident, less anxious, with valued goals seeming more achievable." 11

According to Stephenson the individual has both a general and a specific self concept and he sees himself in different roles as the circumstance and situations vary. Stephenson states, "The various conceptual 'roles' are in some way integrated to provide a self-consistent self picture. Similarly, when an individual is totally incapable of acting in accordance with these roles, there is no self-concept, no self therefore, as in schizophrenia; or contrariwise, the person inflates his self-concept into the self-aggrandizement and delusions of a paranoid." 12

11 ibid.
12 op. cit., 244
Importance of the Self Concept in Adjustment

According to McCandless, inadequate adjustment may be expressed in behavior patterns of aggression, withdrawal, enuresis, nail-biting, in mental disorders and in speech defects. Of the latter, although Eisenson believes a disorder in the use of speech of any type or degree reveals a personality disorder, stuttering is considered by some, including Gifford and Solomon, to be a type of adjutivest behavior. As stuttering grows from the primary to the secondary stage and becomes a part of the individual his behavior and his personality change. This change occurs because his concept of himself is changing. According to Eisenson his concepts of things and of himself are what these things -- persons, objects, relationships, qualities -- mean to him. The concepts he forms are the total effect remaining with him as a result of his experiences in dealing with them.

17 op. cit., 90
It is of particular note that Johnson\textsuperscript{18} emphasizes the importance of the evaluation of nonfluency in causing a child to stutter. Previous to this "self-reflexive assumption" as Johnson terms it, that something is the matter with the way he talks the child is not concerned with his speech. Once he accepts the evaluation of adults as to its degree of nonfluency and attempts to do something about it he is forming a concept that he is different from others. Eisenson states that "everytime speech is used by an individual with the intention of causing responses in others the individual himself reacts to the words he uses."\textsuperscript{19} And for the child who stutters this reaction is to words that are nonfluent. As fear of nonfluency and therefore of stuttering breeds more stuttering and stuttering in turn breeds more fear, the disorder according to Van Riper\textsuperscript{20} perpetuates itself in an ever increasing spiral. Speech becomes so great a concern -- so overshadows his other attributes that as Barbara states, "the person who stutters seems compelled to confine and limit his awareness of himself to his stuttering."\textsuperscript{21} In the words of Eisenson, "adjustments can take place only when there is an equalization between the demands


\textsuperscript{19} op. cit., 89


of the individual and those of the environment." 22

The Stuttering Personality

Bryngelson 23 states that the individual who stutters feels apart and different from others around him. Repeated experiences of social speech inadequacy and failure, with fears of speech block says Fletcher 24 convince the stutterer that he cannot speak "normally." That such experiences would have an effect upon the individual and would alter his personality is to be expected. That he should remain untouched by the attitudes, opinions and actions of others toward himself and his speech would be an almost impossible feat. His way of reacting to these occurrences inevitably brings about a personality change, a change in his self-picture.

According to Appelt the child who stutters has learned to expect or anticipate difficulties in speaking and finally "identifies himself to a certain degree with his symptom." 25 It is no wonder, then, that Fletcher refers to stuttering as "a morbidity of social consciousness, a hyper-sensitivity of

22 op. cit., 150


social attitude, a pathological social response. 26

Solomon has found that gradual personality transformations do occur "such as: 1) increasingly pronounced suppression of the personality with introversion, withdrawal and concealment; 2) over compensation with over assertion, stubbornness, negativism; 3) assumed indifference or neglect -- drifting; 4) a common sense attitude with constructive efforts for gradual self-improvement and eventual recovery. Finally, stuttering becomes a vicious circular non-adjustive reaction." 27 It has been Solomon's experience that stutterers build up a pattern of defensive adjustment both subjectively and objectively to new speech situations from memories of past failures and fears.

Usually, according to Van Riper, 29 the anxiety a stutterer has spreads from specific words and specific situations to situations and speech in general. Travis 30 believes this anxiety develops out of an infantile picture of life rather than being based on a mature evaluation of realities.

Since a stutterer's emotions -- his fears and hopes and


28 loc. cit., 351

29 op. cit., ch. 9

30 Travis, Lee Edward, "The Need for Stuttering," Journal of Speech Disorders, X (1940), 197
anxieties are so inseparably bound up with his speech he needs a therapy that attacks this aspect of the problem as well as the speech part of it. Most therapists, therefore, utilize some combination of speech therapy and psychotherapy in the treatment program with stutterers. As Sheehan has pointed out "so long as the stutterer's speech is adversely affected by certain emotional content, his feelings contribute to his problem, and he has need for more adaptive, adaptive expression of these feelings." Sheehan has found that profound personality changes may occur in stutterers as a result of speech therapy which is itself a specialized form of psychotherapy. He says, "When a stutterer learns how to handle his fears and his blocks, develops healthier attitudes toward others, he changes fundamentally in his personality." Ainsworth declares that at the beginning of therapy the chief problem is one of getting the stutterer to accept the fact that he has a speech defect and to admit it to others. No sooner has he reached this view than he must begin to relinquish it for another. As therapy continues his self concept is in a continuous state of flux. As he gains control of his fears and blocks he has to look at himself as a fluent stutterer

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31 Sheehan, Joseph C., "An Integration of Psychotherapy and Speech Therapy Through a Conflict Theory of Stuttering." Journal of Speech and Hearing Disorders, XIX (1954), 475

32 loc. cit., 477

and/or a nonfluent normal speaker. Sheehan says, "Just as in the early stages of treatment the stutterer needs to accept himself as a stutterer, so in the final stages he must learn to accept himself as a normal speaker... In accepting normality, the stutterer not only gives up the secondary gains which have helped to maintain the disorder, but acquires a radically different self-concept." He now is an ordinary person minus the rationalizations as to what he could accomplish and be if he did not stutter. It is from the stutterer's semantic environment of attitudes, evaluations, opinions and beliefs according to Johnson that his self concept is formed. It is his belief that in the stutterer's self concept nonfluency and stuttering are identified as one and the same. Whenever nonfluencies occur in his speech he thinks of himself as a stutterer.

Survey of Tests Available for Investigating the Self Concept

In investigating the problem a survey of researches involving personality tests was made. Of these, those using the Q-technique seemed most promising. Q-technique involves correlating persons instead of tests and is an analysis of single cases. The individual may array a number of statements of personal concept such that they describe him as he sees him-

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34 op. cit., 480

self at the present time. A second sorting of these statements could be done to give a picture of how he would like to be. From these two sortings and/or others insight into the individual's self concept may be gained. One individual's self concept may be compared with that of others and in this way correlations are made between persons instead of tests. According to Babington-Smith "... R-technique is concerned with the relationships between tests, (but) Q-technique is concerned with those between the persons who take the tests." 36

Rogers has used this type of test -- the Q-sort -- to determine the self-ideal relationship of his clients as a group. Each client sorted the items in terms of a self and an ideal picture at three different stages of therapy: pre-counseling, post-counseling and follow-up. A group correlation as well as self-ideal correlations for each individual within the group were obtained statistically.

Fiedler and Wepman 37 in their exploratory investigation of the self concept of adult stutterers also used the Q-technique. They compared sortings of stutterers with those of psychologists and of a group of mental hospital patients finding that "the stutterer's self concept showed no characteristic difference from that of the non-stutterer ... (and) that


37 Fiedler, Fred E. and Wepman, Joseph M., "An Exploratory Investigation of the Self-Concept of Stutterers." Journal of Speech and Hearing Disorders, XVI (1951), 110 - 114
stutterers as a group appear to look upon themselves as being more like a group of psychologists than they did like a group of mental hygiene clinic patients."

There are various tests which correlate persons instead of tests. Most of these stem from or are variations of P-technique. Stephenson quotes a statement by Burt...

"(i) Where a project is designed in terms of tests which are applied to a sample of subjects and where the correlations between tests are subjected to analysis, one may talk of R-technique.

(ii) If with the sample data, one runs correlations between persons instead of between tests, then one has P-technique.

(iii) The innovation, which Stephenson claims as Q-technique, is to design an experiment in terms of people... then to assess qualities of performance with respect to each person in turn, and then to make correlations between people."\(^{39}\)

This variation of P-technique --- Q --- appeared to be particularly adapted to the problem at hand. It would allow a comparison of the self as a stutterer with the self as normally perceived. It might serve as a methodology for investigating the attitudes of a stutterer in regard to himself at different stages of therapy. It might serve as a possible measure of therapeutic progress. It might be used diagnostically as an

\(^{38}\) loc. cit., 114

\(^{39}\) op. cit., 16
indicator of prognosis. With it, correlations between people and groups of people could be made.

That Q-technique is designed for this purpose is explained by Stephenson who states, "...in R a number of tests are applied to a sample of persons. The tests are scored objectively, and the concern, fundamentally, is with individual differences. But if we now invite any person to look at all the tests, to deal with them with respect to (A) which he believes himself to be most expert at, or (B), which he would like most to do, or (C), which, in his opinion, is the fairest, or (D), which will give most information about his ability, and so forth — in any such case Q-technique would be at issue, and the concern, fundamentally, would be with the single case... As we see, even if the material is the same, as the tests are in this example, it would be differently employed; in R the tests are meant to measure abilities by way of individual differences; in Q they would be used to experiment upon certain attitudes of mind of any person we cared to make the subject of inquiry."40

Selection of the Test

The Hilden Q-Sort and Random Sets of Personal Concepts was selected for use in this study. The original tests consist of six sets of fifty cards, each a statement of personal

40 loc. cit., 15 - 16
concept. The Q-Sort statements were formulated from words at
or below the sixth grade level selected at random from the
Thorndike-Barnhart Handy Pocket Dictionary. This was done to
ensure that the statements would be obtained from a universe
of terms and hence, the conditions of random sampling would
be adhered to. By using random digit tables unbiased sets of
fifty items each were selected and assembled into decks of
fifty cards to be used in Q-Sort studies.

With these random sets Hilden was able to determine the
stability of the Q-Sort function \( g \) in any investigation. He
says, "The stability of the \( g \) obtained on one individual case
may be established, in regard to status at a given time, or
in regard to direction or extent of change that might have
occurred, whether developmentally or experimentally induced."\(^1\)

In Q-sorts two or more sets of values may be obtained for an
individual -- e.g., one for his self-concept and another for
his ideal-concept. According to Hilden, provided a universe
of terms is available, and provided the sample is a random
one, the \( g \) obtained on one sample, for a given individual,
should agree with the \( g \) obtained on any other random sample,
for that same individual.

A procedure for calculating \( g \)'s and Fisher's \( g \) coeffi-
cients based on differences between the single-digit values has
been worked out by Hilden. Raw data have been entered in a

\(^1\) Hilden, Arnold H., Manual for Q-Sort and Random Sets of
Personal Conclu., 1957: Foreward
table of \( r \) and \( g \) values which facilitates calculation of \( r \) and conversion to \( g \) from a tallying of the differences of the paired values.

The fifty statements of a set are sorted according to a designated frame of reference such as self or ideal, into a pre-determined arrangement of nine rows with a stipulated number of cards in each row. Each row is weighted along a continuum from Most like (9) at one end to Most unlike (1) at the other. In rows (9) and (1) two cards are to be placed, in rows (8) and (2) three cards, in rows (7) and (3) six cards, in rows (6) and (4) nine cards, and in row (5) ten cards.

Since placing a card in a row automatically assigns a "score" to it a comparison of the position of that card for one frame of reference with its position in a second frame of reference can be made. This is done by tabulating the number of paired values which differed by a position of 1, 2, 3, 4, 5, 6, 7, and 8 on the Tally Sheet, and multiplying them by the square of that difference. The products are totalled, and for each total (which is the sum of \( d^2 \)) corresponding \( r \) and \( g \) values are given in the table. The formula used for the computing of \( r \) is:

\[
r = 1 - \frac{(\text{Sum of } d^2)}{368}
\]

An explanation of the derivation of the formula and the figures which may be used for determining significance of values are presented in Chapter IV.
In Hildan's words, the general purpose of his manual for Q-Sort and Random Sets of Personal Concepts is "to facilitate research with Q-sort procedure. Three contributions are offered in this connection:

3. A method for obtaining p and g coefficients with economy of time."^{42}

He presents his sets of personal concepts as "an integral part of a general experimental design which may be useful in a variety of investigations."^{43}

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^{42} loc. cit., 1

^{43} loc. cit., 6
CHAPTER II

STATEMENT OF THE PROBLEM

In all, four problems were investigated: 1) the correlation between self and stuttering-self sorts of stutterers at a one week interval; 2) the correlation between self and stuttering self-identification sorts of speech therapy majors at a one week interval; 3) the correlation between self and stuttering-self sorts of stutterers at a four week interval; and 4) the relationship between these correlations and ratings of therapeutic progress.
CHAPTER III

SELECTING AND ADMINISTERING THE TEST

The Problem

The purpose of this chapter is 1) to describe the test that was used in this study and 2) to describe the manner in which it was administered.

Methods Employed

Two basic procedures were involved. One required the sorting of personal concept statements in a self stuttering-self frame of reference. The other involved a comparison of the relationship between correlations on the Q-Sort test and ratings of therapeutic progress.

As has been stated in Chapter I, the Milden Q-Sort and Random Sets of Personal Concepts was selected for use in this study. A copy of the test and the instruction sheet for taking the test are found on later pages in this chapter.

The original Milden test consists of six sets of fifty cards, each a statement of personal concept, which the individual subject sorts into nine categories as to how they apply to him. He sorts a set first with regard to how he thinks they describe him, whether the statements are like or unlike him in varying degrees (self sort). Each statement is weighted, ranging from 9 (most like) to 1 (least like). Then the sub-
ject sorts them as he wants to be, ranging from most like (9) to least like (1) he wants to be (ideal sort).

In this study one of Hilden's random sets, number 11, was used in a self sort together with a revised form (S) of that same set. In the revised form the statements included the word stutterer or stuttering so as to force the individual to judge himself in a stuttering frame of reference. An ideal sorting was not obtained because a comparison between self and stuttering-self rather than self and ideal was desired.

As with the original test, the subject was asked to sort the cards into nine rows according to a pre-determined distribution. Those cards containing statements most like him were placed at the top in row nine; those containing statements least like him were placed at the bottom in row 1. The distribution from nine to one is on a continuum from Most Like to Least Like. A revision of the original directions for card sorting was made in an attempt to simplify and clarify the procedure so the test could be self-administerable with a minimum of verbal directions.

Administering the Test

In order to carry out this study, it was necessary to obtain the cooperation of stutterers and speech therapy majors in taking the test. With the exception of two who were sixteen and one who was eighteen all the stutterers were of college age. It was decided to use as subjects stutterers who
previously had received or were receiving speech therapy in a clinical treatment program. Directors of stuttering therapy programs in college and university speech clinics were contacted by letter and their assistance requested. If they were willing to help in the study, they were sent copies of the test (decks number 11 and 8) together with the instruction sheet, record sheets, and a letter from the writer describing how the test was being adapted for use in this study and how it was to be administered.

The tests were then administered by the directors to the stutterers. Two sets were administered by the writer to groups C and E (see Tables III and V). Selection of the subjects was at the discretion of these directors. If it was believed that a particular individual's progress in therapy would be jeopardized by taking the test he was not included as a subject.

The directors were instructed, in administering the test, to have each subject sort deck 11 (the self sort) before he sorted deck 8 (the stuttering sort), with the two sortings done a week apart. A time interval of one week was used to prevent the subject from recalling the position of the cards. Emphasis was placed on the fact that the sortings were to be a self-sort of how the statements applied to the subject as he is now. He was also to be kept in ignorance of the fact that the second sorting was couched in a stuttering frame of reference.

When the subjects had sorted both decks of cards the tests
were mailed back to the writer for compilation of the data.

These same tests were administered by the writer to the speech therapy majors who were selected on the basis of sophistication about stuttering, and observation and knowledge of the stutterers with whom they were to identify. Here, too, each major sorted deck 11 (a self sort describing him as he is now) before he sorted deck 3 (a sort as he thinks he would be now if he stuttered like a particular stutterer does).

Sub-experiments: Ratings of Progress

It was desired to compare the relationship between correlations obtained on the Q-Sort test and ratings of the same individuals as to therapeutic progress. The stutterers in groups C and E (see Table VIII) were ranked in order from highest to lowest according to ρ scores and also according to therapy progress at the time at which the test was taken. The latter ranking was done by the director of the therapy program without previous knowledge of the ρ scores.
Instruction Sheet

Directions for Card Sorting

1. You will be given a deck of 50 cards containing statements of how people feel, act and think. Some of them will apply to you more than others.

2. You are to sort the cards into 9 rows with a fixed number of cards in each row, as follows:

   row 9:  (2 cards)  Most like you
   row 8:  (3 cards)
   row 7:  (6 cards)
   row 6:  (9 cards)
   row 5:  (10 cards)
   row 4:  (9 cards)
   row 3:  (6 cards)
   row 2:  (3 cards)
   row 1:  (2 cards)  Least like you

3. In the top row, (row 9), are the two cards most like you as you are now. In the bottom row, (row 1), are the two cards least like you as you are now.

4. General Statement: Start at the top, placing the cards most like you there. Gradually move towards the bottom to those least like you. The nearer a card is to the top row the more it is like you. The nearer a card is to the bottom row the less it is like you.

5. As you go through the deck for the first time you may put any number of cards in any row to start with. Shift them about as you read and compare them. REMEMBER: sort the cards as you are now.

6. When you have the right number of cards in each row, record your sorting on Record Sheet #1.

7. The card numbers are given in the lower right hand corner. Write them in the blank spaces after the row numbers. For example, if you placed cards number 49 and 12 in row nine, then write these numbers in the spaces after nine.

   row 9. 49 12

8. Write your first name and last initial, age, sex and the date on the Record Sheet also.

ONE WEEK LATER YOU WILL BE GIVEN ANOTHER DECK TO SORT. THE CARDS WILL BE DIFFERENT BUT THE DIRECTIONS ARE THE SAME.
<table>
<thead>
<tr>
<th>Row</th>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Least like you</td>
<td>(2)</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>(3)</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>(6)</td>
</tr>
<tr>
<td>4</td>
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<td>(6)</td>
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<td>(9)</td>
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</tr>
<tr>
<td>7</td>
<td></td>
<td>(10)</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>(3)</td>
</tr>
<tr>
<td>9</td>
<td>Most like you</td>
<td>(2)</td>
</tr>
</tbody>
</table>
Personal Concept Statements - Deck II

00 I yield completely to my feelings
01 I seek advice a great deal
02 I am wide awake, quick to notice
03 I feel to blame when things go wrong
04 I feel bored
05 I like to have a gay time
06 I stand on ceremony, being very polite
07 I help the poor and needy
08 I cheat when a chance comes
09 Life seems a struggle
10 I am crooked, dishonest
11 I am fond of dancing
12 I suffer from a sense of defeat
13 I deserve more than I have
14 I tend to be dirty, not clean
15 I feel in a state of disorder
16 I am bothered by drowsy feelings
17 I endeavor to do my best
18 I am not easily disturbed nor angered
19 I like to show off and display myself
20 Experience has brought me skill and knowledge
21 I tend to lay bare my thoughts and feelings
22 I do things with expression and feeling
23 I face matters squarely
24 I am fair in my dealings
25 I fare very well
26 I generally am fortunate
27 I look to the future
28 I am gay and full of fun
29 I tend to bear grudge and ill will
30 I tend to interfere with the plans of others
31 I like to join others in doing things
32 I feel lost
33 I like to make things
34 I moan about my lot
35 I am neutral, not definite
36 I tend to punish people
37 I relish my meals
38 I tend to rush around
39 I am satisfied and contented
40 I can be savage and fierce
41 I am a poor scholar
42 I am shrewd in practical affairs
43 I am a skillful person
44 I like solitude
45 I am stupid
46 I act swiftly
47 I tease people
48 I value some things in life very highly
49 I tend to look to the welfare of others
Personal Concept Statements - Deck S

00  Stuttering makes me yield completely to my feelings
01  I seek advice a great deal despite my stuttering
02  I am wide awake, quick to notice, in spite of my stuttering
03  I feel to blame when things go wrong because I stutter
04  Stuttering makes me feel bored
05  I like to have a gay time in spite of my stuttering
06  I stand on ceremony, being very polite perhaps because of my stuttering
07  I help the poor and needy despite my stuttering
08  I cheat when a chance comes because of my handicap
09  Life seems a struggle because I stutter
10  I am crooked, dishonest perhaps because I stutter
11  I am fond of dancing in spite of my stuttering
12  I suffer from a sense of defeat when I stutter
13  I deserve more than I have as a stutterer
14  I tend to be dirty, not clean because of my stuttering
15  I feel in a state of disorder when I stutter
16  I am bothered by drowsy feelings perhaps because of my stuttering
17  I endeavor to do my best despite my stuttering
18  I am not easily disturbed nor angered in spite of my stuttering
19  I like to show off and display myself perhaps because I stutter
20  Experience has brought me skill and knowledge despite my stuttering
21 I tend to lay bare my feelings and thoughts even though I do stutter
22 I do things with expression and feeling in spite of my stuttering
23 I face matters squarely including my stuttering
24 I am fair in my dealings even though I stutter
25 I fare very well in spite of my stuttering
26 I generally am fortunate despite my stuttering
27 I look to the future despite my present stuttering
28 I am gay and full of fun in spite of my stuttering
29 I tend to bear grudge and ill will perhaps because I stutter
30 I tend to interfere with the plans of others perhaps because I stutter
31 I like to join others in doing things despite my stuttering
32 I feel lost because I stutter
33 I like to make things perhaps because I stutter
34 I moan about my lot as a stutterer
35 I am neutral, not definite because I stutter
36 I tend to punish people perhaps because of my stuttering
37 I relish my meals despite my stuttering
38 I tend to rush around perhaps because I stutter
39 I am satisfied and contented despite my stuttering
40 I can be savage and fierce in spite of my stuttering
41 I am a poor scholar perhaps because of my stuttering
42 I am shrewd in practical affairs despite my stuttering
43 I am a skillful person except in speech
44 I like solitude because I stutter
45 I am stupid perhaps because I stutter
46 I act swiftly despite my stuttering
47 I tease people in spite of my stuttering
48 I value some things in life very highly perhaps because of my stuttering
49 I tend to look to the welfare of others even though I do stutter
Summary of Methodology

The Q-Sort test of personal concept statements including set number II (self sort) and a revised form S (stuttering sort) was administered to stutterers and speech therapy majors. Four groups of stutterers sorted the items at an interval of one week, one group at an interval of one month. In each case, however, the sortings were a self sort of how the individual perceived himself at the present time. He arranged the statements in a pre-determined distribution from most like to least like as they described him as he is now. Set S differed from set II in that the revised form was designed to force the stutterer to view himself in a stuttering frame of reference.

The majors likewise sorted the statements in set II to describe themselves as they are now. Statements in set S were sorted to describe themselves as they think they might be if they stuttered like a particular stutterer.

As a sub-experiment, the stutterers' rank order according to \( r \) correlations on the Q-sort test was compared with their rank order according to director ratings of therapeutic progress.
CHAPTER IV

TABULATION AND ANALYSIS OF THE DATA

The Problem

The purpose of this chapter is to tabulate and analyze the data obtained from the sortings of the test items.

Methods Employed

Forty-seven test sets were returned within a three month period. A test set consisted of two decks of cards of personal concept statements (11 and 8), two record sheets and the instruction sheet. The entire number of returned sets (47) were complete in that every card in any deck had been sorted and recorded by the subject.

The method of scoring the tests was the same as that used by Hilden -- i.e., determining the correlation between the fifty pairs of digits which is the $r$ between the two sorts. He states "There are a number of ways of computing $r$. By far the simplest method is one based on the differences between the single-digit values. With the mean (5.0) and $SD^2$ (3.68) constant, the procedure may be worded as follows: find the difference between each pair of digits, square the difference, find the total of these squares, divide that total by 368, and subtract the result from 1.000 (or whatever the desired number of places may be). The formula may be rendered thus: $r = 1 - (\text{sum of } d^2)/368.$"\[44\]

\[44\] loc. cit., 9, 10
According to Hilden "The following figures may be used for determining significance of values. On the basis of the null hypothesis that the population $\mu$ is zero, $\bar{x}$'s obtained on 1 deck are significant at the .05, .02, and .01 levels when they are .280, .333, and .369, respectively."\textsuperscript{45} Hilden has calculated $\bar{z}$ coefficients for $\bar{x}$'s using Fisher's formula (6,198,210) and set up a table of $\bar{x}$ and $\bar{z}$ values for the entire range of sum of $d^2$. However, Hilden warns that "these values may not be strictly applicable... since an underlying assumption of the $\bar{z}$ coefficient is that of independent elements."\textsuperscript{46}

"To determine the significance of differences between $\bar{x}$'s Hilden used the differences between $\bar{z}$ coefficients. "Where comparisons are based on single decks, the values for significance at the .05, .02, and .01 levels are .400, .480, and .532, respectively."\textsuperscript{47}

Hilden's\textsuperscript{48} table of $\bar{x}$ and $\bar{z}$ values was used in the calculation of $\bar{x}$ and $\bar{z}$ coefficients given in the following tables. In order to present a group picture the writer used chi square to test the relationships between the sortings -- self sort and stuttering-self sort which according to Tippett\textsuperscript{49} is a proper test of association for a group of correlations.

\textsuperscript{45} loc. cit., 11
\textsuperscript{46} ibid.
\textsuperscript{47} loc. cit., 12
\textsuperscript{48} loc. cit., 17

**TABLE I**

<table>
<thead>
<tr>
<th>Subject</th>
<th>N</th>
<th>r</th>
<th>z</th>
<th>(z^2(N-3))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tar</td>
<td>50</td>
<td>.842</td>
<td>1.229</td>
<td>70.970</td>
</tr>
<tr>
<td>Wah</td>
<td>50</td>
<td>.682</td>
<td>.833</td>
<td>32.618</td>
</tr>
<tr>
<td>Ram</td>
<td>50</td>
<td>.821</td>
<td>1.159</td>
<td>63.021</td>
</tr>
<tr>
<td>Jas</td>
<td>50</td>
<td>.739</td>
<td>.949</td>
<td>42.347</td>
</tr>
<tr>
<td>Ras</td>
<td>50</td>
<td>.511</td>
<td>.504</td>
<td>14.946</td>
</tr>
<tr>
<td>Map</td>
<td>50</td>
<td>.859</td>
<td>1.288</td>
<td>77.673</td>
</tr>
<tr>
<td>Bac</td>
<td>50</td>
<td>.731</td>
<td>.931</td>
<td>40.749</td>
</tr>
</tbody>
</table>

mean \(r = .741\)      mean \(z = .993\)      \# = 7

\[
x^2 = 312.324
\]

Table I contains the \(r\) and \(z\) scores of the stutterers at one of the speech clinics who took the test. For these correlations of the group the values of chi square for the magnitude of association is 312.324, which is well beyond the value at the .01 level of significance, 16.812.\(^{50}\) The result indicates that there is a significant degree of congruence between the perception of the human self and the perception of the stuttering self and that there are significant individual differences within the population.

The formula used is that of Rogers and Dymond in portraying the self-ideal relationship before counseling:

\[
x^2 = \sum (z\sqrt{N-3})^2 \text{ with } n \text{ degrees of freedom, where } n \text{ is the number of clients and } N \text{ is the number of items sorted in each Q-sort.}^{51}\]


\(^{51}\)op. cit., 62
TABLE II

Self Stuttering-Self Correlations in Group B

<table>
<thead>
<tr>
<th>Subject</th>
<th>N</th>
<th>r</th>
<th>z</th>
<th>$z^2(N-3)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doj</td>
<td>50</td>
<td>.625</td>
<td>.733</td>
<td>25.239</td>
</tr>
<tr>
<td>Des</td>
<td>50</td>
<td>.674</td>
<td>.818</td>
<td>31.343</td>
</tr>
<tr>
<td>Wir</td>
<td>50</td>
<td>.766</td>
<td>1.011</td>
<td>48.034</td>
</tr>
<tr>
<td>Kef</td>
<td>50</td>
<td>.701</td>
<td>.870</td>
<td>35.579</td>
</tr>
<tr>
<td>Caj</td>
<td>50</td>
<td>.582</td>
<td>.665</td>
<td>20.774</td>
</tr>
<tr>
<td>Lob</td>
<td>50</td>
<td>.766</td>
<td>1.011</td>
<td>48.034</td>
</tr>
<tr>
<td>Irv</td>
<td>50</td>
<td>.761</td>
<td>.998</td>
<td>46.812</td>
</tr>
<tr>
<td>Rom</td>
<td>50</td>
<td>.753</td>
<td>.979</td>
<td>45.026</td>
</tr>
<tr>
<td>Buc</td>
<td>50</td>
<td>.641</td>
<td>.760</td>
<td>27.166</td>
</tr>
<tr>
<td>Raf</td>
<td>50</td>
<td>.571</td>
<td>.649</td>
<td>19.787</td>
</tr>
<tr>
<td>Dom</td>
<td>50</td>
<td>.717</td>
<td>.902</td>
<td>38.258</td>
</tr>
<tr>
<td>Bis</td>
<td>50</td>
<td>.598</td>
<td>.690</td>
<td>22.552</td>
</tr>
<tr>
<td>Div</td>
<td>50</td>
<td>.603</td>
<td>.698</td>
<td>22.936</td>
</tr>
<tr>
<td>Jig</td>
<td>50</td>
<td>.595</td>
<td>.686</td>
<td>22.137</td>
</tr>
<tr>
<td>Lsa</td>
<td>50</td>
<td>.772</td>
<td>1.025</td>
<td>49.397</td>
</tr>
<tr>
<td>Mif</td>
<td>50</td>
<td>.617</td>
<td>.720</td>
<td>24.346</td>
</tr>
</tbody>
</table>

mean $r = .671$ mean $z = .822$ n= 16 $c= 15$

$x^2 = 527.923$

Table II contains the $r$ and $z$ scores of a group of stutterers at another speech clinic.

For these correlations of the group the value of chi square for the magnitude of association is 527.923, which is well beyond the value at the .01 level of significance, 30.578. Again there is a significant degree of congruence between the perception of the human self and the perception of the stuttering self.
Table III contains the $r$ and $z$ scores of a group of stutterers at a third speech clinic.

For these correlations of the group the value of chi square for the magnitude of association is 577.928, which is well beyond the value at the .01 level of significance, 27.688. Here, too, the result indicates that there is a significant degree of congruence between the self and stuttering-self sortings.
TABLE IV

Self Stuttering-Self Correlations in Group D

<table>
<thead>
<tr>
<th>Subject</th>
<th>N</th>
<th>r</th>
<th>z</th>
<th>$z^2(N=3)$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ela</td>
<td>50</td>
<td>0.717</td>
<td>0.902</td>
<td>38.258</td>
</tr>
<tr>
<td>Dik</td>
<td>50</td>
<td>0.739</td>
<td>0.949</td>
<td>42.347</td>
</tr>
<tr>
<td>Jes</td>
<td>50</td>
<td>0.788</td>
<td>1.066</td>
<td>53.392</td>
</tr>
<tr>
<td>Mtm</td>
<td>50</td>
<td>0.598</td>
<td>0.690</td>
<td>22.552</td>
</tr>
<tr>
<td>Daj</td>
<td>50</td>
<td>0.777</td>
<td>1.039</td>
<td>50.807</td>
</tr>
<tr>
<td>Edh</td>
<td>50</td>
<td>0.853</td>
<td>1.269</td>
<td>75.670</td>
</tr>
</tbody>
</table>

mean r = 0.744  mean z = 0.986  n = 6  $g = 5$

$x^2 = 283.017$

Table IV contains the r and z scores of a fourth group of stutterers.

For these correlations of the group the value of chi square for the magnitude of association is 283.017, which is well beyond the value at the .01 level of significance, 15.066. Again the result indicates there is a significant degree of congruence between the perception of self and stuttering self.

Tables I, II, III, and IV contain the r and z scores of stutterers from different speech clinics who took the test. The $x^2$ value gives the picture of each group of correlations as a whole.
TABLE V

Self Stuttering-Self Correlations in Group E *

<table>
<thead>
<tr>
<th>Subject</th>
<th>N</th>
<th>r</th>
<th>Z</th>
<th>z²(N-3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mag</td>
<td>50</td>
<td>.594</td>
<td>.625</td>
<td>18.377</td>
</tr>
<tr>
<td>Eds</td>
<td>50</td>
<td>.772</td>
<td>1.025</td>
<td>49.397</td>
</tr>
<tr>
<td>Dis</td>
<td>50</td>
<td>.592</td>
<td>.681</td>
<td>21.808</td>
</tr>
<tr>
<td>Ale</td>
<td>50</td>
<td>.611</td>
<td>.564</td>
<td>14.946</td>
</tr>
</tbody>
</table>

mean r = .607  mean z = .724  n = 4  g = 3

* 1 month apart  \(X^2 = 104.528\)

Table V represents the results of an investigation of the effect of the time interval on the correlation between self and stuttering-self sorts of stutterers. The conditions for testing this group were similar to that of the previous groups in every way except that the two sortings were done one month apart rather than one week apart. This was done to determine whether or not the high relationships shown between self sort and stuttering sorts were due to recall of card position.

For these correlations of the group the value of chi square for the magnitude of association is 104.528, which is again well beyond the value at the .01 level of significance, 11.345. Once more the result indicates that there is a significant degree of congruence between the two sortings. The results obtained would appear to be independent of the time factor. It would seem doubtful that any individual could or would memorize the exact locations of fifty cards arranged in nine rows, as this part of the investigation seems to show.
TABLE VI

Self Stuttering-Self Identifications in Group F

<table>
<thead>
<tr>
<th>Subject</th>
<th>N</th>
<th>r</th>
<th>z</th>
<th>( z^2(N-3) )</th>
<th>Stutterer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lfe</td>
<td>50</td>
<td>.277</td>
<td>.285</td>
<td>3.807</td>
<td>Ros</td>
</tr>
<tr>
<td>Rbo</td>
<td>50</td>
<td>.679</td>
<td>.826</td>
<td>32.242</td>
<td>Jih</td>
</tr>
<tr>
<td>Rgr</td>
<td>50</td>
<td>.693</td>
<td>.848</td>
<td>33.793</td>
<td>Str</td>
</tr>
<tr>
<td>Gni</td>
<td>50</td>
<td>.076</td>
<td>.076</td>
<td>.282</td>
<td>Sav</td>
</tr>
<tr>
<td>Elu</td>
<td>50</td>
<td>.332</td>
<td>.345</td>
<td>5.793</td>
<td>Jow</td>
</tr>
<tr>
<td>Jpa</td>
<td>50</td>
<td>.794</td>
<td>1.081</td>
<td>54.343</td>
<td>Gea</td>
</tr>
<tr>
<td>Nhe</td>
<td>50</td>
<td>.701</td>
<td>.870</td>
<td>35.479</td>
<td>Elk</td>
</tr>
<tr>
<td>Feh</td>
<td>50</td>
<td>.679</td>
<td>.828</td>
<td>32.242</td>
<td>Gej</td>
</tr>
<tr>
<td>Fsh</td>
<td>50</td>
<td>.677</td>
<td>.823</td>
<td>31.819</td>
<td>Ale</td>
</tr>
</tbody>
</table>

mean \( r = .545 \)  mean \( z = .665 \)  n = 9  \( \chi^2 = 230.200 \)

Table VI represents the results of an investigation of the correlation between self and stuttering-self-identification sorts of normal speakers.

The Table contains the \( r \) and \( z \) scores of a group of speech therapy majors, who were sophisticated about stuttering and who observed and knew at least one of the stutterers in groups C and E very well. Each major was asked first to sort the cards for himself, as he is now, and second, to sort the cards as he thinks he would be now if he stuttered like a particular stutterer does. The speech therapy major was told that he was still himself, but had the blocks, repetitions and secondary symptoms of the stutterer with whom he was to identify.

For these correlations of the group the value of \( \chi^2 \) square for the magnitude of association is 230.200, which is well beyond the value at the .01 level of significance, 20.090. The results indicate that there is an association between the two
sortings and that this relationship is a significant one. The speech therapy majors appear to be able to identify with stutterers they know.
### TABLE VII

<table>
<thead>
<tr>
<th>Subject</th>
<th>N</th>
<th>r</th>
<th>z</th>
<th>(z^2(N-3))</th>
</tr>
</thead>
<tbody>
<tr>
<td>Map</td>
<td>50</td>
<td>.859</td>
<td>1.288</td>
<td>77.573</td>
</tr>
<tr>
<td>Edh</td>
<td>50</td>
<td>.653</td>
<td>1.269</td>
<td>75.670</td>
</tr>
<tr>
<td>Tar</td>
<td>50</td>
<td>.842</td>
<td>1.229</td>
<td>70.970</td>
</tr>
<tr>
<td>Saw</td>
<td>50</td>
<td>.832</td>
<td>1.193</td>
<td>66.893</td>
</tr>
<tr>
<td>Ram</td>
<td>50</td>
<td>.821</td>
<td>1.159</td>
<td>63.021</td>
</tr>
<tr>
<td>Maj</td>
<td>50</td>
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<td>61.288</td>
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<tr>
<td>Fvr</td>
<td>50</td>
<td>.804</td>
<td>1.111</td>
<td>58.013</td>
</tr>
<tr>
<td>Jes</td>
<td>50</td>
<td>.768</td>
<td>1.066</td>
<td>53.392</td>
</tr>
<tr>
<td>Ros</td>
<td>50</td>
<td>.763</td>
<td>1.052</td>
<td>52.015</td>
</tr>
<tr>
<td>Daj</td>
<td>50</td>
<td>.777</td>
<td>1.039</td>
<td>50.807</td>
</tr>
<tr>
<td>Laa</td>
<td>50</td>
<td>.772</td>
<td>1.025</td>
<td>49.397</td>
</tr>
<tr>
<td>Eds</td>
<td>50</td>
<td>.772</td>
<td>1.025</td>
<td>49.397</td>
</tr>
<tr>
<td>Wir</td>
<td>50</td>
<td>.766</td>
<td>1.011</td>
<td>48.034</td>
</tr>
<tr>
<td>Lob</td>
<td>50</td>
<td>.766</td>
<td>1.011</td>
<td>48.034</td>
</tr>
<tr>
<td>Irw</td>
<td>50</td>
<td>.761</td>
<td>.998</td>
<td>46.812</td>
</tr>
<tr>
<td>Bob</td>
<td>50</td>
<td>.761</td>
<td>.998</td>
<td>46.812</td>
</tr>
<tr>
<td>Gea</td>
<td>50</td>
<td>.758</td>
<td>.992</td>
<td>46.251</td>
</tr>
<tr>
<td>Rom</td>
<td>50</td>
<td>.753</td>
<td>.979</td>
<td>45.026</td>
</tr>
<tr>
<td>Dik</td>
<td>50</td>
<td>.739</td>
<td>.949</td>
<td>42.347</td>
</tr>
<tr>
<td>Jas</td>
<td>50</td>
<td>.739</td>
<td>.949</td>
<td>42.347</td>
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<td>50</td>
<td>.731</td>
<td>.931</td>
<td>40.749</td>
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<tr>
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<td>.728</td>
<td>.925</td>
<td>40.214</td>
</tr>
<tr>
<td>Dom</td>
<td>50</td>
<td>.728</td>
<td>.902</td>
<td>38.258</td>
</tr>
<tr>
<td>Ela</td>
<td>50</td>
<td>.728</td>
<td>.902</td>
<td>38.258</td>
</tr>
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</table>

mean r = .679  mean z = .699
Table VII represents the total composite group picture of all the stutterers who took the test. The \( r \) scores range from .859 to .511. The range of \( r \) scores for the therapy majors is .794 to .076. The mean \( r \) for the composite group is .679 and the mean \( r \) is .899. The results indicate there is a fairly high correlation between the self-concept and the stuttering-self concept and that there are significant individual differences in the self-stuttering-self correlation in this population.

### TABLE VIII

Rank Order Comparison of Therapy Progress with \( r \) Scores

<table>
<thead>
<tr>
<th>Subject</th>
<th>( r ) score</th>
<th>Rank by ( r ) score</th>
<th>Rank by therapy progress</th>
<th>( D )</th>
<th>( d^2 )</th>
</tr>
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<tbody>
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<td>1</td>
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<td>1</td>
<td>1</td>
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<td>4</td>
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<td>10</td>
<td>8</td>
<td>64</td>
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</table>

\( N = 18 \)

\[ \sum d^2 = 400.5 \]
Table VIII represents a comparison of the \( z \) scores of stutterers in groups C and E with the ratings of these individuals as to therapy progress by the director of the stuttering program.

The formula used is that of Garrett in measuring correlation by the rank-difference method...

\[
\rho = 1 - \frac{6 \sum D^2}{N(N^2 - 1)}
\]

in which \( D \) represents the difference in rank of an individual in the two series; \( \sum D^2 \) is the sum of the squares of all such differences; and \( N \) is the number of cases.\(^{52}\)

For this correlation of the group the value of the rank correlation coefficient (rho) is .59, which is statistically significant at the .01 level, (.590).\(^{53}\) There is a positive relationship between \( z \) correlations and therapy progress ratings in this group of stutterers.

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\(^{52}\) loc. cit., 355.

\(^{53}\) loc. cit., Table 25, 200
CHAPTER V

IMPLICATIONS FOR THERAPY

From an analysis of the data obtained on the two sortings it would appear that stutterers tend to think of themselves as stutterers. The stuttering symptom seems to have become incorporated within the self concept itself. As Johnson says, "The stutterer suffers from a semantic confusion, which he has interiorized from his semantic environment. He identifies non-fluency and stuttering...So far as evaluative behavior is concerned, therefore, the stutterer needs to understand the taboo imposed by his semantic environment...He needs to differentiate stuttering from non-fluency, and to see stuttering as his attempts to avoid non-fluency." This identification of non-fluency with stuttering, once a child has been called a stutterer, is strengthened by the taboo against nonfluency in our culture.

That nonfluency is a matter of concern to us is evident from the fact that we have a label for it: "stuttering." Johnson gives as a partial explanation for the absence of stuttering among the Indians the finding that they have no word for it in their language. Nonfluency is not considered a defect of the person in their culture. In fact, speech defects are not recognized. There is no place in their self concept

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54 Johnson, People in Quandaries, 460 - 461
55 loc. cit., 443
for a facet termed: speech—defective or normal.

But there is in ours. We conceive of ourselves as speech defectives or normal speakers. Our self concept is speech oriented. As stated earlier, our concept is formed in part by our own speech evaluations together with interpretations of the perceptions and evaluations others have and reflect back to us. It is no wonder, then, that Johnson emphasizes the diagnosis of stuttering as one of the causes of the disorder. He goes on to say, "The evaluations made by the parents (usually) which they express, overtly or implicitly, by diagnosing their child's speech as 'stuttering' or 'defective,' or 'abnormal,' are a very important part of the child's semantic environment. Insofar as the child interiorizes this aspect of his semantic environment, he too evaluates his speech as 'defective,' 'difficult,' 'not acceptable,' etc., and his manner of speaking is consequently made more hesitant, cautious, labored, and the like." 56

Once reaction to the labeling has taken place the child's normal nonfluencies are transformed into the exaggerated hesitations, repetitions, blocks, forcing, and avoidance common to the adult stutterer.

As the stutterer interiorizes the evaluations of others and changes his self concept with respect to those evaluations he changes as a person. He is now a stutterer. This concept

56 loc. cit., 446
affects his existence to the extent to which stuttering pervades his activities. Of necessity it varies as the roles in which the individual finds himself varies. He does not always conceive of himself as a stutterer, however. He may forget it for a time and think of himself as a boy, a son, an athlete and so forth. The forced awareness that he is a stutterer comes back quickly when he has difficulty with speech. And so the concept of himself as a stutterer is incorporated into his self concept again.

Merely because he has incorporated stuttering within his self concept does not necessarily mean he has accepted it, even if he says verbally, "I am a stutterer." There is an acceptance within acceptance. He may admit "I am a stutterer" and then forcibly remove the idea from consciousness — repress the memory of repetitions, prolongations and blocks. Or he may say, "I am a stutterer" and actually mean "so what, that is just the way I talk. Stuttering is a part of me." In this instance verbal admittance signifies both intellectual and emotional acceptance.

Some individuals are able to accept stuttering as a part of themselves and others cannot. Just as there are different degrees of acceptance of the various roles in which an individual finds himself, so, too, stuttering is accepted in different degrees at different times. A stutterer may find it easy to accept stuttering in the role of a playmate with his friends, but find it difficult to accept stuttering in the role of a
son identifying with a normal speaking perfectionistic father or of a boy in a culture with taboos against nonfluency and in which the male is to be superior.

How thoroughly stuttering reflects the concept of self is apparent to therapists skilled in working with stutterers. They seem to find that the stutterer's self concept is revealed by his individual stuttering pattern—by the type of blocks he has, and what these blocks say about him. Do they whine "It isn't fair that I should have to talk like this?" or aggressively say, "I hate you?" or self-pityingly, "I can't help it?"

In essence, does a stutterer's self concept provide for acceptance of his stuttering as part of himself?

From the sub-study in which speech therapy progress ratings are compared with correlations on the test a positive relationship between the two was shown to exist, statistically significant at the .01 level of confidence. Progress in therapy appears to be closely related to admittance and acceptance of the fact that one is a stutterer, according to Ainsworth, Bryngelson, Johnson, Travis, Van Riper and others. Hence, the conclusion that high correlation on the test — .7, .8, .9 — signifies acceptance of stuttering and a low correlation — .4, .5, .6 — signifies little or at least a lesser degree of acceptance seems defensible.

Knowledge of a particular stutterer's degree of acceptance of his handicap is information useful to the therapist in plan—
ning therapy and in tailoring it to fit individual needs. If a stutterer is finding it difficult to accept his stuttering as part of himself, then this aspect of therapy will need more emphasis in order that progress may continue.

If this or similar tests of self concept can be used to measure, objectively, the degree of acceptance of stuttering by a stutterer, and the change in this acceptance as determined by a change in the self concept over time, then the therapist will have a needed tool.
CHAPTER VI

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The Problem

It was the purpose of this study to investigate the self concept of a stutterer and particularly to determine whether having to confront yourself as a stutterer changes your concept.

Methods Employed

Since an individual's concept of himself may be an important factor in his adjustment, it is important in speech therapy to be able to measure the self concept of the stutterer with some degree of validity. Often, as a stutterer gains some measure of control of his speech his attitude toward it and toward himself changes. He becomes more objective—more able to see himself as he is, to acknowledge his assets and liabilities. However, it is important to have a means of detecting differences in objectivity, in acceptance, in order to use this information in therapy. If a stutterer's self concept does not change throughout therapy then his speech pattern probably does not change basically, either.

A Q-Sort test of personal concept statements consisting of Hilden's deck number 11 (a self sort) and a revised deck S (a stuttering sort) was administered to forty five college age
and three adolescent stutterers and nine speech therapy majors. All the stutterers either had received or were receiving speech therapy in a clinical treatment program.

The therapy majors and four groups of stutterers sorted the items at an interval of one week, one group at an interval of one month. In each case the subject sorted deck II (fifty personal concept statements) before he sorted deck S (a revision of the statements to include the words stutterer or stuttering so as to force the individual to judge himself in a stuttering frame of reference). Both sortings were a self sort of how the subject perceived himself at the present time. He arrayed the statement in a predetermined distribution of nine rows with a fixed number of cards in each row from most like to least like himself.

The majors likewise sorted the statements in set II to describe themselves as they are now. Statements in set S were sorted to describe themselves as they think they might be if they stuttered like a designated stutterer.

As a sub-experiment, the stutterers' rank order according to g correlations on the Q-Sort test was compared with their rank order according to director ratings of therapeutic progress.

Conclusions

In so far as the techniques used in this study may be valid, the following conclusions seem to be defensible:
1. There is a fairly high correlation between the self concept and the stuttering-self concept of the subjects in this investigation. Correlations range from .859 to .511 with a mean r of .679.

2. These stutterers, as a group, tended to think of themselves as stutterers. In groups C and E there is a strong and positive relationship between therapy progress as rated by the director of the therapy program and self stuttering-self correlations (r scores) on the Q-sort test. The correlation obtained is statistically significant at the one percent level of confidence.

3. Speech therapy majors in this study who are sophisticated about stuttering appear to be able to identify with stutterers they know. That their own self concept is not "stuttering" oriented would seem to be indicated by the wide range of scores from .794 to .075 with a mean r of .545.

Recommendations

In so far as the conclusions may be defensible the following recommendations seem reasonable:

1. That this methodology of measuring the self concept -- Q-technique be tested with larger groups of stutterers.
2. That the sortings be done prior to, during, and at the close of therapy in an attempt to measure objectively through change in self concept, progress in speech therapy.
3. That a further sorting be attempted with a set of statements
couched in the frame of reference "if I did not stutter" or "if I were not a stutterer" and that the discrepancy between stuttering-self and non-stuttering-self sortings be tested as to its value in indicating therapeutic prognosis.
BIBLIOGRAPHY
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