AN ANALYSIS OF THE USE OF ORAL INTERPRETATION

AS A

PSYCHOTHERAPEUTIC TECHNIQUE

DISSERTATION

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

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1970

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ACKNOWLEDGMENTS

To my adviser, Keith Brooks, and to my reading committee, Kathryn Schoen, and Wallace C. Fotheringham, go my deepest thanks for their wise counsel and unfailing support throughout my Ph.D. program.

To the patients and the staff at Huntington State Hospital (especially Dr. Joe Carter), my appreciation for their co-operation and my wishes for continued therapeutic success.

To my parents, and most of all, my husband, George, my love for the perspective they gave me.
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 CHAPTER I  
THEORETICAL BACKGROUND

Communication is the most important business of man. The whole of our political, economic, ethical, scientific, and aesthetic structures are based upon it—upon what has been distilled and preserved (through the communicative processes) of past achievements, past hopes, successes—and failures as well—and the lessons we have learned from them. Civilization itself might well be called that state of being in which communication is achieved.1

Through civilizations and in life, the ability to effectively send, receive, and coordinate messages is vitally important. Nowhere does this communicative ability seem more susceptible to breakdown than among those who are emotionally disturbed.

While many studies have referred to the problem of communication in the mentally ill,2 none have utilized the communicative act of oral interpretation as a possible therapy. This study explores the use of oral interpretation as a psychotherapeutic technique. In so doing, it measures changes both in reception and word association response.

2These include the works of Reusch, Bateson, Rogers, and others which will be explored later.
The cloze procedure measure of change centers upon the subject as communicatee, or listener. The word association test measure patterns of subject response to chosen stimulus words. Thus, the study focuses on the investigation of a previously untested use of oral interpretation. Moreover, it seeks to explore a new approach in psychotherapy. Finally, and perhaps most essentially, the study hopes to lend insight into the communication problems of the emotionally disturbed.

Fortunately, those who talk most seriously about communication are endeavoring to improve it. The field of communications has been in the vanguard of the behavioral sciences in seeking the answers to failures in communication. While the search has taken many directions, here the focus will be on the interdisciplinary aspects of communications skills.

In its search for solutions, the field of communications has relied upon the expertise in the areas of psychology, educational philosophy, and statistical measurement, to name a few. The blending of theories has resulted, and is resulting, in ever stronger and more relevant research in the behavioral sciences.

As evidence of this kind of interdisciplinary endeavor, the Department of Speech at Ohio State University, and the College of Medicine have a growing liaison. The advantages of such cooperation have at least two dimensions: (1) the
application of communication theory in solving problems within the health setting, and (2) the expansion of the communications area in a manner that is mutually beneficial to both departments.

It is through that liaison that this study evolved. As a Fellow in the Regional Medical Fellowship Program and a Ph.D. candidate in the Department of Speech, my interest centered upon the utilization of communication theory in the health setting, and, specifically, in the mental health area.

Definition of Terms

For the purposes of this study, clarification of each of the following terms is made.

Oral Interpretation

This term is used according to its application in speech and communications, and not in psychiatry. It does not refer to the restating of the patient's conversation by the psychiatrist in order to lead him to an awareness of things not previously recognized. Rather, it deals with the reading aloud of literature (in this case, fiction) to

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stimulate listener response. As Brooks defines it:

The communicative act of oral interpretation is the process of stimulating listener response which is favorable to the intent of the literature in terms of the reader's judgments, as communicated from the manuscript through vocal and physical suggestion.4

Psychotherapy

This term refers to the treatment of the individual by a psychiatrist, psychotherapist, or psychologist. It deals with the mental and attitudinal processes rather than physical ones. Wolberg defines it as follows:

Psychotherapy is the treatment by psychological means, of problems of an emotional nature in which a trained person deliberately establishes a professional relationship with the patient with the object (1) of removing, modifying, or retarding existing symptoms, (2) of mediating disturbed patterns of behavior, and (3) of promoting positive personality growth and development.5

Gottschalk and Auerbach provide another definition:

What we call psychotherapy is one institutionalized form of this process


whereby one individual attempts to influence another. 6

Group Therapy

Group therapy is defined as:

the utilization by a therapist of a group of patients and a group method in performing psychotherapy. ... The group is formed and meets with the therapist for the purpose of psychotherapy--namely, the investigation and discussion of the psychopathology of the individuals comprising the group. 7

Theory

The previously stated purposes of this study are three-fold:

1. the investigation of a previously untested use for oral interpretation.

2. an exploration of a possible new approach in psychotherapy.

3. a look into the communication problems of the emotionally disturbed.

A further examination of the background and present


status of each of these factors may give additional insight into the need for this research.

Empirical Studies in Oral Interpretation

Since the time of the rhapsodes in ancient Greece,8 men have enjoyed the sound of the story as interpreted by a skilled reader. Until very recently, however, the focus of oral interpretation was primarily upon its aesthetic qualities. While many oral interpretation studies were made, most dealt with the analysis of literature, the history of the field, or criticism of the author and his works. "An Interpretation of the Book of Job" by Joseph Catmull is an example of the analysis of literature approach to studying oral interpretation,9 while Nydia Reynolds' "A Historical Study of the Oral Interpretation Activities of the Circuit Chautauqua, 1904-1932,"10 follows the historical research format. Additional research in oral interpretation which


illustrates this point may be found in the August issues of *Speech Monographs* each year.

More recently, interest has shifted towards an investigation of oral interpretation as a communication skill—one to be used as, for example, rhetoric is used. The 1969 "Symposium in the Teaching of Black Literature through Interpretation" held at Northwestern University is an instance of oral interpretation being used as a communicative skill. The purpose of the Symposium was to change an atmosphere of confrontation to one of dialogue between black and white through the reading of Black literature.

Accompanying this shift of emphasis was the employment of scientific methods for measuring change. Martin Cobin notes this trend and urges improvement in applying statistical, quantitative and empirical methods in oral interpretation research.11

Such application of scientific methods had already been made by Brooks and Wulftange12 in their investigation of listener involvement in oral interpretation when presented by audio, television and live performances. This research


indicated that the face-to-face presentation evoked the fullest aesthetic response.

The semantic differential measured responses to reader's theatre productions in a study by Frandsen, Rockey and Kleinau. Participants in a reader's theatre workshop responded to the testing scales. A factor analysis of terms gave the most variances to: general evaluation, potency, activity, content, and intent evaluation.

Leonardo and Tiffany explored the effectiveness of programmed instruction in oral interpretation and found that reading effectiveness was significantly greater and reading rates slower in all programs. They also found that the combination of making the student voice conscious and introducing awareness of the selection's meaning effected more improvement than mere reinforcement.

In 1967, Reynolds dealt with the use of oral interpretation as a stimulus to attitude change. Reynolds tested two groups of listeners' reactions to literature on a controversial issue. He found that where subjects were not told of the experimenter's intent, there was more attitude

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change than when subjects were aware of the intent of the research.\textsuperscript{15}

Finally, Nonna Dalan compared the effects of on-stage focus with the effects of off-stage focus in a Reader's Theatre presentation. Her subjects included 122 undergraduate students who viewed two productions of "The Duchess of Malfi," one featuring off-stage focus and the other, on-stage focus. Using a questionnaire to measure comprehension and a semantic differential to measure aesthetic response, the study found no significant difference in comprehension between presentations, but significant differences did emerge in aesthetic response.\textsuperscript{16}

These studies, then, indicate the direction of quantitative research in oral interpretation which in the broadest sense the present study follows. More specifically, this study, can be viewed as a new step in oral interpretation research in that it is part of an increasing trend to employ the methodology of the social and behavioral sciences. As is evident, empirical measurements of this body of

\textsuperscript{15}Jerry Dee Reynolds, "Attitude Change by the Stimulus of the Oral Interpretation of Literature," (Unpublished Ph.D. dissertation, Department of Speech, The Ohio State University, 1966), p. 73.

knowledge are in their infancy.

**Approaches in Psychotherapy**

Psychotherapy, like oral interpretation, is just beginning to scientifically evaluate its endeavors. The main problem in evaluation in psychotherapy is the lack of adequate control due to the nature of illness studied. The patient's health needs demand primary concern; the structure of the study must yield to those needs. As Gottschalk and Auerbach observe:

> ...there exists a pessimistic preoccupation with the unreliability of observations, the lack of precision in assessing change, the difficulty in controlling potentially relevant variables, and the low general predictive capacity of the theoretical framework whatever it may be.\(^{17}\)

Regardless of this very real limitation, some significant research in psychotherapy has been done.

Before examining that research, it may be helpful to review the main types of psychotherapy and their purposes.

Wolberg divides psychotherapy into three main types; these are listed below with their objectives and approaches.\(^{18}\)

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\(^{17}\) *Op. cit.*, Gottschalk and Auerbach, p. 3.

<table>
<thead>
<tr>
<th>Type of Treatment</th>
<th>Objectives</th>
<th>Approaches</th>
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<td>SUPPORTIVE THERAPY</td>
<td>Strengthening of existing defenses. Elaboration of new and better mechanisms of maintaining control. Restoration to an adaptive equilibrium.</td>
<td>Guidance; environmental manipulation; externalization of interests; reassurance; pressure and coercion; persuasion; emotional catharsis and desensitization; prestige suggestion; suggestive hypnosis; inspirational group therapy, supportive adjuncts (somatic therapy, muscular relaxation, hydrotherapy).</td>
</tr>
<tr>
<td>REEDUCATIVE THERAPY</td>
<td>Deliberate efforts at readjustment, goal modification and the living up to existing creative potentialities, with or without insight into conscious conflicts.</td>
<td>Behavior and conditioning therapy; &quot;relationship therapy;&quot; &quot;attitude therapy;&quot; interview psychotherapy; client-centered therapy; directive therapy; distributive analysis and synthesis (psychobiologic therapy); therapeutic counseling; casework therapy; &quot;rational therapy;&quot; reeducative group therapy; family therapy; psychodrama; semantic therapy; philosophic approaches (existential, zen buddhist).</td>
</tr>
<tr>
<td>RECONSTRUCTIVE THERAPY</td>
<td>Insight into unconscious conflicts, with efforts to achieve extensive alterations of character structure. Expansion of personality growth with development of new adaptive potentialities.</td>
<td>Freudian psychoanalysis; Kleinian analysis; neo-freudian psychoanalysis (Adler, Jung, Siegel, Rank, Ferenczi, Reich, Fromm, Sullivan, Horney, Rado); psychoanalytically oriented psychotherapy; transactional approaches; existential analysis; adjunctive therapies (hypnoanalysis, narcotherapy, play therapy, art therapy, analytic group therapy).</td>
</tr>
</tbody>
</table>
The employment of oral interpretation as a psychotherapeutic technique fits most congruently into the supportive approach, "externalization of interests." Other methods in this category include: occupational, music, dance and movement, social and poetry therapies.\(^{19}\) Poetry therapy, the method most closely related to oral interpretation, is designed according to Leedy,\(^{20}\) to "incite patients to constructive action as well as to contribute to the evolvement of a life philosophy."\(^{21}\) This is accomplished through discussion of the poems and their meanings as they relate to the patients. While Leedy's approach is patient-centered, medical educators have recognized the value of teaching empathy to medical students through "paperback psychiatry."\(^{22}\) At the University of Wisconsin, sophomores in Medical School studied contemporary plays and novels to make them more sensitive to the emotional needs of their patients. Therefore, the employment of literature to teach empathy is not a startling concept.

With this basic understanding, one can examine the

\(^{19}\)Ibid., Wolberg, pp. 76-80.


empirical research done in the area of psychotherapy.

One of the most comprehensive reports on the present status of psychotherapeutic research was submitted by the Association for the Advancement of Psychotherapy under the editorship of Stanley Lesse. Representative of the entire book is Chessick and Bassan's evaluation of the "Experimental Approaches to the Concept of Empathy in Psychotherapy." This study measured empathy in the psychotherapeutic process by using a number of definitions. It found that objectively observed empathy varied the least whereas subjectively reported empathy varied the most. Objective empathy was measured physiologically by blood pressure, EKG, and galvanic skin response tests.

In another study in this volume, Jurjevich investigated the existence of spontaneous remission; that is, the lessening of psychiatric symptoms without psychotherapy. He found that the effects of the passage of time do verify the existence of this phenomena.

25 Ibid., p. 64-65.
Stollak, Guerney and Rothburg compiled 58 studies into a volume of research in psychotherapy. The main categories treated were: (1) research design, strategy, and philosophy; (2) research on outcome and evaluating; (3) methods to predict the course of psychotherapy; (4) research on the process and methods of evaluating the process; (5) the psychotherapeutic relationship; (6) new psychotherapy variants and research methods—therapy and methodology.27

Commenting in his introduction to this volume, Carl Rogers notes:

Psychotherapy at the present time is in a state of chaos. ...This situation makes inevitable the development of a new fact-finding attitude—a more objective appraisal of different types of change in personality and behavior, and a more empirical understanding of the subtle subjective conditions which lead to these changes.28

This statement reflects the concern of psychotherapy over its previous lack of sound scientific data.

Reviewing the recent research in psychotherapy, one perceives a trend, as in oral interpretation, away from


purely subjective, intuitive observations towards a more precise measurement of change in psychotherapy.

Communication Problems and Psychotherapy

"The communicative act is at the very heart of psychopathology,"29 according to Joseph Zubin. His assessment reflects the view held by a number of theorists and practitioners of psychotherapy. In recent years, an ever-increasing group of psychotherapists have turned to an examination of communication theory (and learning theory) for insight into the problems of the emotionally disturbed.

As Rogers submits,

The whole task of psychotherapy is the task of dealing with a failure in communication. The emotionally maladjusted person, the "neurotic," is in difficulty first, because communication (within himself) has broken down and, second, because, as a result of this, his communication with others has been damaged.30

Ruesch, one of the first psychotherapists to recognize the potential value of communication theory, suggests:

... Because the individual afflicted with disturbances of communication is unable to correct—in part or as a whole--


his inappropriate attitudes, beliefs, thoughts, feelings and actions, an attempt is made to teach him those methods and techniques which will enable him to correct his information and performance.\textsuperscript{31}

Because of this recent realization that the disturbed person has difficulty in communicating, most studies have focused on the expressive aspect of communication. Ruesch further emphasizes the above when he states:

\begin{quote}
Therapeutic communication is remedial in that a person who has learned to relate effectively will be able to accept the inevitable while steering his existence in matters where he has some choice.\textsuperscript{32}
\end{quote}

That "relating effectively" indicates an interest in the subject as communicator, rather than communicatee. The present study investigates the disturbed communication patterns in terms of the communicatee. In doing so, it looks at the listening, rather than the expressive, aspects of communication.

As far as can be determined, only one recent study exists regarding the audience aspects in psychotherapeutic communication. Its primary interest was the occurrence attitude change in an audience exposed to psychodrama. Greenberg found significant differences in attitudes evident


after exposure to psychodrama.  

Other studies in psychotherapy-communication are those of Robbins and Jones. Robbins explored the correlation between certain communication variables (the extent to which the individual was seen as a source of information; success in having questions answered; success in controlling group; status in group; effect of his socially positive behavior on group) and mental wellness in a married couples psychotherapy group. His study revealed positive correlations between all communication variables with wellness, except the one related to socially positive behavior.

The purpose of Jones' study was to analyze leadership and communication functions of co-therapists in a married couples psychotherapy group with particular focus on meaning clarification. Results indicated high correlation between proportion of clarification contributions made by therapists and those made by patients. A high correlation was also found between the amount of meaning clarification made by each patient and his level of wellness. This


last finding substantiates Ruesch's theory that once communication begins to be restored, the patient begins to recover.

Of related interest is Horowitz' report on "Listening and Attitude--The Interaction of Cognition and Affect." Horowitz asserts that listening is not just message reception, but involves an attitude itself. He further states that both listening and attitude tap deep psychological processes and are, therefore, interdependent, though not co-equal processes. He concludes that

Listening is a cognitive process, and can affect and change attitude only under appropriate conditions. In contrast, attitude is an affective and motivational process and exists as a prior condition to all cognitive functioning. Hence, attitude can determine not only what is listened to and retained, but even whether one listens at all.36

While no previous studies have measured oral interpretation as a psychotherapeutic technique, there has been some use of methods which form a rationale for oral interpretation therapy. Among those methods are bibliotherapy in particular and those techniques listed under Wolberg's "externalization of interests" in general. These therapies

operate on the premise that the emotionally disturbed person is interested mainly in his difficulty. His concentration is centered, almost completely, upon his problems. Again, Horowitz' belief (p.18) that attitude may hold the key to listening has pertinence here. In order to reverse this introverted tendency, an externalization of interests is attempted through the use of art, music, work, and bibliotherapy, to name just a few. Bibliotherapy, most extensively used in England, is defined by Kinney as:

A program of selected activity involving reading materials, planned, conducted and controlled under the guidance of a physician as treatment for psychiatric patients and utilizing, if needed, the assistance of a trained librarian.37

Among the purposes of bibliotherapy outlined by Appel are:

...to help the patient develop a clarification of his difficulties and contribute to the development of 'insight' into his condition.
...to implement the experience of others in effecting a cure.38

In some cases, the medical librarian selects the literature and guides the patient in his reading program. From the reports reviewed, bibliotherapy can aid both the physically


and mentally ill. The use of bibliotherapy indicates that literature can be employed and has been employed, to help those who are ill in body and in mind. Powell holds that bibliotherapy has its greatest value for those patients who are "verbal-intellectual." He states that they gain most reward and most often transfer openness into group therapy. It is believed that the same group should benefit most from oral interpretation therapy. Yet, there is an added dimension to oral interpretation listening therapy. It may offer a new means of reaching those who could benefit from bibliotherapy, but who, for some reason or another, don't like to read or are unable to read.

Another type of therapy which has relevance to this study is psychodrama. Psychodrama features a stage, patient, director, auxiliary ego's and the audience. It relies on "spontaneity" on the part of the patient and provides an emotional catharsis for him, and, sometimes, one for the audience. For the most part, psychodrama focuses on the communicator, rather than the communicatee. Its importance to this study, however, is that it seeks an answer to emotional disturbance through a communicative act.

A similar, and quite topical, approach to psycho-

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therapy is "soap opera therapy." Lazarus and Bienlien's experiment used nine patients who were not considered good candidates for group psychotherapy because they were highly defensive and unable to communicate about emotional events. These subjects viewed soap operas on television and over a period of weeks improved to the point that they could join regular therapy sessions. The researchers suggest that the patients were able to easily identify with the soap opera situations and discuss them without being threatened. As time passed, they related stories about themselves similar to those viewed. All in all, the television soap operas provided a point of departure for both emotional catharsis and re-education.\(^4^1\)

The rationale for oral interpretation listening therapy is derived from all of the above. It relates to bibliotherapy in that it offers literature for listening for the patient. The literature chosen for this study was optimistic in nature, featuring victory over trials and hardship. Oral interpretation listening therapy relates to psychodrama and soap opera therapy in that both offer catharsis through identification. Unlike, psychodrama which relies heavily upon the patient's "spontaneity," oral interpretation listening therapy protects the threatened patient from

verbal demands, and, hence, premature verbal exposure. As a final advantage, for those who do not or prefer not to read, listening to oral interpretation may provide the same opportunities for insight as are derived from bibliotherapy.

**Summary**

The purposes of this study are threefold: (1) to investigate a previously untested use (beyond the purely aesthetic) for oral interpretation; (2) to explore a new approach in psychotherapy; (3) to lend insight into the communication problems of the emotionally disturbed.

Chapter II presents the structure and rationale of the experimental design including brief explanations of the methodological techniques used.

Chapter III is the analysis of the data obtained in the experiment. Chapter IV draws conclusions, and presents brief case histories. The final chapter summarizes the study and offers suggestions for future research.
CHAPTER II
EXPERIMENTAL METHODOLOGY

In order to relate directly to the threefold investigation outlined in Chapter I, an experiment was designed to test if oral interpretation is effective as a psychotherapeutic technique. Three main measurements were used in the study: cloze procedure, word association and modified case histories. The cloze and word association tests are quantitative measures while the case history is qualitative.

TABLE 2
GENERAL DESIGN FOR CLOZE PROCEDURE TREATMENT

<table>
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<tr>
<th>Oral Interpretation</th>
<th>Listening</th>
<th>Reading</th>
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<tbody>
<tr>
<td>Trial 1</td>
<td>Discussion</td>
<td>No Discussion</td>
</tr>
<tr>
<td>Trial 2</td>
<td>Discussion</td>
<td>No Discussion</td>
</tr>
<tr>
<td>Trial 3</td>
<td>Discussion</td>
<td>No Discussion</td>
</tr>
</tbody>
</table>

This table illustrates the design for manipulating four variables: listening, reading, discussion, and no discussion over a period of three trials. This test employs a $2 \times 2 \times 3$ factorial design with repeated measures.
A complete discussion of the testing activities for each group may be found later in this chapter.

TABLE 3
GENERAL DESIGN FOR THE WORD ASSOCIATION MEASURE

<table>
<thead>
<tr>
<th>Experimental Group</th>
<th>Word Association Pre-Test</th>
<th>Literature Series</th>
<th>Word Assoc. Post Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>Word Association Pre-Test</td>
<td>No Literature</td>
<td>Word Assoc. Post Test</td>
</tr>
</tbody>
</table>

In this design, the experimental group is composed of the 28 subjects who formed Groups I-IV in the cloze procedure test. The control group was drawn from the same initial population as the experimental group (hospitalized, emotionally disturbed people who were currently in group therapy at Huntington State Hospital), the only difference being that they were not in the oral interpretation listening therapy sessions.

With these general designs in mind, one can now proceed to a further explanation of each of the three measures as well as to an extended footnote detailing the groundwork necessary for the study.

Experimental Methodology

As noted before, one qualitative and two quantitative measures were employed to gauge the effects of the
study. The quantitative measures were cloze procedure and word association while the qualitative measure was the case history. An examination of each of these methods may be helpful.

Cloze Procedure

Honigfeld defines cloze procedure as a "global measure of speech comprehensibility."\(^{42}\) Osgood considers cloze analysis as "an index of overall correspondence or commonality between the language systems of different individuals."\(^{43}\) In the past, cloze procedure has been used in testing reading comprehension as well as measuring readability.\(^{44}\) Dickens and Williams have demonstrated that cloze is a valid technique for measuring comprehension of spoken messages.\(^{45}\) Their research concludes that oral cloze procedure has certain advantages over multiple


choice tests as a research technique for studying the comprehension of the spoken message. This conclusion and the suggestion by Dickens and Williams that cloze scores may be more sensitive to individual differences and less dependent upon the type of message than the multiple choice test scores led to the decision to use cloze procedure as a measure of listening comprehension in this study.

Actual Structure for Cloze Procedure

"Cloze analysis involves the mutilation of a message by the deletion of every \textit{nth} word. Subjects complete the mutilated message by filling in the blanks, and scores are usually expressed by correct agreements with the source material."\textsuperscript{46} Research by Weaver and Kingston indicates that structural (every \textit{nth} word) deletions correlate significantly higher with vocabulary and reading comprehension sections of the Diagnostic Reading Test than do lexical (every \textit{nth} noun or adjective) deletions.\textsuperscript{47} For this reason deletions in this experiment were made randomly with every 15th word. The following is an example of a test paragraph which was actually employed in the treatment:

\begin{verbatim}
* * * Loc. cit., Honigfeld.
\end{verbatim}

\textsuperscript{46} Loc. cit., Honigfeld.

Original Passage

One dollar and eighty-seven cents. That was all. And sixty cents of it was in pennies. Pennies saved one and two at a time by bulldozing the grocer and the vegetable man and the butcher until one's cheeks burned with the silent hint of stinginess that such close buying implied. One dollar and eighty-seven cents. And the next day would be Christmas.

Cloze Procedure Testing Passage

One dollar and eighty-seven cents. That was all. And sixty _____ of it was in pennies. Pennies saved one and two at a _____ by bulldozing the grocer and the vegetable man and butcher until _____ cheeks burned with the silent hint of stinginess that such close buying _____ One dollar and eighty-seven cents. And the _____ would be Christmas.

In the experiment, each of the four main groups was tested by cloze procedure as follows:

<table>
<thead>
<tr>
<th>GROUP I</th>
<th>GROUP II</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listened to story on tape</td>
<td>Read story</td>
</tr>
<tr>
<td>Discussed story</td>
<td>Discussed story</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GROUP III</th>
<th>GROUP IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listened to story on tape</td>
<td>Read story</td>
</tr>
</tbody>
</table>

---

There were seven subjects in each group and each group met a total of six times and was exposed to ten stories. The detailed activities of each group in each meeting may be found in the Appendix.

In general, the sessions began with light conversation in order to put the subjects at ease. The researcher endeavored to practice Rogers' theory of "unconditional positive regard" in her patient contact, feeling that such an approach would be beneficial to the patient and would facilitate testing. After these few moments, depending upon their group, subjects listened to the oral interpretation of an optimistic, high school reading level story on a tape recording, or silently read that same story. The tapes used in this experiment were recorded by the researcher who has had intensive training in oral interpretation and has taught oral interpretation on the university level. Therefore, the recordings were made by a highly skilled reader, minimizing the possibility of inferior reading performance.

Care was also exercised in the choice of literature for the study. In order to stay within the average reading ability of the subjects, the literature was selected

\[\text{Loc. cit., Rogers.}\]
from high school reading texts. Coincidentally, most of the stories in high school texts met the optimism criterion. That is, these stories contained trials and hardships, but featured a victory over these odds. Since the thrust of the literature was hopeful and optimistic, the study hypothesized that a trend towards optimism in the experimental group might emerge.

When the subjects finished the selection, the cloze procedure test was administered (if it were a testing session). As outlined previously, the cloze test was the same story the subjects had just encountered, but with every nth or, in this case, 15th, word deleted. Those in the listening groups (I and III) heard the same story on tape during cloze testing, but with silent intervals indicating where a word had been deleted. In order to help avoid confusion and haste, a pause of ten seconds was inserted at the end of each sentence. Answers were written on a separate sheet of paper with numbered blanks to correspond with the silences on the tape. Those in the reading groups (II and IV) were given typed copies of the same story with blanks where words had been removed. Subjects filled in the blanks with the proper answers.

This cloze procedure testing was given three times
during the experiment: first, in the initial session after subjects had heard or read the first story; second, after subjects had been exposed to the fifth story—roughly mid-point in the experiment; and, finally, after subjects had finished the last (10th) story.

Since the testing procedure is so demanding, it was felt that additional testing would be overly exhausting and would induce test-fatigue and possible resistance to the experiment.

Each of the three stories used in the cloze procedure testing contained 128 word deletions. In this way, scoring of the correct replies was equalized.

Word Association

In addition to cloze procedure, change was calculated by means of a word association test. The word association test may be found in numerous and varied forms, but its main goal is to measure, at least to some degree, the human thought process. Robinson defines association theory as follows:

By association we may mean simply the establishment of functional relations among psychological activities and states in the course of individual experience.50

As used in this study, word association test refers to

the means of obtaining overt responses (words) elicited by a key word acting as a stimulus in a controlled situation. The word association test is commonly employed in two ways: first, in the study of the normative language response and meaning and, second, in the study of individual or idiosyncratic meaning. The second approach has often been employed to diagnose particular problems of the emotionally disturbed. Numerous observations have noted a link between psychopathological behavior and non-normative language patterns.

The most frequently used word association test is the discrete free association form. In this format, the subject supplies only one association to each key word, working as quickly as possible.

The word association test is directed at the measurement of the associative properties of responses. In many instances, objective criteria or ratings are used. For example, responses may be described in terms of the part of speech they represent; that is, whether they are the same or different from the stimulus word. In other cases, responses may be described in terms of the ratings on a semantic differential scale.

In order to simplify testing for the subjects, the discrete free association format was utilized in this

---

study. The word association test itself was specifically designed for this experiment. A pre-test was given prior to any oral interpretation listening or reading sessions. All 28 subjects in Groups I through IV in the oral interpretation listening experiment acted as the experimental group for this phase of the study. Seventeen other patients who were currently in group therapy but not in the oral interpretation testing, served as control. The post-test was administered at the end of the oral interpretation listening treatment.

The experimental and control groups responded to the following twelve words:

1. TALKING
2. READING
3. COMMUNICATION
4. LISTENING
5. HAPPINESS
6. COURAGE
7. LOVE
8. KINDNESS
9. FAMILY
10. FUTURE
11. LIFE
12. ME

These words were chosen because they reflected the three patterns of responses the study wished to tap: (1) communication; (2) main ideas in the stories; (3) personal regard. Words listed above as 1-4 deal directly with communication and some of its aspects while words 5-8 refer to the main idea or impression left by at least one of the stories to which the subjects had been exposed
and words 9-12 involve personal reactions of the subject about himself. With this breakdown the study could look at patterns of possible change in each of these three areas.

Analyzing the data yielded by these stimulus words, a panel of three judges, all active in psychotherapy, then evaluated the pre-test and the post-test responses according to positive, neutral, and negative word association response criteria.52 Judges were instructed to score a response as "positive" if it were oriented to reality, appropriate to the stimulus word, and indicative of mental health. If it did not meet these criteria, the judges were advised to score it as "negative." The "neutral category was reserved for responses which the judges did not feel fit into either the positive or negative ends of the continuum.

Once the judges' scores were received, they were subjected to a test of the reliability of the means to determine agreement between judges. Following this measurement, t-test scores were calculated between pre- and post-

52 Judging the word association responses were: Wm. Gibson, M.D., Director of the Mental Retardation Training Center, The Ohio State University, Columbus, Ohio; Sandra Eade Foster, M.A., of the Alcoholic Treatment Center, London, Ontario, Canada; and Frank Schimpfhauser, M.A., formerly a psychologist with the State of Ohio Department of Mental Hygiene and Correction.
tests to see if any change had occurred. As a final measurement, correlations between word groupings (Communication, Literature, and Personal) were examined to ascertain if they did, indeed, tap different patterns of response.

Modified Case Histories

Before quantitative methods and scientific standards were widely known and practiced, the bulk of psychotherapeutic research depended upon the case history to report results. Even with the advent of these more objective measures, the case history still has value. It is the case history which lends insight into the individual reaction and provides the background of each subject.

The brief case history form supplied here is designed to indicate the vital statistics of the subjects, the nature of their presumed emotional disturbances, the length of present and past institutionalization, and their degree of education. In addition to these facts, any subject comment or action believed by the researcher to be relevant to the study is included, as are the scores of the individual subject on the quantitative tests.

Subjects

Twenty-eight emotionally disturbed male and female patients institutionalized at Huntington State Hospital, Huntington, West Virginia and presently engaged in ongoing
group therapy comprised the experimental subjects for this study. The sex ratio between subjects was fairly evenly distributed: 13 females and 15 males. Approximately 8 of the subjects had college educations or the equivalent, while 14 had high school, or near high school, educations, and 6 had eighth grade educations. Most subjects were from a low socio-economic level. A patient distribution according to presumed mental illness reveals:

- Alcoholism .................. 12
- Schizophrenia ................. 7
- Depressive Neurosis ........... 4
- Manic-Depressive ............. 2
- Paranoid-explosive Personality .. 1
- Inferiority Complex ............ 1
- Drug Dependence ............... 1

The control, numbering 17, was composed of patients at Huntington State Hospital who were also in group therapy, but who did not participate in the oral interpretation listening treatment. Of these 17, 7 were men and 10 were women. There were 4 members of the control group who had college educations or the equivalent, 10 who had high school diplomas and 3 who had not gone beyond the 8th grade. Again, most of these patients were from low socio-
economic levels. Distribution according to illness yielded the following:

- Alcoholism ................. 6
- Schizophrenia ................ 5
- Depressive Neurosis .......... 2
- Manic-Depressive ............ 1
- Inferiority Complex .......... 2
- Explosive Personality ....... 1

Pre-Study Preparation

The technical, procedural matters behind research are often overlooked in the publication of the study. However, since this study represents one of the first ventures of communication into psychotherapy, such background may be helpful to future researchers. This report is footnoted here for those who may find it of value.  

53 The state mental hospital is technically closed to outside researchers; that is, in order to conduct research in this environment, one must be either a staff member or a volunteer at the institution. One may not simply drop in to do his research and then disappear. This policy holds true for both Ohio and West Virginia. In order to comply with this policy, the researcher officially volunteered her services at Huntington State Hospital, Huntington, West Virginia where this study was conducted. Moreover, prior to volunteering, the investigator contacted Dr. William Gibson, Director of the Mental Retardation Training Program at the Ohio State University, who in turn arranged with Martin Janis, Director of Mental Hygiene and Correction for the State of Ohio, to have this research request in West Virginia supported by Ohio. With this
Before research was actually begun, frequent trips were made to the hospital for orientation. During this time, under the direction of the hospital's chief psychologist, Dr. Joe Carter, efforts were made to acquaint the researcher with the floor nurses, aides, physicians, and the switchboard operator. Later, these acquaintances became crucial factors in the conduct of the study. Furthermore, exposure to ongoing testing and therapy was afforded the investigator.

While all of the above may fit into the category of interpersonal communication, one cannot stress enough the necessity for cooperative relationships between incoming researchers and the resident staff. The researcher must always bear in mind that it is he who is possibly disrupting routine and it is the hospital which is extending the opportunity for him to do so.

In addition to these considerations were sheer logistical problems. As formerly arranged, most patients had work therapy in the mornings and psychotherapy in the afternoons. Therefore, the problem of meeting with four different groups of subjects twice a week for two and one half weeks loomed large. In this case, the then current supervisor of the hospital, Dr. Gaston de Lemos, at the suggestion of Dr. Carter, accorded this research top patient priority, thereby releasing them from other commitments for this study. This support was invaluable.

Even though the study did have top priority, testing times were arranged, insofaras possible, not to conflict with existing programs.

Once patient time was freed, the problem of a suitable meeting place arose. Although the hospital had several classrooms and a therapy room, they had been committed previously for use by other staff members. Again, intercession by the head psychologist to the secretary in charge of room assignment yielded the solution. For the entire course of the study, approximately three months, all sessions were held from 1 p.m. to 2 p.m. and from 3:30 p.m. to 4:30 p.m. in the staff library of the hospital. This was an ideal arrangement due to the quiet subdued atmosphere and understanding librarian, Mrs. Loretta Williams.

With the major obstacles overcome, minor difficulties continued to arise. It frequently occurred that a patient was either too ill or "forgot" to attend a session. In
Summary

Chapter II has provided models of cloze procedure and word association tests used in this study. It has also reviewed and further defined the quantitative and qualitative tests illustrated by those models and has provided additional insight into the technical problems of conducting research in a state mental hospital.

The final designs of the cloze procedure and word association tests are found in Tables 4 and 5, respectively.

**TABLE 4**

**SPECIFIC DESIGN FOR CLOZE PROCEDURE TREATMENT**

<table>
<thead>
<tr>
<th>Trial</th>
<th>Oral Interpretation</th>
<th>Listening</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Discussion</td>
<td>No Discussion</td>
<td>Discussion</td>
</tr>
<tr>
<td>2</td>
<td>Discussion</td>
<td>No Discussion</td>
<td>Discussion</td>
</tr>
<tr>
<td>3</td>
<td>Discussion</td>
<td>No Discussion</td>
<td>Discussion</td>
</tr>
</tbody>
</table>

53 (cont'd)

these cases, a make-up session had to be arranged. Throughout the study, the main concern had to be with the patient's well-being, and all research plans were subordinate to that concern.

The importance of knowing the staff became evident as the researcher wished to contact patients. Immediately prior to the time the patients returned to the wards before lunch, the researcher would call the hospital and ask the floor aides to remind specific patients of their therapy session. This network of switch-board operator--aide--nurse communication insured patients' attendance.
The null hypotheses for this study are:

1. There is no significant difference between the pre-test and post-test pattern of responses of the experimental group in the word association test.

2. There is no significant difference between the pre-test and post-test pattern of responses of the control group in the word association test.

3. There is no significant difference in the pre-test and the post-test pattern of responses between the experimental and control groups in the word association test.

4. There is no significant difference in the pattern of responses yielded by the word association test.
between the Communication, Literature, and Personal word groupings for the experimental group.

5. There is no significant difference between the groups which received oral interpretation listening therapy and those which read the literature.

6. There is no significant difference between the groups which discussed the literature and those which did not.

7. There is no significant difference between the groups which read and discussed the literature and those which listened and discussed the literature.

8. There is no significant difference in scores between trials.

9. There is no interaction between procedure (oral interpretation listening/reading therapy) and time.

10. There is no interaction between discussion and time.

11. There is no interaction between procedure, discussion and time.
CHAPTER III
ANALYSIS OF DATA

The intent of this chapter is to present a review of the statistical analysis made on the data gathered during this experiment. The word association test is considered first, followed by an analysis of the cloze procedure tests. Chapter IV draws the major conclusions for this study from the results of the tests. In addition, Chapter IV offers pertinent case histories alluded to in Chapter II.

Analysis of the Word Association Test

As described in Chapter II, the word association test was administered to 28 subjects in the experimental group and 17 in the control group ($N_T = 45$). A panel of three judges rated the responses of each subject in the pre- and post-test on each stimulus word (a total of 12) by indicating if, in their opinions, the response was positive, negative, or neutral. A response was scored "positive" if the judge felt it was oriented to reality, appropriate to the stimulus word, and indicative of mental health. If the judge felt the opposite were true, he scored the word "negative." If neither of these categories fit, the judge scored the word "neutral."
In order to determine the degree of agreement among judges' ratings for each of the twelve stimulus words, the judges' scores were subjected to a test of the reliability of the means.\textsuperscript{54} The analysis of variance used to measure the degree of agreement here has been previously employed by Hsu and Feldt in measuring reliability between a small number of judges.\textsuperscript{55} Using a computer program developed by William Spain, Jr. and Peter Hanson, graduate students in the College of Education at The Ohio State University, reliability co-efficients were obtained for each of the stimulus words in the pre- and post-tests, a total of 24 co-efficients. A score for a stimulus word for one judge was obtained by assigning values to the judge's reaction to the subject's response. For example, if the judge believed that the subject's response "conversation" to the stimulus word "TALKING" was positive, the value assigned by the researcher was one; if neutral, the value equalled two; if negative, three. Inspection of these 24 values revealed a sharp break at .6. All but


\textsuperscript{55}Tse-Chi Hsu and Leonard Feldt, "The Effect of Limitations on the Number of Criterion Score Values on the Significance Level of the F-Test," \textit{American Education Research Association Journal}. Vol. VI, No. 4., p. 515.
three words had reliability co-efficients of .6 or higher; these three words, "COURAGE," "KINDNESS," and "ME" were eliminated in the ensuing analysis.

Once the above tests were completed, the stimulus words were grouped according to (1) Communication, (2) Literature, (3) Personal patterns of response by summing the individual scores for each word in each group. Since three words had been deleted, there were unequal categories. Communication words were: "TALKING," "LISTENING," "READING," and "COMMUNICATION." Literature words were: "HAPPINESS" and "LOVE," and Personal words were "FAMILY," "FUTURE" and "LIFE." Once grouped, these three categories were utilized for the remainder of the analysis.

These groups of words (Communication, Literature, and Personal) were next subjected to a series of t-tests to determine if any change had occurred for the word association hypotheses. Tables 6, 7, and 8 illustrate the results of these t-tests. Further explanations for each hypothesis may be found below the t-test tables.

### TABLE 6

<table>
<thead>
<tr>
<th>Word Group</th>
<th>df</th>
<th>t</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>26</td>
<td>.36</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Literature</td>
<td>26</td>
<td>1.88</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Personal</td>
<td>26</td>
<td>.56</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

* 2 tailed test
### TABLE 7

**t** test of mean differences between pre- and post-tests for the control group

<table>
<thead>
<tr>
<th>Word Group</th>
<th>df</th>
<th>t</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>15</td>
<td>1.43</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Literature</td>
<td>15</td>
<td>0.20</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Personal</td>
<td>15</td>
<td>0.76</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

*2 tailed test

### TABLE 8

**t** test of mean differences between experimental and control groups (pre minus post tests)

<table>
<thead>
<tr>
<th>Word Group</th>
<th>df</th>
<th>t</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>45</td>
<td>1.00</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Literature</td>
<td>45</td>
<td>1.17</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Personal</td>
<td>45</td>
<td>0.20</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

*2 tailed test

1. There is no significant difference between the pre-test and post-test pattern of responses of the experimental group in the word association test.

The comparison of pre- and post-test responses in each of the three word groupings failed to reach a level of significance. The null hypothesis was not rejected.

2. There is no significant difference between the pre-test and post-test pattern of responses of the control group in the word association test.

Each of the comparisons of the three groupings of
words failed to reach a level of significance when measured by the \( t \)-test. The null hypothesis was not rejected.

3. There is no significant difference in the pre-test and post-test patterns of response between experimental and control groups in the word association test.

In comparing the results of the differences scores (between pre- and post-tests) of the experimental group with those of the control group, no significant difference emerged. The null hypothesis was not rejected.

4. There is no significant difference in the patterns of response yielded by the word association test between Communication, Literature, and Personal groupings for the experimental group.

A correlation test was employed to reveal if these categories were measuring the same or different responses. The following tables indicate the degrees of correlation found.

**TABLE 9**

**CORRELATION OF WORD GROUPINGS: PRE-TEST**

<table>
<thead>
<tr>
<th>Word Groupings</th>
<th>Communication</th>
<th>Literature</th>
<th>Personal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>1.00</td>
<td>.43</td>
<td>.43</td>
</tr>
<tr>
<td>Literature</td>
<td></td>
<td>1.00</td>
<td>.72</td>
</tr>
<tr>
<td>Personal</td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>
TABLE 10
CORRELATION OF WORD GROUPINGS: POST-TEST

<table>
<thead>
<tr>
<th>Word Groupings</th>
<th>Communication</th>
<th>Literature</th>
<th>Personal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>1.00</td>
<td>.49</td>
<td>.77</td>
</tr>
<tr>
<td>Literature</td>
<td>1.00</td>
<td>1.00</td>
<td>.54</td>
</tr>
<tr>
<td>Personal</td>
<td></td>
<td></td>
<td>1.00</td>
</tr>
</tbody>
</table>

These results reveal a significant difference from a random correlation. For 26 degrees of freedom, .37 is significant and the null hypothesis is not rejected. Recognizing this, it still appears that certain word groupings show greater correlations in the pre-test (Literature-Personal) than in the post-test and vice-versa (Communication-Personal).

Analysis of Cloze Procedure

The cloze procedure testing format consisted of a three factor experiment with repeated measures which was subjected to an analysis of variance. Each of the variables—time, oral interpretation listening therapy, and discussion—was scrutinized for change.

Assumptions underlying the analysis of variance test were according to Winer56 and can be supported by the experimental arrangement.

56Loc. cit., Winer, p. 337.
Subjects involved in the cloze procedure testing phase of this study were divided into four groups. The following is a list of the groups with their experimental activities:

Group I: Listened to oral interpretation tape of story and then discussed the story.

Group II: Read the story silently and then discussed it.

Group III: Listened to oral interpretation tape of the story.

Group IV: Read the story silently.

In this design, Groups II and IV acted as control for the discussion variable in Groups I and III.

Thus, the elements of time, discussion and oral interpretation listening therapy were all experimental variables, as seen below in Table II.

In the analysis of variance, each variable was examined for interaction with all other variables. The results of the analysis of variance for this three factor experiment with repeated measures are seen in Table 12 and reported below each stated null hypothesis (for cloze procedure).

5. There is no difference between the groups which received oral interpretation listening therapy and those
which read the literature.

The high level of significance registered in main effect A indicates that differences do indeed exist between the listening and reading groups. The $F$-value achieved was 122.11 which had significance at the .01 level. The null hypothesis was rejected.

### TABLE II

**DESIGN FOR CLOZE PROCEDURE TEST**

<table>
<thead>
<tr>
<th>READING (A₁)</th>
<th>DISCUSSION (B₁)</th>
<th>TIME (C₁)</th>
<th>TIME (C₂)</th>
<th>TIME (C₃)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FIRST TRIAL</td>
<td>MID TRIAL</td>
<td>FINAL TRIAL</td>
<td></td>
</tr>
<tr>
<td>NO DISCUSSION (B₂)</td>
<td>FIRST TRIAL</td>
<td>MID TRIAL</td>
<td>FINAL TRIAL</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>READING (A₂)</th>
<th>DISCUSSION (B₁)</th>
<th>TIME (C₁)</th>
<th>TIME (C₂)</th>
<th>TIME (C₃)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FIRST TRIAL</td>
<td>MID TRIAL</td>
<td>FINAL TRIAL</td>
<td></td>
</tr>
<tr>
<td>NO DISCUSSION (B₂)</td>
<td>FIRST TRIAL</td>
<td>MID TRIAL</td>
<td>FINAL TRIAL</td>
<td></td>
</tr>
</tbody>
</table>

6. There is no significant difference between the groups which discussed the literature and those which did not.

Main effect B's significance indicates that differences do exist between the two groups. $F$-value attained
was 5.56. This value was significant at the .05 level (needed for .05 level, 4.26). The null hypothesis was rejected.

**TABLE 12**

ANALYSIS OF VARIANCE FOR CLOZE DATA

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>df</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>BETWEEN SUBJECTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A (Procedure)</td>
<td>1</td>
<td>51,752.68</td>
<td>122.11</td>
<td>.01*</td>
</tr>
<tr>
<td>B (Discussion)</td>
<td>1</td>
<td>2,357.44</td>
<td>5.56</td>
<td>.05*</td>
</tr>
<tr>
<td>AB</td>
<td>1</td>
<td>41.44</td>
<td>41.44</td>
<td>.01*</td>
</tr>
<tr>
<td>Subjects within groups</td>
<td>24</td>
<td>423.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WITHIN SUBJECTS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C (Trials)</td>
<td>2</td>
<td>530.46</td>
<td>4.28</td>
<td>.05*</td>
</tr>
<tr>
<td>AC</td>
<td>2</td>
<td>1.75</td>
<td>.01</td>
<td>.05</td>
</tr>
<tr>
<td>BC</td>
<td>2</td>
<td>82.44</td>
<td>.67</td>
<td>.05</td>
</tr>
<tr>
<td>ABC</td>
<td>2</td>
<td>48.01</td>
<td>.39</td>
<td>.05</td>
</tr>
<tr>
<td>C x subjects within</td>
<td>48</td>
<td>123.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*denotes significance

7. There is no significant difference between the groups which read and discussed the literature and those which listened and discussed the literature.

A highly significant AB relationship indicates that the effect of discussion is different in the two (reading-listening) A groups. F-value attained was 41.55 which had significance at the .01 level, (7.82 was needed
for .01 level). The null hypothesis was rejected.

8. There is no significant difference in scores between trials.

The mean number of correct answers changed signifi-
cantly during the blocks of trials. F-value attained
was 4.27 (p = .05) while 4.08 was necessary to eliminate
chance. The null hypothesis was rejected.

9. There is no interaction between procedure (oral
interpretation listening therapy/reading) and time.

The null hypothesis was not rejected.

10. There is no interaction between discussion and
time.

The null hypothesis was not rejected.

11. There is no interaction between procedure, dis-
cussion, and time.

The null hypothesis was not rejected.

The failure to reject null hypotheses 5-7 indicates
the mean differences of AC, BC, and ABC are not dependent
upon their combination with time.

These findings are discussed further in Chapter IV.
CHAPTER IV
DISCUSSION OF RESULTS

The two fundamental considerations of this research project are to determine if (1) patterns of verbal free association responses change as a result of oral interpretation listening therapy, and (2) if listening ability can be improved through oral interpretation listening therapy. In the broader sense, this study hopes to explore a possible new approach in psychotherapy and to investigate the communication problems of the emotionally disturbed. Moreover, this study may provide additional uses for oral interpretation.

In order to examine the results of this experiment carefully, major conclusions are first drawn for the word association test and then for the cloze procedure. Brief case histories conclude the chapter.

Major Conclusions--Word Association Test

The first three hypotheses of this research center upon the emergence of pre- and post-test differences in the experimental and control groups, and on differences between the experimental and control groups in the word association test. None of these hypotheses were rejected.
indicating that no significant change occurred between the pre- and post-tests. This result suggests that the responses stimulated by the test words remained the same even after the oral interpretation listening treatment. This result, when viewed alone, seems to repudiate the belief that modification of patterns of verbal free association occurs during treatment.

However, an added dimension emerges when the results of the fourth hypothesis are scrutinized. The fourth hypothesis states that there is no significant difference in the pattern of responses yielded by the word association test between the Communication, Literature, and Personal groupings for the experimental group.

As was evidenced in Chapter III, each of these word groupings was compared with the other two word groupings in both the pre- and post-tests. At the .05 level, a correlation of .37 was considered significantly different from a random relationship for each of the word groupings. This test, then, established that there was a low probability that the correlation in this population was 0. Accepting this, one still notes that for the two different points in time (pre-test and post-test) two out of the three word groupings' correlation co-efficients appear to be different. For example, in the Communication-Personal pre-test
grouping, the correlation co-efficient is .43 while it is .77 in the post-test. What is of interest here is the seeming change between pre- and post-tests. It may indicate that the patterns of response for the word groupings are not the same from pre- to post-test.

For purposes of further discussion, and recognizing that all correlation co-efficients are significantly different from 0, the different co-efficients will be referred to as relatively low if they are at .4, or as relatively high if they are at .7. In this discussion, relativity refers to the seeming difference between .4 and .7.

Examining each of these relationships, several differences come to light. A seemingly low correlation exists between Communication and Literature on both the pre- and post-tests. This indicates that a very low degree of predictability may be present between these two variables. Since that low predictability is found in both pre- and post-tests for the Communication-Literature word grouping, it appears that the oral interpretation listening therapy had no effect on the subject's perception of these two word sets.

A different occurrence is seen in the Communication-Personal correlation between pre- and post-tests. In the pre-test, a relatively low correlation is evidenced between
these two variables whereas in the post-test, a relatively high correlation is apparent. Some type of change between the pre- and post-test seems possible when viewed in this manner.

The final set of words, Literature-Personal, have relatively high correlation scores in the pre-test, but relatively low average correlation in the post-test, also indicating some possible change. Statistically, what may be happening here is a shift in word association predictability for certain stimulus word groupings. This may be due to the oral interpretation listening therapy. To clarify, it is possible that the subjects who felt in the pre-test that the Communication and Personal word groupings were vaguely related to each other, experienced a shift in response to those words during treatment—causing a relatively high correlation to emerge in the post-test. When illustrated, this movement might appear as follows:

\[
.7(\text{POST}) \leq -4(\text{PRE})
\]

<table>
<thead>
<tr>
<th>HIGH POSITIVE</th>
<th>RANDOM</th>
<th>HIGH NEGATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>(+1)</td>
<td>(0)</td>
<td>(-1)</td>
</tr>
</tbody>
</table>

The shift may have occurred because the subject began to relate his idea of communication to his idea of himself. Perhaps, prior to exposure to the communicative act of oral interpretation, the subject did not perceive any relationship between communication and himself because he
lacked communicative skill (as evidenced by the cloze procedure test). Once he began to communicate more successfully, he may have then identified himself with communication.

Conversely, in the Literature-Personal grouping, a relatively high correlation is found in the pre-test while a relatively low correlation appears in the post-test. These subjects, whose pre-test scores indicated a strong relationship between the Literature and Personal word groupings revealed a weaker relationship following treatment. One of the unstated, but underlying, questions of this study was: could exposure to literature, and the optimistic ideas therein, change the subject's views of himself? The results of this test appear to indicate that a change does occur, but in a direction which was unanticipated. It appears that after treatment, the subjects perceive a greater difference between these word groupings than they did before treatment. Indeed, before treatment, the experimental group indicated that they felt that the Literature and Personal groupings measured somewhat the same responses. Since the literature dealt with optimistic and somewhat idealistic situations, it may be that after treatment the subjects saw a greater disparity between themselves and the literature. Instead of incorporating the literature into their perception of themselves, the
subjects actually separated it from themselves. Such a change may indicate that the literature to which they listened did not mesh with their views of themselves to any significant degree. Using the word "LOVE" in the Literature category as an example, one might theorize that many of the emotionally disturbed may have had difficulty in their past experience with love. Consequently, when they listen to an idealistic, optimistic story about love, they feel it does not totally agree with their reality and, therefore, their entire view of the literature changes in relation to themselves.

These findings are only indicative of trends, however, and are cautiously reported.

**Major Conclusions--Cloze Procedure**

The fifth null hypothesis stating that no difference exists between the groups which received oral interpretation listening therapy and those which read the literature was rejected. An examination of the $A_1$ and $A_2$ group means indicates that the groups which read the literature ($A_2$) scored approximately twice as high on the initial test than did the groups which listened to the literature ($A_1$). The rate of improvement of $A_1$, on the other hand, was similar to $A_2$'s improvement. The scores of $A_1$ did not, at any time during test, approach
those of $A_2$. This result supports the belief that those who are emotionally disturbed do indeed have more difficulty listening than they do reading. This may possibly be accounted for in two ways: (1) In the listening test, the only cues available to the subject were verbal; therefore, if his concentration waivered, the subject would be apt to miss an answer whereas those who read had the stimulus sentence before them at all times during testing and could, therefore, rescan if they wished; (2) Most people, both those presumed normal and those presumed disturbed, are taught to read, but not, ordinarily, to listen. Consequently, listening skill is a totally new challenge in a world which mistakenly assumes that everyone has that skill.

The test results indicated that in the sixth hypothesis differences do exist between those who discussed the literature and those who did not. Consistently higher scores were attained by those groups which discussed the literature. Since discussion revolved around the story content, it is believed that the knowledge that they would be expected to contribute to the discussion may have motivated the subjects to be more attentive to the literature. In addition, discussion, by its very nature, tends to clarify, and may have led to deeper understanding of
the story content for these groups.

In the seventh hypothesis, differences emerged between the groups which read and discussed the literature and those who listened and discussed the literature. While, as noted above, all groups who discussed the literature scored higher than those who did not, the groups which read and discussed scored higher than those who listened and discussed. This result indicates that in this approach to psychotherapy, the inclusion of discussion is more necessary to groups which listen to the literature than those who read it.

The eighth hypothesis stating that no differences in scores occurred between trials was rejected. Each experimental group, regardless of specific treatment, scored higher from one trial to the next. The greatest gain was made between the first and second trials, but higher scores were noted on the final trial as well. This improvement may be attributed either to increased listening or reading ability or to learning how to take the test. This result follows the classic learning curve.

The ninth hypothesis stating that there was no interaction between procedure and time was not rejected. The tenth hypothesis which stated there was no interaction between discussion and time was not rejected either. Nor was the eleventh hypothesis which held that
there was no interaction between procedure, discussion, and time, rejected. The inability to reject these three hypotheses indicates that there were non-significant interactions between variables.

From the above examination, it would seem that the reading and discussion of literature is a more effective means of psychotherapy than the listening approach, if the test scores alone are used to gauge effectiveness. There are other qualitative indications, however, which suggest that the listening method may be effective for those who have difficulty reading. The following case histories may illustrate this point.

**Brief Case Histories of Subjects**

In Chapter II, a short, overall description of the subjects appeared. That description sketched the male-female ratio, type of emotional disturbance, educational level, and the number of subjects in the study. At this juncture, that subject sketch is expanded. The following three tables (13, 14, and 15) reveal the age, marital status, and the previous hospital commitments of the subjects as a whole. Following these tables is a case history for each subject whose name has been altered to protect his privacy.
TABLE 13

DISTRIBUTION OF SUBJECTS ACCORDING TO AGE

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Number of Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-24</td>
<td>5</td>
</tr>
<tr>
<td>25-35</td>
<td>6</td>
</tr>
<tr>
<td>36-45</td>
<td>10</td>
</tr>
<tr>
<td>46-55</td>
<td>4</td>
</tr>
<tr>
<td>56+</td>
<td>3</td>
</tr>
</tbody>
</table>

TABLE 14

DISTRIBUTION OF SUBJECTS ACCORDING TO MARITAL STATUS

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Number of Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>8</td>
</tr>
<tr>
<td>Single</td>
<td>6</td>
</tr>
<tr>
<td>Divorced</td>
<td>9</td>
</tr>
<tr>
<td>Widowed</td>
<td>1</td>
</tr>
<tr>
<td>Separated</td>
<td>4</td>
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</tbody>
</table>

TABLE 15

DISTRIBUTION OF SUBJECTS ACCORDING TO PREVIOUS HOSPITALIZATION

<table>
<thead>
<tr>
<th>Previous Admissions</th>
<th>Number of Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
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<tr>
<td>1</td>
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<td>2</td>
<td>5</td>
</tr>
<tr>
<td>3+</td>
<td>4</td>
</tr>
<tr>
<td>4+</td>
<td>9</td>
</tr>
</tbody>
</table>

These tables indicate that most of the subjects were 36-45 years of age, were somewhat evenly distributed with regard to marital status, though there was a higher incidence of divorce and separation than of marriage and single-
ness. Finally, a high number of subjects have been previously hospitalized four or more times or have been in continuous treatment at the hospital for over a year (all those in 4+ category). There, the research involved many patients suffering from somewhat chronic emotional disturbances.

A closer examination of each subject may now be valuable. When looking at the relationship between the subjects' case histories and their test scores, the following should be kept in mind. First, in the word association test, the individual's score could have been a 1, 2, or 3, depending on the judge's rating it positive (1), neutral (2), or negative (3). For a total of 9 stimulus words as judged by 3 judges, each subject could have a score as high as 81 or as low as 27 with the median falling at 54. In this test, high scores are negative and low scores, positive. Therefore, as in golf, any lowering of the score during the treatment is considered positive, and any raising of the score, negative. Second, the cloze procedure tests were scored on a basis of 128 being perfectly correct; that is, a perfect agreement with the original literature. In the groups which listened to the stories (Groups I and III) the average for the initial cloze test was 30 and, for the final test, 35. In the groups which read the literature (Groups II and IV), the initial cloze mean was 74 and the
Specific Case Histories of Subjects

Cynthia Anderson, female, 21, single, from a metropolitan area, 1 year of college, hysterical personality with suicidal tendencies.

The subject was hospitalized following a series of hysterical outbursts at her mother (divorced) and an attempted suicide. In the previous year, Cynthia had borne an illegitimate child which she surrendered for adoption when the father did not suggest marriage. Cynthia was an extremely attractive, well-groomed, and seemingly intelligent girl. Hospital records indicated that she lived at home with her mother and worked as a personnel interviewer for an employment agency.

Reaction to Oral Interpretation Listening Therapy

From the first session, Cynthia had difficulty concentrating on the literature. While expressing interest in the group and exhibiting a good grasp of the story content, she was often restless. She regretted the end of therapy and remarked that she was glad something had forced her to think of something other than herself.

Cynthia's word association score (32) did not change from pre- to post-test, indicating little or no change in
her patterns of response. On the other hand, her cloze procedure scores were much higher than the Group II mean and support the contention that she understood the stories. Her initial cloze score of 111 dropped to 99 in the final test, which despite still remaining high, may indicate a waivering of concentration on Cynthia's part.

Calvin Bailey, male, 54, married, from a metropolitan area, 10th grade education alcoholic.

Though the subject had never been hospitalized before, he had been addicted to alcohol for over 30 years. His commitment was voluntary and decided upon when his wife threatened to leave him if he did not seek help.

Reaction to Oral Interpretation Listening Therapy

Though rather quiet, Calvin willingly participated in the therapy sessions. He felt that "The Man Who Had No Eyes" and the "Best Hated Man in Town" were selections which had meaning for him.

Calvin's word association scores moved from 40 to 49 in the testing, suggesting that his pattern of responses became less positive during testing. His cloze procedure scores for Group IV improved from 76 to 85, implying an improvement in listening skills.

Roger Ballmer, male, 45, divorced, from a small town, high
school education, chronic alcoholic.

This subject had been previously hospitalized three times for alcoholism. His manner appeared to be easy-going and he exhibited a wry sense of humor. Throughout therapy, he referred to the sessions as "classes" and to the researcher as "teacher."

Reaction to Oral Interpretation Listening Therapy

Roger stated, at the end of therapy, that he had enjoyed coming to the sessions. Beyond enjoyment, however, his scores in both the word association and cloze tests registered a small positive change. A member of Group III, Roger's cloze scores were 35 in the pre-test and 37 in the post-test—both high average scores. The subject's word association test moved in a positive direction from 33 to 31.

Alice Brooks, female, 37, divorced, from a small city, high school education, manic-depressive illness.

At the time of the study, this subject, the mother of five small youngsters, was in the midst of divorce proceedings. Consequently, though she was extremely co-operative, she had great difficulty concentrating.

Reaction to Oral Interpretation Listening Therapy

While the subject stated that she "liked" the sessions, she often didn't grasp the full meaning of the stories.
Her Group II cloze test score dwindled from 75 in the initial test to 55 in the final test. If reacting to the literature according to rote-memory, the subject scored high, but when the element of discussion entered the testing, Alice faltered. The subject's pattern of responses did move in a positive direction throughout the treatment, from 39 to 31.

Linda Burkhard, female, 23, single, from a metropolitan area, 9th grade education, schizophrenic.

This subject had been institutionalized since she was 13 years old. Five of those years were spent at Missouri State Hospital and the remainder at Huntington State Hospital. Characterized by abrupt mood swings, the subject often was either laughing hysterically or on the verge of tears. Since Linda had been at the hospital so long, she sometimes assumed a guidance role with new patients until they began to rely on her, at which time she would reject them. It was necessary for Linda to have constant oral stimulation; she fulfilled this need by dominating the conversation, chain-smoking, chewing gum, and eating excessively.

Reaction to Oral Interpretation Listening Therapy

Many of the stories appeared to have direct relevance to Linda. She recognized and understood the main themes
of the literature as evidenced by her contributions to the Group I discussion, and her improvement in cloze procedure scores, from 22 to 27. Perhaps, the most valuable aspect of the therapy for this subject, however, was the discussion. In discussion, Linda was forced to remain quiet at times and to listen to others before interjecting her next thought. The subject's word association scores (32 in the pre-test and 31 in the post-test) indicated only a slight positive movement in her patterns of response.

Sheldon Carson, male, 35, married, from a metropolitan area, B.S. degree in Art Education, inadequate personality.

This subject, with a severe inferiority complex, had great difficulty even being in the presence of others. Prior to his hospital admission four months earlier, Sheldon had taught art on the high school level. His teaching contract for the next year had not been renewed due to the subject's inability to control his students. He was the father of four young children and had married in his late twenties after the death of his mother with whom he had always lived.

Reaction to Oral Interpretation Listening Therapy

In the first sessions, the subject, who walked in a shuffling manner with eyes downcast, listened to the stories and made no comment. Towards the final testing,
he began to open up and to even initiate conversation rather than waiting for others to do so. At the close of testing, he made a point of telling the researcher that he enjoyed the Group I therapy. For Sheldon, being a member of a non-threatening group was probably the greatest benefit derived from therapy.

Sheldon's word association scores moved in a positive direction, from 39 to 31, suggesting a change in his patterns of response. His cloze procedure scores fell from 48 to 42 throughout testing which may indicate that his attention was upon group processes rather than story content.

John Casey, male, 38, married, from a small town, 8th grade education, alcoholic.

This subject had been an alcoholic for several years although this was his first hospitalization for treatment. He had entered the Alcoholic Treatment Unit after losing his job due to intoxication. In addition, his marriage was deeply troubled because of his drinking.

Reaction to Oral Interpretation Listening Therapy

In the initial testing session, this subject was barely able to remain for the entire therapy hour. He had been completely inebriated upon entry to the hospital one week before and was then in the final stages of de-
toxification. Through the testing period, his ability to concentrate improved and he readily identified with several of the characters in the stories, exclaiming, "Ain't it the truth!" at the end of "The Man Who Had No Eyes." This subject stated that he liked the Group III therapy because it had meaning for him, and because no one "preached" to him through the stories.

While no change in patterns of response was registered, the subject did improve greatly in his cloze procedure scores, from 5 in the initial testing to 41 in the final testing. This cloze score indicates that John's concentration had, in fact, improved.

Peggy Caudill, female, 37, separated, from a small town, 6th grade education, schizophrenic.

The subject had been hospitalized continuously since 1955. She entered the hospital upon the birth of her last child and had not rejoined her family since then. Peggy usually resided at the Halfway House in Huntington, a supervised home for those patients believed to be recovering, but not yet totally ready to be released. While at Halfway House, Peggy worked as a waitress in a local restaurant. During the time of testing, however, she had regressed and was in treatment at the main hospital.
Reaction to Oral Interpretation Listening Therapy

While there were several stories to which this subject reacted positively, her response, for the most part, was neutral. She did not object to the sessions, yet she did nothing to gain anything from the treatment. Peggy's scores on the word association test moved in a positive direction from 39 to 31 while her Group IV cloze score slipped from 94 to 85. Her decreasing cloze score supports the observation that the subject lacked concentration while reading the literature. In Peggy's case, the greatest benefit was probably the exercise of concentration demanded by the literature.

Jay Chamberlaine, male, 33, separated, from a small city, 3 years of college, alcoholic.

This subject had no record of prior hospitalization, yet stated that drinking had been a problem for a number of years. Jay felt that his marriage was ending because of his alcoholism and his related inability to maintain a job. A slightly pugnacious, highly defensive manner permeated his personality.

Reaction to Oral Interpretation Listening Therapy

At first, the subject was angered because he was forced to get out of bed in order to attend the sessions.
He ranted that everyone in the hospital administration demanded something constantly and that he was never left alone. When the researcher agreed with him that many demands indeed were made upon him, he calmed down. Thereafter, he readily joined in the group and seemed to pride himself in understanding the thrust of the literature before many others did. He often led the discussion and stated that he felt the stories offered insight into some of his own problems.

For a subject whose initial reaction to treatment had been one of strong resistance, Jay evidenced a significant positive change in his patterns of response as measured by the word association test. His pre-test score was 43 and his post-test score was 32. However, his Group II cloze procedure scores dropped from 72 to 63, perhaps reflecting his eagerness to discuss the stories, rather than to read them closely.

Louise Deardon, female, 56, widow, from a metropolitan area, B.S. degree in education, depressive neurosis.

Since the time of her husband's death, this subject had been a frequent patient at the hospital. Though her daughter lived in the same city as Louise (the daughter and her husband had purchased Louise's home from her), they indicated that there was no room for her at their
home. Louise did maintain a close relationship with her son who was a high school senior. In the past, the subject had taught elementary school and had worked as a house mother in a college sorority. On two occasions, Louise had attempted suicide.

Reaction to Oral Interpretation Listening Therapy

Though quiet, Louise was attentive during therapy sessions. For the most part, her participation was limited to responding to questions. She did state, at the close of treatment, that some of the stories gave her something to think about.

The subject's patterns of response remained somewhat the same from pre-test to post-test, 49 to 50, possibly indicating that the story content affected her little. However, the observation that she was attentive was verified by her great gain in Group I cloze procedure scores, from 22 to 45.

Bess Dunn, female, 45, separated, from a small city, two year's nurse's training, depressive neurosis.

The subject, a mother of four, had a high I.Q. which was reflected in her ability to grasp the central theme of the literature. Bess was quiet, well-spoken, but appeared to be heavily sedated in the early sessions. The researcher conferred with her psychotherapist about the
subject's drug dosage and, after examination, the amount was reduced. At this point, she became more alert and involved in the therapy. Her hospital record revealed that Bess had been institutionalized for treatment on six previous occasions.

Reaction to Oral Interpretation Listening Therapy

Throughout the last half of the testing (after her drug intake was reduced), the subject led the discussion of the literature. Her insight into the meaning of the stories was both creative and accurate. She indicated on several occasions that she enjoyed the treatment and felt that the literature had value.

In both aspects of testing, the subject's scores reflected the positive observations made about her. Bess' patterns of response moved positively from 41 to 28 and her cloze scores gained from 46 to 69, the highest of all Group I scores.

Ben Flautt, male 56, married, from a small town, 8th grade education, alcoholic.

The subject was a chronic alcoholic with a long history of addiction. His physical appearance fit much into the alcoholic stereotype: a red, bulbous nose, and rhumey eyes. The patient, a carpenter, had not been hospitalized
prior to that time. Ben was most co-operative during all the sessions.

Reaction to Oral Interpretation Treatment

With his 8th grade education and long neglect of reading, the subject had difficulty with the literature. He repeatedly stated that he wished he had been placed in a listening, rather than a reading group. However, he displayed persistence and finished his reading task, though it took him much longer than the rest of the group. The subject felt that he would have gained more from the therapy if he had been allowed to listen to the stories, rather than to read them.

Regardless of his difficulty with reading, this subject's high motivation was reflected in his great increase in Group II cloze scores, from 43 to 104. Though Ben may have felt that he would have scored higher in a listening group, his reading scores were among the highest of all those tested. Ben's patterns of response appeared to move in a slightly negative direction during treatment, from 31 to 34.

Elbert Grant, male, 34, married, from a small town, high school education, alcoholic.

The subject's case records revealed that he had entered the Alcoholic Treatment Unit twice before only to
leave the hospital before treatment was completed. His case record was otherwise sketchy and, at that time, incomplete.

Reaction to Oral Interpretation Listening Therapy

From the first, the subject was reluctant to attend therapy sessions. He rarely participated in the discussion and seemed relieved when testing was over.

Despite his seemingly resistant attitude, Elbert's scores registered favorable change. His patterns of response moved in a slightly more positive direction, from 37 to 36 while his Group IV cloze scores gained from 65 to 78.

Lloyd Hamilton, male, 56, divorced, from a small town, 8th grade education.

The subject described himself as a "hard drinker for 40 years." A former coal miner, Lloyd had been hospitalized for alcoholic addiction on two previous occasions. In addition, he had been imprisoned for five years on a charge of assault to murder. A rather emaciated, small man, the subject had also been treated for tuberculosis in the past. He exhibited a dry, mountain sense of humor and played the guitar for enjoyment.

Reaction to Oral Interpretation Listening Therapy

Because he had great difficulty reading, Lloyd lis-
tened to the stories. He experienced hardship in understanding how to answer the test, but finally did comprehend in the final testing. He stated that he really liked "to listen to them stories, but I wouldn't care nothin' fer readin' 'em." He especially liked "The Man Who Had No Eyes" and "The Best Hated Man in Town."

Lloyd's very low initial Group III cloze score (0) reflected his difficulty in communication skills and inability to comprehend testing instructions. As the testing progressed, however, he did learn how to do the task as evidenced by his final cloze score (15). Whether or not he would have increased his listening ability had the treatment extended over a longer period of time remains unknown. His patterns of response moved in a negative direction throughout testing, from 33 to 43.

Bert Kincaid, male, 25, single, from a metropolitan area, 11th grade education, schizophrenic.

Of all the patients tested, Bert evidenced the most classic schizophrenic symptoms. In the word association pre-test, all his responses rhymed with the stimulus words. In addition, many of his responses were of a violent nature; for example, "guns," "missile," and "Eliot Ness."

The subject had been hospitalized continuously since 1963 when he was a junior in high school. He rarely participated in adolescent activities prior to his commitment,
with the exception of the high school band. Bert was extraordinarily tall, almost 6'7". Tests had been run to determine if there were any abnormality in the pituitary gland, but none was discovered.

Reaction to Oral Interpretation Listening Therapy

Although he attended every session, the subject never arrived at the appointed hour, but would appear usually one-half an hour early or twenty minutes late. On the occasions when he was early, Bert would converse with the researcher quite easily. He was highly interested in his scores on the tests and evidenced a need to achieve higher scores than did the others in the group. He believed, and frequently asserted, that he was a genius. His records did indicate a high I.Q., but nothing near genius level.

Bert's reactions to the stories were often the exact opposite of what one would expect. He frequently derided the foolishness of the "hero" for a noble act. The subject was then quite surprised to hear the reactions of other members of the group to the stories. He appeared to mull over their reactions, but usually did not comment further. His continued attendance in light of this group opposition was believed to be a positive sign. For the first time perhaps, he realized that his perceptions were not always like those of his peer group. This realization and the very fact that he listened to opposing views may
be indications that the possibility for change does exist in him.

Bert's word association scores parallel the observations made about him. His patterns of response moved negatively from 51 to 59 and may reflect his dissonance with the literature and with the group. On the other hand, his Group I cloze procedure score (29 in the pre-test and 51 in the post-test) indicate that the subject was indeed listening to the stories and was gaining in listening skills.

Patricia Maglan, female, 29, married, from a small town, high school education, paranoid schizophrenic with suicidal tendencies.

The case history of this patient revealed that she had been hospitalized on four occasions since 1965. At the time of the study, Patricia had entered treatment shortly after the birth of her second child. She had, at that time, in a fit of frenzy, thrown her baby against a wall. This was Patricia's second marriage; the first ended in divorce.

The subject had great difficulty concentrating and would often disrupt therapy sessions by laughing and giggling with another group member. She frequently drew sketches of women's heads on the blackboard at the onset
of the session and referred to herself as a "big mouth."

Reaction to Oral Interpretation Listening Therapy

Patricia's total lack of concentration was evident throughout therapy. Her attention was easily lost. She did, however, attend the sessions, though she did not participate in the discussion. The researcher doubts that this therapy had any great value for this subject.

Patricia's extremely low Group III cloze scores (2 in the initial test and 0 in the final test) verify her lack of concentration during testing. Her patterns of response did move in a slightly more positive direction, from 39 to 35 which may have been due to simply an enjoyment, on her part, of being a member of the group.

Marilyn McMahon, female, 53, divorced, from a metropolitan area, M.A. in psychology, manic-depressive, manic type; paranoid schizophrenic reaction.

The subject, who looked much younger than 53, had been hospitalized on four separate occasions since 1963. Often, when she was released, she engaged in long, loud alcoholic binges that resulted in her return to the hospital by civil authorities and led to delirium tremens for her. Marilyn had one son who was presently in the care of her ex-husband, though Marilyn had been granted custody of the child.
Because of her interest in psychology, the subject was eager to know the intent of all phases of testing. When the study was completed, the researcher discussed it with her thoroughly.

Reaction to Oral Interpretation Listening Therapy

Throughout testing, the subject's reaction was one alternating between skepticism and curiosity. Though the stories dealt with a number of topics and emotions, the subject perceived that they all concerned love. Following one session, in a vivid example and display of her feelings, Marilyn fairly shouted with anger,

All these stories deal with love! You think that love is the answer to everything! Well, it's not! You may think it is, but it's not! And that's what will ruin your whole study!

Having come to this conclusion, the subject resisted the therapy and more or less mentally withdrew from the sessions, although she continued to attend.

Regardless of Marilyn's verbalized opposition to what she perceived to be the goal of the literature, her word association scores indicated a slightly positive change, from 39 to 34. Thus, the subject may either have been unknowingly affected by the treatment or she may have consciously totally disregarded it when responding to the stimulus words. Marilyn's Group I cloze scores did reveal
a small loss of attention from initial to final testing, from 41 to 35.

Lawrence Montgomery, male, 45, divorced, from a small town, 8th grade education, alcoholic.

The subject, a rather small man, had been hospitalized on two previous occasions for addiction to alcohol. At the time of the study, he had been offered a job as an orderly at the State Hospital Farm and, consequently, was thinking of little else at the time. His 8th grade education limited his reading ability, but he managed to complete all the literature.

Reaction to Oral Interpretation Listening Therapy

At first, Lawrence was reluctant to attend the sessions. He repeatedly remarked that he didn't think he could do the task. With encouragement, he successfully completed all sessions. He identified strongly with "The Best Hated Man in Town," and "The Man Who Had No Eyes." At the conclusion of testing, he told the researcher that he hadn't read in years, but that he liked this kind of reading.

Lawrence's scores in both phases of testing reflected the observations made. His word association scores moved positively from 33 to 31 and his Group IV cloze score gained 31 points, from 59 to 90.
Harold Newcomb, male, 31, divorced, from a small town, 10th grade education, alcoholic.

The subject, a painter, had been hospitalized four times between June, 1968 and September, 1969 for addiction to alcohol. Harold appeared alert during all sessions and exhibited a clear sense of humor.

Reaction to Oral Interpretation Listening Therapy

The subject concentrated intently as he read the stories. He stated that he enjoyed reading them, especially "The Best Hated Man in Town," and "The Man Who Had No Eyes." He clearly grasped the main themes of the stories. Since Harold was rather extroverted, he had no difficulty engaging in group discussion.

Harold's word association test revealed a very slight negative shift (29 in the pre-test to 30 in the post-test) in his pattern of responses. His Group II cloze procedure scores gained from 75 to 89 throughout testing, supporting the observation that he concentrated intently on the literature when reading.

Frank Petree, male, 37, separated, from a small town, high school education, alcoholic.

The subject had been previously hospitalized seven times in the past five years for addiction to alcohol.
He was the father of two daughters and was presently separated from his wife due to his addiction. Before his present hospitalization, Frank had been wandering through Ohio where, among other misadventures, he unknowingly found himself in the midst of the Negro unrest on Columbus' East side in the summer of 1969.

Reaction to Oral Interpretation Listening Therapy

The subject reacted quite favorably to the literature, it seemed. He indicated that many of the stories were meaningful to him and participated in the discussion willingly.

Both of his test scores verify observations of his reactions to the treatment. Frank's word association score in the pre-test was 40 while his post-test score was 27, indicating a strong change in a positive direction. His Group II cloze scores, which were initially quite high, increased from 102 to 110.

Weston Saunders, male, 46, divorced, from a metropolitan area, B.A. in accounting, alcoholic.

The subject, a very personable man, had been in the Alcoholic Treatment Unit once before, but had left after one week. At the time of the study, he had voluntarily re-entered the program after becoming intoxicated enough to gather the courage to return. Weston was deeply dis-
turbed over his recent divorce and his repeated loss of jobs due to alcoholism. He stated that he became alcoholic while he worked in the Virgin Islands due to a proliferation of rum and endless social drinking.

Reaction to Oral Interpretation Listening Therapy

The subject prided himself upon his educational achievements and this seemingly motivated him to concentrate intently during the sessions. Weston stated that he needed this kind of activity to "clear out the cobwebs" and to lure him back to reading.

While his Group III cloze scores showed a gain from 36 to 47, Weston's word association patterns of response moved in a negative direction, from 33 to 36. The subject's great need to perform well may have blocked any significant change in his pattern of responses.

Elizabeth Scott, female, 55, married, from a metropolitan area, B.S. in education, alcoholic with suicidal tendencies.

The subject, a rather stout woman with arthritic knees, had a history of two prior hospitalizations for alcoholism. She had recently remarried after having been widowed for a long period of time. Elizabeth's records indicated that she had been alcoholic for approximately 13 years.
Reaction to Oral Interpretation Listening Therapy

While the subject intellectually grasped all the literature, she displayed more interest in her physical and emotional difficulties than in the therapy itself. This was evidenced by her willingness to read the literature, but to discuss only her problems with the group, instead of the literature. She made no attempt to discover any relevance the literature may have had to her dilemma, at least outwardly.

Elizabeth's word association score of 29, a highly positive score to begin with, remained constant throughout testing. It may be, since her pattern of responses were so high to begin with, that Elizabeth perceived no need to relate the literature to her self-concept. Her high Group IV cloze scores (95 in the initial test and 102 in the final test) indicated that she fully comprehended the literature.

Ernest Smith, male, 45, divorced, from a metropolitan area, 2 years of college, schizophrenic.

The subject, a handsome man of 45, had been a patient on a continuous basis since 1967. Prior to 1967, he had been hospitalized four times. Much of his time was spent in creative painting and several of his works hung on hospital ward walls. Ernest seemed to be a sensi-
tive person as well as a creative one. He had one grandchild of whom he was quite fond. He was quiet in manner and highly co-operative.

Reaction to Oral Interpretation Listening Therapy

While Ernest often appeared to be preoccupied before listening to the literature, he concentrated deeply while the tape played. His Group III initial cloze score of 37 indicated that he did devote his attention to the stories, but the final cloze score showed a drop to 21. On the other hand, Ernest's word association scores revealed a positive change in his pattern of responses, from 39 to 33. He remarked that he especially liked "The Little Prince." He was one of only a few patients who comprehended the larger meaning of this story.

Adam Souders, male, 20, single, from a metropolitan area, high school education, paranoid explosive personality.

The subject had been hospitalized since April, 1969 following an attempt upon his father's life. Adam's brother, Malcolm, was also hospitalized during the time of the study after having shot and wounded their older brother, Charles. Adam's family background revealed a domineering, almost irrational father, a weak mother, but one who did care for her children, and, generally, a pervasively sick home environment. At the time of his
commitment (by his father) Adam was raging, but he later withdrew into an almost catatonic state. At the beginning of this study, 5 months after Adam's admission, he still maintained a stuporous look, disheveled dress, and rigid body control.

Reaction to Oral Interpretation Listening Therapy

The change in Adam during the weeks of the study was one of the most notable of all the subjects. He seemed to greatly enjoy reading the stories, even those which seemed difficult to him. He exhibited a gradual improvement in communicative ability as expressed in (1) better sustained conversation; (2) more normal facial expression—a loss of stupor; (3) improved ability to concentrate as evidenced in the doubling of his cloze scores, from 34 to 60. Adam's word association scores further support these observations; they moved in a positive direction, from 67 to 40. At the conclusion of treatment, he was very reluctant to cease the therapy and asked if he could come to some other groups.

It is impossible to say that oral interpretation listening therapy alone caused this change; the patient was receiving group and chemotherapy as well. It may be, however, that this therapy helped him over a communicative hump.
Mary Vager, female, 42, divorced, from a metropolitan area, high school education, schizophrenic.

The subject was a chronic schizophrenic with 21 prior hospital admissions dating back to 1952. Mary had one 19-year-old daughter and lived with her parents. She was an attractive woman, yet a very dependent one. The subject was extremely upset at the time of testing because the doctors had not permitted her mother to visit her.

Reaction to Oral Interpretation Listening Therapy

Mary had great difficulty concentrating on the literature. Though she blamed the drugs she was taking, her lack of concentration may also have been due to her own inability to direct her attention away from herself. Testing this subject was an erratic process because of her emotional upset.

Mary's scores indicate little change in either test. Her pattern of responses moved negatively from 30 to 32 and her Group IV cloze scores dropped from 72 to 63 during treatment. These scores may be valid, or they may reflect the research difficulty in this subject's case.

Nan Weaver, female, 24, single, from a small town, high school education, drug dependence.

Hospitalized while under the influence of drugs, the
subject had been a patient for six months. At the time of testing, she was resuming normal activities at a rapid pace and was about to begin business school through the sponsorship of a hospital rehabilitation program. One of seven children, Nan had borne great responsibility in her family. She had cared for the younger children in addition to nieces and nephews. The subject indicated that she enjoyed children, but that she had no time for herself. During treatment sessions, she was very cheerful, usually on balance, very gentle and supportive to others.

Reaction to Oral Interpretation Listening Therapy

Throughout the therapy sessions, Nan stated that the stories were valuable to her. She apparently listened attentively and discussed the literature with eagerness.

Nan's Group III cloze procedure scores showed a slight increase, from 45 to 47, during treatment. Her scores were among the highest for those who listened to, rather than read, the stories. The subject's pattern of responses evidences a negative shift from 36 to 45 during treatment which seems to contradict her verbalized feelings about the therapy.

Debra Dorsey, female, 20, single, from a small city, high school education, dependent personality.
This subject, an attractive girl who had been studying cosmetology, had been hospitalized three months. She appeared quiet, yet was most polite. During group therapy with the head psychologist, she maintained perfect attendance, yet never spoke in the group. In a private session with the psychologist, she stated that she sat in the group desperately trying to think of something to say, but she never could. The psychologist advised her not to try so intensely and to simply focus on listening to others. This conference occurred about the time Debra began oral interpretation listening therapy.

Reaction to Oral Interpretation Listening Therapy

Debra's reaction to oral interpretation listening therapy was the most dramatic of all subjects tested. When she first attended the sessions, she asserted that she did not want to participate. In the second and third sessions, she fell asleep, and in the fourth meeting, the subject listened with seemingly little involvement, but did not participate in the discussion. In the fifth session, however, she listened intently to "The Little Prince" until it ended. Then, Debra sat bolt upright and said, "I know exactly what that story means, what it's trying to tell us." When encouraged to explain, she related, with excitement, the theme of the story to her love feelings for her mother and her great fear of the mother's going
away (dying). The same scene was repeated after the final story, "The Stepmother." Twice in the same one hour session, a girl who had been too self-conscious and uncertain to even talk, had led the group in its discussion, without the slightest hesitation. At the end of the session, she profusely thanked the researcher and repeatedly remarked how much she enjoyed the literature.

Debra's reaction was quite similar to a closure or sudden insight. Her psychologist indicated that he would carefully observe her for any change in her behavior in group therapy. It was hoped that a transfer might occur from the oral interpretation listening therapy to group therapy in Debra's case.

The subject's word association scores (41 in the pre-test and 40 in the post-test) indicated a slightly positive change in her pattern of responses. Furthermore, her Group I cloze test scores increased significantly from 70 to 83.

Theresa Hansen, female, 38, married, from a small town, high school education, schizophrenic.

The subject, a mother of three, had been hospitalized for four months at the time of the study. She had a slightly stuporous look and walked rigidly. Her behavior changed noticeably on the day when her husband and child-
ren visited her; at these times, she was alert and con-
versed easily. For the most part, however, her attention
centered on not being late for dinner.

Reaction to Oral Interpretation Listening Therapy

While Theresa attended the sessions regularly, she
displayed little interest in the literature. One notable
exception was "My Father Doesn't Like Me." The subject
indicated that her sons would probably have liked that
story. She was very conscious of the time during sessions
and often asked to be dismissed early so she would not be
late for dinner. The oral interpretation therapy was
probably of little value to this subject.

Again, the subject's scores verified the researcher's
observations. Theresa's word association test scores re-
vealed a negative shift from 34 in the pre-test to 45 in
the post-test. In addition, her Group II cloze scores
were very low in both initial and final tests, 10 and 15
respectively, although some gain was noted.

From these brief case histories emerges an unmeasured
hidden factor in the experiment—enjoyment. As noted in
their reactions to the oral interpretation listening ther-
apy, several of the subjects openly expressed their enjoy-
ment while listening to the literature. Others who were
in reading groups indicated that they would prefer to
listen to the literature rather than to read it. If one were to consider pleasure as a factor in treatment, the expressed preferences for listening over reading by a number of the subjects should be taken into account.
CHAPTER V

SUMMARY

The purpose of this study was to explore the use of oral interpretation listening therapy as a psychotherapeutic technique. In so doing, it measured both changes in reception and in word association response. Thus, the study focused upon the investigation of empirical data which may provide additional possibilities for the use of oral interpretation. Moreover, it sought to explore a new approach in psychotherapy which may lead to changes in medical education and practice. Last, and perhaps, most essentially, the study hoped to lend insight into the communicative problems of the emotionally disturbed.

In order to relate directly to this threefold investigation, an experiment was designed to test if oral interpretation was effective as a psychotherapeutic technique. Three major measurements were used in the study: cloze procedure test, word association test, and modified case histories. The cloze and word association tests were quantitative measures while the case histories were qualitative. The general designs appear below:
GENERAL DESIGN FOR CLOZE PROCEDURE TREATMENT

<table>
<thead>
<tr>
<th></th>
<th>Oral Interpretation</th>
<th>Listening</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trial 1</td>
<td>Discussion</td>
<td>No Discussion</td>
<td>Discussion</td>
</tr>
<tr>
<td>Trial 2</td>
<td>Discussion</td>
<td>No Discussion</td>
<td>Discussion</td>
</tr>
<tr>
<td>Trial 3</td>
<td>Discussion</td>
<td>No Discussion</td>
<td>Discussion</td>
</tr>
</tbody>
</table>

GENERAL DESIGN FOR THE WORD ASSOCIATION MEASURE

<table>
<thead>
<tr>
<th></th>
<th>Experimental Group</th>
<th>Word Association Pre-Test</th>
<th>Literature Series</th>
<th>Word Assoc. Post Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control Group</td>
<td>Word Association Pre-Test</td>
<td>No Literature</td>
<td>Word Assoc. Post Test</td>
<td></td>
</tr>
</tbody>
</table>

Cloze procedure was defined as "an index of overall correspondence or commonality between the language systems of different individuals." It involves the mutilation of a message by the deletion of every nth word and subjects complete the mutilated message by filling in the blanks. Scores are usually expressed by correct agreements with the source material.
Ten passages from fictional, optimistic, high school level literature were chosen for presentation to the subjects. Three of these passages were used as tests in the first, mid, and last treatment sessions. The subjects were divided into four groups: Group I, listened to the literature on tape and then discussed it; Group II, read the literature silently and then discussed it; Group III, listened to the literature on tape; and Group IV, read the literature silently.

Twenty eight emotionally disturbed male and female patients institutionalized at Huntington State Hospital in Huntington, West Virginia who were engaged in ongoing group therapy comprised the experimental group for this study. The control group was composed of seventeen patients who were in therapy at the hospital, but who did not receive the oral interpretation listening therapy.

The cloze procedure testing format consisted of a three factor experiment with repeated measures which was subjected to an analysis of variance. Each of the variables—time, oral interpretation listening therapy, and discussion—was examined for change. This analysis revealed that a difference existed between the groups who received oral interpretation listening therapy and those who read the literature. This result supports the belief
that those who are emotionally disturbed do indeed have more difficulty listening than they do reading. Test results also indicated that differences do exist between those who discussed the literature and those who did not. This finding demonstrated that consistently higher scores were attained by those who discussed the literature.

In addition, differences emerged between the groups which read and discussed and those which listened and discussed the literature. This result indicated that in this approach to psychotherapy, the inclusion of discussion is more necessary to groups who listen to the literature than to those who read it.

Also rejected was the hypothesis which stated that no difference in scores occurred between trials. A gain in scores was recorded for each trial, a trend following the classic learning curve.

Non-significant interactions between variables were evidenced by the failure to reject the final hypotheses. These were: (1) There is no interaction between procedure and time; (2) There is no interaction between discussion and time; (3) There is no interaction between procedure discussion and time.

In all, the cloze procedure test indicated that the reading and discussion of literature is more effective
than the listening approach.

The word association test refers to the means of obtaining overt responses (words) elicited by a key word acting as a stimulus in a controlled situation. Only one response per stimulus word was supplied by the subject.

The subjects' responses were then rated by a panel of judges which scored them either "positive," "neutral," or "negative" according to a mental health criterion. The judges' ratings were then subjected to a test of the reliability of the mean whereupon three words (COURAGE, KINDNESS and ME) were omitted from further analysis.

The first three hypotheses of this facet of the study focused upon the emergence of pre- and post-test differences in the experimental and control groups, and on differences between experimental and control groups. None of these hypotheses were rejected indicating that no significant change occurred between pre- and post-tests, as measured by t-tests. This result, when viewed alone, seems to repudiate the belief that modification of the pattern of verbal word association responses occurs during testing.

However, an added dimension emerged in the analysis of the fourth word association hypothesis. While significant differences were not found by correlation tests, in
the pattern of responses yielded by the word association test between Communication-Literature-Personal groupings for the experimental group, a possible change appeared for some groupings between the pre- and post-tests. A shift in word association predictability for certain stimulus word groups may account for this change. This finding is not a verified one, however, and should be viewed only as a possible trend.

Turning from the quantitative means of measurement to the more subjective qualitative observations, this study noted a verbalized acceptance and approval of the treatment by the majority of the subjects. A noteworthy number of the subjects expressed their preference for listening to the literature rather than reading it. In those cases, an entertainment or novelty factor may have been operating.

Through the synthesis of all these tests and measurements, some general trends emerge. First, it appears that most subjects, by their own testimony, seem to react favorably to the treatment. For those who do not like, or have difficulty with, reading, the oral interpretation listening therapy appears to be helpful. Second, in general, the subjects became better communicatees during the treatment period, as verified by the consistent rise in cloze procedure scores. Finally, it appears that the word association test alone indicated no change in the mean responses.
between pre- and post-tests, but that some kind of change may have occurred in the word groupings' relationships.

Suggestions for Future Research

In the examination of the results of this study, many questions suitable for future research have been revealed. The first of these is: Would the same results have occurred with a larger sample? In view of the small subject number, this investigation should be seen as a pilot study. Would the same results have occurred had the study been protracted over a longer period of time? Two to three weeks may have been too short a testing period. The question also arises as to the extent of influence the researcher's personality may have had on the treatment and testing processes. A repeat of this study would be most enlightening.

The second suggestion for future studies is that a deeper probe should be made into the pre- and post-test differences evidenced in the word groupings (Communication-Literature-Personal) in the word association test. Why do relatively low correlations appear in the pre-test for a word grouping while relatively high correlations appear in the post-test? Is this related, in any way, to the type of literature chosen for the study? Should, in fact, the literature be more realistic and
less idealistic in order to fit what we think may be the subjects' view of reality.

Third, an analysis of the subjective reaction to the literature chosen may be helpful. Why did so many subjects find "The Man Who Had No Eyes" and "The Best Hated Man in Town" particularly relevant?

As a final suggestion, future researchers might address themselves to the problems of communication among the emotionally disturbed by focusing upon their difficulties in expression, rather than reception.

Final Summary

Returning to the threefold purpose of the study, one finds that each has been fulfilled. The study has explored the use of oral interpretation as a psychotherapeutic technique and has found that it has value. Second, the study has investigated a possible new approach in psychotherapy which could lead to changes in medical education and practice. The use of oral interpretation in psychotherapy could be guided by a psychotherapist, with the bulk of the therapy being performed by ancillary professionals. Finally, the study has provided some insight into the communication problems of the emotionally disturbed. It has done so by demonstrating that the emotionally disturbed do indeed, as others have suspected, have diffi-
culty with the receptive aspects of communication.

In conclusion, it is hoped that this pilot study may help others to research the infinite number of questions posed by the communication problems of the emotionally disturbed.
## APPENDIX A
### DETAILED ACTIVITIES OF CLOZE PROCEDURE TESTING GROUPS

<table>
<thead>
<tr>
<th>Group</th>
<th>Introduction</th>
<th>Explanation</th>
<th>Word Association Pre-Test</th>
<th>Pre-Test</th>
<th>Meeting #1</th>
<th>Meeting #2</th>
<th>Meeting #3</th>
<th>Meeting #4</th>
<th>Meeting #5</th>
<th>Meeting #6</th>
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</thead>
<tbody>
<tr>
<td>I</td>
<td>Same as I</td>
<td>Same as I</td>
<td>Same as I</td>
<td></td>
<td>Read &quot;My Father Doesn't Like Me&quot; *Cloze Test</td>
<td>O.I. Tape &quot;Man Who Had No Eyes&quot; Discussion</td>
<td>O.I. Tape &quot;Man Who Had No Eyes&quot; Discussion</td>
<td>O.I. Tape &quot;Harpist on Horseback&quot; Discussion</td>
<td>O.I. Tape &quot;The Little Prince&quot; Discussion</td>
<td>O.I. Tape &quot;Gift of the Magi&quot; *Cloze Test</td>
</tr>
<tr>
<td>II</td>
<td>Same as I</td>
<td>Same as I</td>
<td>Same as I</td>
<td></td>
<td>Read &quot;My Father Doesn't Like Me&quot; *Cloze Test</td>
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<td>O.I. Tape &quot;Gift of the Magi&quot; *Cloze Test</td>
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</table>

*O.I. Tape indicates the use of an O.I. tape.*
APPENDIX B

LIST OF TITLES USED IN CLOZE PROCEDURE TESTING


BIBLIOGRAPHY

Books


Brooks, Keith, ed. The Communicative Arts and Sciences of Speech. Columbus, Ohio: Charles E. Merrill, 1967.


**Articles**


Theses and Dissertations


Government Publications


Other


Spain, William and Hansen, Peter. Computer Program for an Analysis of Variance for the Reliability of the Mean. Regional Medical Fellowship Program. The Ohio State University, Winter, 1970.