AN ANALYSIS OF THE
TYPES OF GROUP PSYCHOTHERAPY WITH
HOSPITALIZED ALCOHOLICS

by Joan J. Rossi

Dissertation presented to the Faculty of
Arts of the University of Ottawa through
the Institute of Psychology as partial
fulfillment of the requirements for the
degree of Doctor of Philosophy.

uOttawa
Library Annex

Aylmer, Canada, 1957
UMI Number: DC53931

INFORMATION TO USERS

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleed-through, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.
ACKNOWLEDGMENT

This dissertation was prepared under the guidance of Maurice Chagnon Ph.D. of the Institute of Psychology of the University of Ottawa.

The writer is specially indebted to his Willmar State Hospital colleagues for their interest and valuable help: to Mr. Earl Ends, M.A., for his statistical acumen, and to Dr. C. W. Page for introducing the original design to the project for a process analysis of therapy. Dr. Howard Davis and Mr. James Daniel, M.A., are accorded special gratitude for reading the manuscript and making valuable suggestions for changes. Finally, to Dr. N. J. Bradley, Superintendent of the Willmar hospital, whose interest and concern for the welfare of alcoholics made the project a reality by initiating the necessary financial support of the Department of Public Welfare of the State of Minnesota.
CURRICULUM STUDIORUM

Jean J. Rossi was born March 30, 1926, in Plainfield, New Jersey. He received the Bachelor of Science degree in English Literature from Seton Hall College, South Orange, New Jersey in 1949. He received the Master of Arts degree in Clinical Psychology from the Catholic University of America, Washington, D.C., in 1954. The title of his thesis was: "A Study of Attitude Differences Between Juvenile Delinquent Recidivist and Non-Recidivist, Using the Sentence Completion Test."
# Table of Contents

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>viii</td>
</tr>
<tr>
<td>I.-REVIEW OF THE LITERATURE</td>
<td></td>
</tr>
<tr>
<td>1. Repressive-Inspiration Frames of Reference</td>
<td>2</td>
</tr>
<tr>
<td>2. Didactic-Dynamic Frames of Reference</td>
<td>7</td>
</tr>
<tr>
<td>3. Analytic or Constructive Frames of Reference</td>
<td>12</td>
</tr>
<tr>
<td>II.-EXPERIMENTAL DESIGN</td>
<td></td>
</tr>
<tr>
<td>1. The Tools</td>
<td>18</td>
</tr>
<tr>
<td>2. Method of the Experiment</td>
<td>20</td>
</tr>
<tr>
<td>3. The Sample</td>
<td>21</td>
</tr>
<tr>
<td>4. Tabulation of the Data</td>
<td>32</td>
</tr>
<tr>
<td>5. Specific Hypotheses</td>
<td>36</td>
</tr>
<tr>
<td>III.-RESULTS</td>
<td></td>
</tr>
<tr>
<td>1. Differences Between Methods</td>
<td>39</td>
</tr>
<tr>
<td>2. Similarities Between Methods</td>
<td>40</td>
</tr>
<tr>
<td>3. Therapeutic Gains Each Method</td>
<td>55</td>
</tr>
<tr>
<td>4. The Follow-up</td>
<td>57</td>
</tr>
<tr>
<td>IV.-DISCUSSION</td>
<td></td>
</tr>
<tr>
<td>1. External Variation Between Methods</td>
<td>65</td>
</tr>
<tr>
<td>2. Internal Variation Between Methods</td>
<td>70</td>
</tr>
<tr>
<td>3. Relation Between Internal and External Reliability</td>
<td>73</td>
</tr>
<tr>
<td>4. Influence of Actuarial Information</td>
<td>76</td>
</tr>
<tr>
<td>SUMMARY AND CONCLUSIONS</td>
<td></td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>95</td>
</tr>
</tbody>
</table>

## Appendix

1. **A BRIEF RATIONALE OF THE TWO-FACTOR THEORY OF LEARNING AND A METHOD OF APPLICATION** | 108  
2. **CRITIQUE FOR VERBAL BEHAVIOR CODING** | 117  
3. **DEFINITION AND CALCULATIONS FOR THE ELEVEN PROCESS GOALS** | 119  


# Table of Contents

**Appendix**

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. SOCIAL HISTORY DATA</td>
<td>124</td>
</tr>
<tr>
<td>5. STANDARDS FOR EVALUATION OF INEBRIATE PATIENTS</td>
<td>126</td>
</tr>
<tr>
<td>6. AVERAGED PERCENT CONTENT OF TYPE STATEMENTS IN GROUP PSYCHOTHERAPY</td>
<td>126</td>
</tr>
<tr>
<td>7. ABSTRACT OF A PROCESS ANALYSIS OF THESE TYPES OF GROUP PSYCHOTHERAPY WITH HOSPITALIZED ALCOHOLICS</td>
<td>129</td>
</tr>
</tbody>
</table>
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Distribution of the Number of Treated Patients in Each Therapeutic Orientation with Each Therapist</td>
<td>25</td>
</tr>
<tr>
<td>II.</td>
<td>Distribution of Age and AGCT Scores of Treated Alcoholics in Each Theoretical Formulation</td>
<td>26</td>
</tr>
<tr>
<td>III.</td>
<td>Percentage of Treated Alcoholics in Different Aspects of Social Background in Each Theoretical Formulation</td>
<td>29</td>
</tr>
<tr>
<td>IV.</td>
<td>Percentage of Treated Alcoholics in Different Aspects of Drinking History in Each Theoretical Formulation</td>
<td>30</td>
</tr>
<tr>
<td>V.</td>
<td>Analysis of Variance of Problem-Solving in Three Theory Oriented Methods of Group Therapy</td>
<td>42</td>
</tr>
<tr>
<td>VI.</td>
<td>Significant Differences in Problem-Solving in Four Methods of Group Therapy</td>
<td>43</td>
</tr>
<tr>
<td>VII.</td>
<td>Analysis of Variance of Exploring Behavior in Three Theory Oriented Methods of Therapy</td>
<td>44</td>
</tr>
<tr>
<td>VIII.</td>
<td>Significant Differences in Exploring Between Four Methods of Group Therapy</td>
<td>45</td>
</tr>
<tr>
<td>IX.</td>
<td>Analysis of Variance of Symptoms in Three Theory Oriented Methods of Group Therapy</td>
<td>49</td>
</tr>
<tr>
<td>X.</td>
<td>Significant Differences in Symptoms in Four Methods of Group Therapy</td>
<td>51</td>
</tr>
<tr>
<td>XI.</td>
<td>Analysis of Variance of Motivation Therapy-Aided in Three Theory Oriented Methods of Group Therapy</td>
<td>52</td>
</tr>
<tr>
<td>XII.</td>
<td>Significant Differences in Motivation Therapy-Aided Between Three Methods of Group Therapy</td>
<td>52</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>XIII.</td>
<td>Analysis of Variance of Labeling Behavior in Three Theory Oriented Methods of Group Therapy</td>
<td>53</td>
</tr>
<tr>
<td>XIV.</td>
<td>Significant Differences in Labeling Behavior in Three Methods of Group Therapy</td>
<td>54</td>
</tr>
<tr>
<td>XV.</td>
<td>Criteria with Therapeutic Gains and Significantly Related Actuarial Variables in Psychoanalytically Oriented Group Therapy</td>
<td>59</td>
</tr>
<tr>
<td>XVI.</td>
<td>Criteria with Therapeutic Gains and Significantly Related Actuarial Variables in Learning Oriented Group Therapy</td>
<td>61</td>
</tr>
<tr>
<td>XVII.</td>
<td>Criteria with Therapeutic Gains and Significantly Related Patient Characteristics in Client-Centered Therapy</td>
<td>63</td>
</tr>
<tr>
<td>XVIII.</td>
<td>Criteria with Therapeutic Gains and Actuarial Variables in the Control Method</td>
<td>64</td>
</tr>
<tr>
<td>XIX.</td>
<td>Condensed Results of 12 Month Follow-up Status of 19 Alcoholics Treated in Group Therapy</td>
<td>67</td>
</tr>
<tr>
<td>XX.</td>
<td>Significant Differences in Follow-up of 19 Patients in Group Treatment</td>
<td>68</td>
</tr>
<tr>
<td>XXI.</td>
<td>Original 12 Month Follow-up Rating of 66 Inebriates in Group Therapy, Willmar State Hospital, Minn., 1954</td>
<td>127</td>
</tr>
<tr>
<td>XXII.</td>
<td>Averaged Percent Content of Type Statements in Group Psychotherapy</td>
<td>128</td>
</tr>
</tbody>
</table>
INTRODUCTION

Since the 1935 inception of Alcoholics Anonymous and their remarkable success since then, the efficacy of group therapy procedures in the treatment of alcoholics has become a reality. There still remains, however, an attempt to allow the professionals to work with comparable success. This has not yet been accomplished for a variety of reasons. However, through the implementation of a variety of techniques in a variety of settings, group therapy is beginning to emerge as the most effective singular form of the psychotherapeutic procedures.

This thesis is one aspect of a larger project which was concerned with the comparative effectiveness of three of these group therapy procedures, e.g., psychoanalytic; client-centered and a learning orientation modeled after Fowler's two-factor concept.

The emphasis in this report were eleven process goals which were deducible directly from the verbal behavior of the patients. The outcome aspect of this same project is referred to in the text, and can be obtained for reading by special request.

This thesis and also the project was felt to be important first from the very practical standpoint of providing a means for increasing the effectiveness of a
INTRODUCTION

therapy program for hospitalised alcoholics. Since effective treatment usually has been accomplished in from 25 to 40% of the admissions in the standard program, it was a highly profitable venture by indicating more effectiveness was possible with such extra therapeutic efforts.

This report is particularly important from a theoretic viewpoint in providing some very direct reliably measured evidence of the psychotherapeutic processes of different orientations in a common frame of reference. It is a venture frequently discussed, but seldom acted on because of the extreme expense, need for controlled conditions, and general experimental rigor.

The first portion of this report is concerned with a review of the literature on the various types of group therapy utilized with alcoholics. Emphasizing clinical reports, this review shows few previous attempts to evaluate this procedure under controlled conditions.

Chapter II discusses the operational procedures in the experimental design of this project, emphasizing the controlled conditions. It describes the three psychotherapeutic orientations employed; some of the major characteristics of the alcoholic sample; and ending with the special statistical operations employed, and the two specific hypotheses to be tested.
Chapter III presents the results of this analysis and Chapter IV, the discussion of the results. The discussion evaluates both the quantitative and qualitative aspects of the relationship between the follow-up status of the patients (external reliability), and their participation in therapy (internal reliability). The actuarial information or characteristics of the sample are discussed in terms of the strength of influence on the therapy process.

Finally, a summary of the conclusions and suggestions for further research into the process of group therapy is presented.
CHAPTER I

REVIEW OF THE LITERATURE

The most broad and comprehensive definition of the alcoholic was presented in 1952 by the World Health Organization as:

Alcoholics are those excessive drinkers whose dependence upon alcohol has attained such a degree that it shows a noticeable mental disturbance or an interference with their bodily and mental health, their inter-personal relations, and their smooth social and economic functioning; or who show the prodromal signs of such developments. They therefore require treatment.

Treatment, however, follows no set rule. Wilson has isolated four general types which include: 1) Conditioned Reflex Aversion; 2) Psychotherapy; 3) Alcoholics Anonymous, and 4) Synthetic treatment. The last is any combination of the above mentioned methods, and it is considered the most promising among the professionals. Giving elaborate reviews of the literature in each area, Wilson noticeably neglects group therapy, regarded by some as the psychological treatment of choice in preference to individual psychotherapy.


A review of the group treatment procedures with alcoholics indicates that they fall into the pattern of categories suggested by Gifford and Mackenzie in 1948. Agreeing with Thomas, they find three main frames of references under the heading of group therapy: 1) The Repressive – Inspirational, 2) The Didactic–dynamic, and 3) The "Analytic" approach. The literature, which may often be inadequate clinical reports, will be reviewed under each of these categories, and then summarized.

1. Repressive–Inspirational Frames of Reference.

In this orientation the therapist generally stresses the suppression of impulses to drink, together with the search for substitutive outlets in faith and work, with a heavy reliance on contagion. There may be exploitation of the therapist's role as leader; the strong collective transference that results strengthens the positive effects of the example of successful members. At times the patient is urged to control himself, to suppress asocial or worrisome thoughts.


or wishes, and to find an interest or inspiration in life.

Alcoholics Anonymous stands pre-eminently in the foreground in this approach. It is a way of life in addition to being a therapeutic technique. Drawing on the resources of medicine, religion and drinking experiences, it is a synthesis of old ideas rather than a new discovery. This group, united by kindred experiences, maintain their goal of sobriety by the dedication of helping others who ask for aid. Although considerable has been written about Alcoholics Anonymous, few writers have elaborated on the specific technique; instead they deal with the basic principles and ideas giving a general picture. This writer’s experiences shows that AA methods revolve around:

a) Group meetings which are open or closed (to non-members). Closed meetings are the essential vehicle where group therapy takes place. There is much open and frank discussion of personal problems but none of this is compulsory. Depending on the number of people, smaller "squads" are formed to facilitate inter-personal relations and to increase the cathartic value of confession.

---


6 R. Wilson, Op. Cit.
b) Classes, which are held with new members for initial orientation into the twelve steps, the code of AA.

c) Every member has a sponsor. Each member works through the twelve steps of AA with some older member, but he always selects his own sponsor.

The details of the program, its history and its development are well covered elsewhere. Suffice it to say at this point that proof of the usefulness of this procedure is evidenced by the greater incidence of recovery than in all other methods combined.

Heath reported on a modified AA approach with merchant seamen, conducted at rest centers in the port of New York. He felt that merchant seamen presented peculiar problems concerning occupational and alcoholic isolation and that they should greatly benefit from group participation. His weekly treatment was divided into two phases: 1) Factual, involving information giving and bibliotherapy, and 2) Therapeutic, facilitating catharsis through inventory. Although he reported

7 Idem, ibidem.


the use of group hypnosis, no details were given. In
terms of results, he claimed longer periods of abstinence
for the participants than at any time since addiction.

Lawn, in discussing an overall treatment program
for alcoholism in a military setting, attempted to reeducate
his group members in the "values and goals of life..."10
Group participation was obligatory for all rehabilitees
meeting daily over a six-month period. No evidence of his
results were given beyond this bare indication of his tech­
nique.

Lee made only a passing remark that he used group
procedures in a five day program with 18-25 seriously ill
hospitalized patients. He gave no details but attempted to
prepare them for AA affiliation.

Mueller12, following a "sophisticated" AA approach
with rotating male veterans not ordinarily recommended for
group treatment, claimed greater effectiveness when he com­
bined his method with conditioned reflex therapy. Although

---

10 H. J. Lawn, "The Study and Treatment of Alcoholism
in the 5th S. C. Rehabilitation Center", American Journal of

11 I. P. Lee, "Clinic for Alcoholism Makes Friends and

12 E. E. Mueller, "Group Therapy with Alcoholics in a
Hospital Setting", Diseases of the Nervous System, Vol. 10,
1944, p. 298-303.
he postulated no goals, he gave details on his groups, and he mentioned that the alcoholic is taught to distinguish between the shame of self and the shame accompanying an act. He was also taught that alcoholism is always a symptom of something else. He used such concepts as reeducation, transference, catharsis and interaction, but believed that psychoanalytic concepts frightened alcoholics.

Group hypnotherapy was reported by Paley\textsuperscript{13} with five seriously ill male alcoholics, who had poor prognosis, working on the principle of "surrender" used in AA. Over a period of eight months he employed five types of suggestion, the first four of which were stepping stones to the final one, "... that satisfaction was permissible and would subsequently be equated with sobriety, while drinking would be equated with anxiety"\textsuperscript{14}. In a one year follow-up of the three who completed therapy, he found two abstainers; one complete, one continuing to need aid, and no report on the third man.

Reporting on an experiment, Stewart\textsuperscript{15} also used a 'sophisticated' AA approach with 23 voluntary male in-patients who attended rotatingly a total of thirty-six sessions over a

\begin{footnotes}
\item[14] Idem, ibidem.
\end{footnotes}
twelve-week period. Empathy, defined as deliberate identification with another, is conceived as a goal and a technique in group communication. His empathy would promote personal freedom requisite to sobriety and would be viewed as the more general goal, while sobriety would be the specific goal. Technically applied to treatment, empathy is the exchange of opinions rather than of scientific facts. Stewart feels this is necessary for mutual help. In his technique he accepts all symptoms and refers all explanations to compulsive drinking and sobriety. A one year follow-up of twenty-three patients showed that eight had remained abstinent with no relapse, three with one relapse, two had improved with more than one relapse, five had not improved, and five were unreported.

Independent of AA, all of the above specific reports claim successes, but the most valuable information comes from the latter two studies because they have applied controlling factors and conducted a reasonable follow-up. More specific information, other than sobriety as the achieved goal, would have been valuable. Stewart speaks both as a therapist and an alcoholic, which may account for his concern about empathy.

2. - Didactic-Dynamic Frames of Reference.

Didactic groups are characterized by a series of lectures on the physiology of alcohol, the dynamics of alcoholic and nonalcoholic behavior and personality, usually followed
by questions and answers and even discussions where some patients reveal their problems. Interpretation is given, but it is slight and on a superficial level. The value of this method is derived from the imparting of conscious intellectual 'insight'. It is also believed that facts presented to the conscious mind may be used constructively by the unconscious either immediately or stored in memory for subsequent use.

Most prominent in the reports under this area were the transcript series of McCarthy16,17 of the Yale Plan Clinic. He gave a detailed account of one of a series of groups that he had worked with over a period of two years. Using a voluntary, mixed out-patient group, some of whom were also AA members, he held weekly meetings over a period of six months. He reported three objectives: 1) to attain objectivity about emotions; 2) to facilitate intellectual grasp of the problem, and 3) to provide for emotional release through insight and


18 McCarthy, "Group Therapy in an Out-patient Clinic..."
group participation. With occasional changes of leaders or therapists, topics were presented to the group ranging from the physiology of alcohol to significant psychological issues. The proposed follow-up analysis has not yet appeared in print.

Ebaugh's experience suggests that although group therapy is the treatment of choice, it is still an adjunct to individual treatment, and that within a group the best therapeutic results are obtained from an analysis of the therapeutic transference. Although he presented no evidence of a particular group study, he recommended a program closely resembling McCarthy's in topical coverage.

Delehanty, reporting on state hospital care of male alcoholics in 1947, limited his discussion to objectives. He did not define the group population beyond this, but stated that they met voluntarily twice a week. Working on the assumption that alcoholism is most frequently an attempt to resolve an anxiety neurosis, he specified the same objectives as Ebaugh and McCarthy. Delehanty's follow-up made no specific


20 McCarthy, "Group Therapy in an Out-patient Clinic..."


references, but claimed that his patients made successively longer adjustments outside of the hospital.

Evseeff also reporting on the state hospital care of male patients, concluded that groups had increased his dynamic understanding of patients. He selected usually 8-10 patients with I.Q.'s over 90, who were psychoneurotic or cyclothymic personalities, held meetings twice per week, but gave no overall time for a particular group. In his groups he noted three topical phases: (1) Information getting and identifying self, (2) Introduction of dynamic topics emphasizing growth and development, (3) Coordination of individual therapy to facilitate freer discussion of personal problems. He also introduced public interpretations of fictitious Thematic Apperception Test stories and applied a modification of the Psychodrama, but he did not evaluate either of these. He claimed that patients had benefited from group treatment.

In 1949, Kersten reported on nonpsychotic male alcoholics differentiated by Knight's criteria. Selecting his patients on the basis of sincerity, he claimed that group treatment showed greater incidence of success over other


GROUP THERAPY WITH ALCOHOLICS

methods. He met with the group twice a week over a three month period with particular topics introduced by patients and therapist. Kersten also felt the therapist's personality determined his technique, and greatly influenced results.

Lerner\(^{26}\) is to be commended for his clarity where little is left to doubt. He gave abbreviated transcriptions of male alcoholic jail inmates, where any one identifiable group met for four three-hour sessions over a four-week period. Describing his role as teacher-counselor he postulated five specific goals in the group process concerning attitudes of members toward: (1) Selves, (2) Each other, (3) Teacher-counselor, (4) Jail environment, (5) Miscellaneous. Four sessions of a specific group transcribed indicated the interactional process in four phases: (1) Generally testing behavior, hostility, doubt, and suspicion, (2) Lessening of hostility and anxiety with attempted rationalization of behavior and feelings, (3) Increase in spontaneity with open discussions, (4) Greater spontaneity with a confessional group climate, and examination of first phase attitudes. There was a lessening of hostility noted and a better appreciation of problems, although they may have remained unsolved. No overall

results were given, but comments were made that the therapist’s effectiveness is related to his realistic acceptance of the alcoholic’s problems.

For a clear understanding of the process of group therapy, McCarthy and Lerner are highly recommended, although neither present follow-up data. The application of this method seems more popular than repressive methods among professional therapists. The two authors have isolated stages or phases within their groups as they progress, and they have shown the direction of movement. Lerner gave greater detail because of his abbreviated analysis of the transcriptions. Evseeff’s three phases were protracted topical summaries similar to McCarthy’s series, whereas Lerner’s analysis was interactional, and concerned more with the affective experiences of the members. Follow-up data would have completed the picture.

3. - Analytic or Constructive Frames of Reference.

The focus here is on emotional release, on insight and understanding, with the ultimate goal being treatment of causes, although mediate undefined goals, such as socialization,

27 McCarthy, "Group Therapy in Alcoholism, transcription..."
29 Idem, ibidem.
are achieved. Free discussion and association is emphasized with psychoanalytic principles of therapy, where catharsis, insight and ego-building, and transference are essential elements. Therapy urges loosening of repression, the conscious recognition and analysis of unconscious asocial wishes; it aims to free energy bound in needless repression, and it does not direct the patient's activities towards specific goals. Once the energies are freed, the individual will himself find suitable social outlets.

Haber\(^{31}\) was the first who reported the use of role-playing techniques in addition to other methods with hospitalized male veterans meeting five days per week. Giving no specific experimental data, he postulated three goals concerning situations which were chosen: (1) To aid patients in dealing with reality problems, (2) To encourage community spirit, and (3) To resolve deep conflicts through affective reeducation.

Pfeffer\(^{32}\) included transcriptions in reporting on an elaborately selected mixed out-patient group, with whom he excluded individual therapy. Selecting his patients

---


GROUP THERAPY WITH ALCOHOLICS

on the basis of failure through previous methods of treatment and similarity of emotional problems, he met with a group of six over a one year period twice a week. Using free association and discussion, he concluded that four patients improved on a six dimension scale, while two who left the group unimproved showed the most intense transference feelings.

Shulman used random selection procedures for hospitalized males, in which he described general background features. Meeting with a group numbering from 5-20, twice per week, he utilized a combinatory psychoanalytic and client-centered approach with topics introduced by members. Appraising his results through AA in the areas of sobriety and social effects, he concluded that few improved remarkably, a large number did well, and about half were unimproved, but did not give the time differential.

Thompson utilized a dynamic orientation directed to ego function of here and now, with historical references to sources of conflicts. Operating within the framework of AA in a VA hospital with male alcoholics he met with a group six days per week, gave no evidence of total extent of a specific

---


group, and commented that the therapist's attitude and personality have therapeutic effects. Giving no details, Wexberg mentioned he uses psychodrama in an out-patient clinic.

Only one report in this category included transcriptions, gave detailed follow-up information, and analyzed his procedure with a particular controlled group. Generally, however, there was no indication of what the specific benefits were from this type of therapy formulation, but the conclusions agreed with the other types; that group therapy seemed beneficial.

Summary.

Eighteen clinical reports have been mentioned, only five of which showed concern with systematic procedure, or controlling factors in their treatment procedure. Conclusions based on this type of evidence were necessarily limited, although there seemed to be agreement that group therapy was beneficial, if not the treatment of choice. Some dispute, however, exists over the 'proper' orientation of psychotherapy with alcoholics, but no evidence was given in the

---


literature of the relative efficacy of one method compared to any other. The therapist's personality as an influencing variable was mentioned by three authors, who feel the therapist must realistically accept the alcoholic and his problems; and that his personality would probably be a determining factor in the success of a treatment. The question remains unanswered, however, as to how much of an influence the therapists' personality does have.

The variation in application to patient populations show no trend, but of the above reports nine were of hospitalized males, four concerned outpatients: two mixed populations and two with unique circumstances, and one report presented no specific details. The preponderance of hospitalized patients appears due to the factors of hospitalisation being the predominant means of effecting the synthetic treatment, of which group therapy is usually a portion.

Because there has been little attempt to define precisely the variables, both dependent and independent or to seek specific relationships between observed behavioral indices under controlled conditions, the criticisms mentioned appear to be the most fruitful needed areas for further study.

It is out of this more general problem that the present proposed investigation has grown, but seeks to find an answer to one of the specific problems of the relative efficacy of types of group therapy.

A more general aim of this project is to discover under what conditions social functioning can be most economically learned; it is concerned with one aspect of this general problem, which may be stated in the form of the null hypothesis that: "No significant differences will be found in three methods of group psychotherapy based on three different orientations of personality development in bringing about in hospitalised alcoholics more adequate social functioning."
CHAPTER II

EXPERIMENTAL DESIGN

This chapter discusses the operational procedures involved in conducting an experiment to test the proposition described in the preceding chapter.

It begins with a description of the three psychotherapeutic orientations as the tools to be implemented. This is followed by a description of the methods or operations of the experiment, with particular reference to the activities of the therapists. The sample is discussed next, with an elaboration on the principles of selection, and a social and drinking history of the sample actually used. The tabulation of the data explains the statistical operations in the codification procedures, the definitions of the criteria selected, and the necessity for transformation procedures. Finally, the two specific hypotheses are elaborated, along with their required statistical operations.

1.-- The Tools

In order to adequately test the above stated hypothesis, three psychotherapeutic formulations were selected, each of which is based on a theory of personality:
1) psychoanalytic psychotherapy as posited by Slavson\(^1\),
2) client–centered psychotherapy as advocated by Rogers\(^2\)
and his associates, and 3) a learning theory of Psycho-
therapy as proposed by Mowrer\(^3,4\), and elaborated by
Shoben\(^5\), and by Ends and Page\(^6\). Because of the relative
uniqueness of this latter, a detailed elaboration of the
application of this proposal is given in Appendix 1.

Each of four experienced psychotherapists utilized
each of the three named methods with the addition of a
control group, which was non–theory oriented involving
primarily social discussion. This produced a total of
sixteen specific groups for this study.

---

1 J. R. Slavson, Analytic Group Psychotherapy with
Children, Adolescents and Adults, New York, Columbia

2 C. R. Rogers, Client–Centered Therapy, Its Current
Practice, Implications and Theory, Boston, Houghten Mifflin,
1951, 11-560 p.

3 O. H. Mowrer, "Neurosis, Psychotherapy and Two-
Factor Learning Theory" in O. H. Mowrer, Psychotherapy, Theory

4 O. H. Mowrer, Learning Theory and Personality

5 L. J. Shoben, "Psychotherapy as a Problem in
Learning Theory", Psychological Bulletin, Vol. 46, 1949,
p. 366-392.

6 E. Ends and C. W. Page, A Study of Three Types of
Group Psychotherapy Emphasis with Hospitalized Male
Inebriate Patients, Mimeographed Report of a Research
Project Supported by the Department of Public Welfare of the
State of Minnesota, Willmar, State Hospital, Minnesota,
June 1955, 35 p, Appendices A,B,C.
2. Method of the Experiment

Each therapy group met with one therapist three times a week, for a total of fifteen one-hour sessions. This five-week period was planned to keep the group meetings operating completely within the limits of hospitalization, usually about eight weeks.

a) The rotation system. — Each therapist started the experiment with a different formulation. This was done to cancel out practice effects with all formulations done at the same time and order. The scheme of this system is shown below where the letters represent the therapists.

<table>
<thead>
<tr>
<th>PHASE OF THE PROJECT</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I</td>
<td>II</td>
<td>III</td>
<td>IV</td>
</tr>
<tr>
<td>Learning</td>
<td>W</td>
<td>X</td>
<td>Y</td>
<td>Z</td>
</tr>
<tr>
<td>Psychoanalytic</td>
<td>X</td>
<td>Y</td>
<td>Z</td>
<td>W</td>
</tr>
<tr>
<td>Client-Centered</td>
<td>Y</td>
<td>Z</td>
<td>W</td>
<td>X</td>
</tr>
<tr>
<td>Control</td>
<td>Z</td>
<td>W</td>
<td>X</td>
<td>Y</td>
</tr>
</tbody>
</table>

This scheme shows that therapist W started with the Learning formulation and ended with the Psychoanalytic formulation, while Therapist X started with the Psychoanalytic orientation and terminated with the Client-Centered orientation. It should be apparent from this scheme that each method-unit was a product of application in each phase of the project.
b) Therapist variables. — To insure adherence to a specific theoretical formulation by each therapist, controls were effected by public criticism of playbacks of the therapy meetings. The public criticism was confined to the therapists participating in the project.

Previous training for this project involved six months of taking "practice" groups by each therapist. In terms of this each participating therapist took 2, sometimes 3 practice groups with alcoholic patients to develop "technical" proficiency in the less familiar methods.

The background of the participating therapists showed some consistency, even though different professions were represented. There were three clinical psychologists and one psychiatric social worker, all of whom were primarily psychoanalytically oriented in training and practice. Also, each claimed at least five years of training and professional experience, and all had participated and conducted individual psychotherapy with diverse hospital and outpatient types over a three year period. None were specialists in psychotherapy, either group or individual.

3. - The Sample

A total of 96 non-psychotic, non-organic, alcoholics were selected from the incoming male patients of the Willmar State Hospital, Willmar, Minnesota. Six patients were
assigned to each of the sixteen groups according to specific criteria.

a) Principles of selection. — The criteria for selection included a restricted age range, minimum mental ability and mutual rejection on a reliable sociometric scale.

1. All male inebriates between the ages of 25-45 inclusive were selected, inasmuch as this range was found to have the highest proportion of success or improvement in the standard hospital treatment program for inebriates\(^7\).

2. All such men in the above age range were tested for mental ability on the AGCT\(^6\) approximately ten days after admission. A percentile rank of 40 or better was needed for the patients to be considered for the sociometric scale. This score or rank was decided as the closest approximation of low average intellectual functioning, the minimum needed to participate and understand the verbal process of group therapy.

\(^7\) M. W. Brandes, Personal Communication, Willmar State Hospital Follow-up evaluation of inebriate patients in the period 1950-1953.

The patients were then selected for the therapeutic groups on the basis of the W.A.Y. sociometric technique, which is described by Lewis\(^9\). In effect, a patient publicly responded to two questions: "Name 3 things about yourself," and "If you had only 3 wishes, what would they be?" The patient was then rated by every other member of a group in terms of preference for affiliation on a scale of one through five. One signified closest preference and five indicated least preference. Numbers, rather than names, were used to increase objectivity. The members selected to participate in the same group were composed of mutually rejecting individuals, who, according to Lewis tended to show the most therapeutic progress. Inasmuch as the maximum range of possible ratings was not utilised by every member of a group, the highest rating given by each person was considered to represent individuals with whom he would least like to associate. Hence, a rating of three by one individual might represent his most negative choice. Six patients were selected for each therapy group by this procedure.

b) The final sample. — The total final number of patients completing the group therapy treatment was 66.

---

This great attrition was due to a variety of factors including lack of felt need for treatment, which sometimes led to leaving the hospital without official permission, and in particular the voluntary treatment program, which permits a patient to leave the hospital even though against medical advice, seventy-two hours after notification. Replacements, then, were selected using the original criteria if therapy had not begun. Once the therapy sessions were in progress, no new members were added.

1. Summarily two groups completed therapy with 6 members, four groups completed with 5 members, six groups with 4 members, two groups with 3 members, and two groups with 2 members. The distribution of the final number of patient subjects in each therapy group is presented graphically in Table I.

2. The mean age and standard deviation of the experimental subjects were 38.87 and 5.75 respectively. The mean AGCT score and standard deviation were 115.26 and 9.98 respectively. For a more discriminative description of the age and AGCT distribution of the entire sample, Table II presents the data with respect to each of the therapeutic methods used. These data suggest there is no significant difference in age and AGCT distribution between any of the therapy method groups.
Table I. Distribution of the Number of Treated Patients in Each Therapeutic Orientation with Each Therapist.

<table>
<thead>
<tr>
<th>Method</th>
<th>Therapist</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Methods</td>
<td></td>
<td>66</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning</td>
<td></td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>17</td>
</tr>
<tr>
<td>Psychoanalytic</td>
<td></td>
<td>5</td>
<td>4</td>
<td>2</td>
<td>6</td>
<td>17</td>
</tr>
<tr>
<td>Client-Centered</td>
<td></td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Control</td>
<td></td>
<td>4</td>
<td>5</td>
<td>5</td>
<td>3</td>
<td>17</td>
</tr>
</tbody>
</table>
Table II. Distribution of Age and AGCT Scores of Treated Alcoholics in Each Theoretical Formulation.

<table>
<thead>
<tr>
<th>Method</th>
<th>Age</th>
<th>AGCT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
</tr>
<tr>
<td>All Methods</td>
<td>36.87</td>
<td>5.75</td>
</tr>
<tr>
<td>Learning</td>
<td>36.50</td>
<td>6.55</td>
</tr>
<tr>
<td>Psychoanalytic</td>
<td>38.00</td>
<td>5.35</td>
</tr>
<tr>
<td>Client-Centered</td>
<td>36.27</td>
<td>5.80</td>
</tr>
<tr>
<td>Control</td>
<td>36.71</td>
<td>5.29</td>
</tr>
</tbody>
</table>
The mean AGCT and standard deviation for 384 consecutive male inebriate admissions (which included the sample in this study) within the same age range were 108.87 and 21.46 respectively. According to Ends, these inebriate admissions were an unbiased sample as far as measured intellectual ability is concerned. The difference between the mean AGCT scores of the 384 consecutive admissions and the mean of the sample of 66 who completed the treatment reflect the omission of those in the sample achieving less than the 40th percentile.

3. Abbreviated social and drinking histories were obtained before treatment on all patients selected, but were not used as a basis for selection. This information was requested by the authors to obtain basic information about the sample, that is, what kind of people were they; to construct a prognostic index by relating this information to treatment outcome; and specifically for the writer's purpose in this project, to determine the relationship to psychotherapeutic progress. Since there was substantial variation in certain characteristics from method to method, it was considered a worthwhile procedure to test the effect of these differences on the project. This will be noted when the secondary hypothesis is discussed. This information is presented in Tables III and IV, which follow.

Presenting the various aspects of social background, Table III first indicates that occupationally the greatest proportion of all members fell in the category of unskilled labor, with skilled workers following close behind. Many of the people that made up the sample were primarily construction laborers, farmers, carpenters, etc., working and living in rural districts.

Most patients felt they earned an average salary, with about one quarter feeling they earned less than the average. Outside financial aid was utilized and needed by more than one-quarter of the patients. This need showed considerable variability in the sample from method to method.

The highest proportion of patients were married, while one-quarter were single, and one-fifth were divorced. Note here that there was considerable variability among members belonging to each group method.

Both the parental and personal home was described as satisfactory by over one-half of the patients. Those in the learning method, however, indicated a predominant lack of satisfaction with their personal home.

Table IV presents the significant aspects of the drinking behavior of the patient sample.

Over fifty percent of the patients had a total drinking history of from 11 to 20 years with a quite variable distribution in the remaining year groups of above
### Table III. Percentage of Treated Alcoholics in Different Aspects of Social Background in Each Theoretical Formulation.

<table>
<thead>
<tr>
<th>Social Area</th>
<th>Total</th>
<th>Learn. Psych.</th>
<th>CI-Cent.</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=66</td>
<td>N=17</td>
<td>N=17</td>
<td>N=15</td>
</tr>
<tr>
<td><strong>Occupational level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unskilled</td>
<td>40</td>
<td>25</td>
<td>53</td>
<td>47</td>
</tr>
<tr>
<td>Skilled</td>
<td>29</td>
<td>44</td>
<td>24</td>
<td>20</td>
</tr>
<tr>
<td>Semi-Skilled</td>
<td>19</td>
<td>19</td>
<td>12</td>
<td>27</td>
</tr>
<tr>
<td>Semi-Professional</td>
<td>11</td>
<td>6</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td>Professional</td>
<td>1</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Salary level</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average</td>
<td>59</td>
<td>56</td>
<td>41</td>
<td>80</td>
</tr>
<tr>
<td>Below average</td>
<td>25</td>
<td>37</td>
<td>29</td>
<td>13</td>
</tr>
<tr>
<td>Above average</td>
<td>16</td>
<td>6</td>
<td>29</td>
<td>7</td>
</tr>
<tr>
<td><strong>Outside Aid</strong></td>
<td>38</td>
<td>56</td>
<td>29</td>
<td>27</td>
</tr>
<tr>
<td><strong>Marital Status</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>43</td>
<td>31</td>
<td>47</td>
<td>47</td>
</tr>
<tr>
<td>Single</td>
<td>27</td>
<td>12</td>
<td>35</td>
<td>27</td>
</tr>
<tr>
<td>Divorced</td>
<td>20</td>
<td>37</td>
<td>12</td>
<td>14</td>
</tr>
<tr>
<td>Separated</td>
<td>5</td>
<td>12</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Remarried</td>
<td>5</td>
<td>6</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td><strong>Parental Home</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfactory</td>
<td>66</td>
<td>56</td>
<td>71</td>
<td>73</td>
</tr>
<tr>
<td>Unsatisfactory</td>
<td>34</td>
<td>44</td>
<td>29</td>
<td>27</td>
</tr>
<tr>
<td><strong>Personal Home</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Satisfactory</td>
<td>57</td>
<td>31</td>
<td>64</td>
<td>73</td>
</tr>
<tr>
<td>Unsatisfactory</td>
<td>43</td>
<td>69</td>
<td>36</td>
<td>27</td>
</tr>
</tbody>
</table>

*a* Includes unemployment benefits, family aid, welfare agencies, pensions, etc.
Table IV. Percentage of Treated Alcoholics in Different Aspects of Drinking History in Each Theoretical Formulation.

<table>
<thead>
<tr>
<th>Drinking Aspect</th>
<th>Total Learn. Psych. Cl-Cent. Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N=66</td>
</tr>
<tr>
<td>Total Years Drinking</td>
<td></td>
</tr>
<tr>
<td>16-20</td>
<td>31</td>
</tr>
<tr>
<td>11-15</td>
<td>29</td>
</tr>
<tr>
<td>21-25</td>
<td>15</td>
</tr>
<tr>
<td>26-above</td>
<td>12</td>
</tr>
<tr>
<td>10-below</td>
<td>8</td>
</tr>
<tr>
<td>Unknown</td>
<td>5</td>
</tr>
<tr>
<td>Uncontrolled Drinking</td>
<td></td>
</tr>
<tr>
<td>6 years and over</td>
<td>47</td>
</tr>
<tr>
<td>3-5</td>
<td>24</td>
</tr>
<tr>
<td>1-2</td>
<td>8</td>
</tr>
<tr>
<td>1-11 months</td>
<td>10</td>
</tr>
<tr>
<td>No loss of control</td>
<td>11</td>
</tr>
<tr>
<td>Drinking Pattern</td>
<td></td>
</tr>
<tr>
<td>monthly</td>
<td>28</td>
</tr>
<tr>
<td>Weekly</td>
<td>30</td>
</tr>
<tr>
<td>daily</td>
<td>29</td>
</tr>
<tr>
<td>bimonthly</td>
<td>16</td>
</tr>
<tr>
<td>semi-annually</td>
<td>6</td>
</tr>
<tr>
<td>Change from Previous Year</td>
<td></td>
</tr>
<tr>
<td>more</td>
<td>54</td>
</tr>
<tr>
<td>same</td>
<td>27</td>
</tr>
<tr>
<td>less</td>
<td>19</td>
</tr>
<tr>
<td>Previous Treatment</td>
<td></td>
</tr>
<tr>
<td>AA</td>
<td>11</td>
</tr>
<tr>
<td>Self</td>
<td>23</td>
</tr>
<tr>
<td>Hospitalisation</td>
<td>10</td>
</tr>
<tr>
<td>None</td>
<td>16</td>
</tr>
<tr>
<td>Special</td>
<td>5</td>
</tr>
</tbody>
</table>

a Closest approximations.

b Precludes number of times in any one or combination of treatment methods attempted.

c Includes private psychiatric treatment, rest homes, antabuse, etc.
21 years and below 10 years.

Nearly half the sample drank uncontrolled for more than six years, with about one-quarter falling between three and five years. It is interesting to note that about one-tenth claimed less than a year of uncontrolled drinking, and an additional one-tenth claimed no loss of control. These latter individuals made up the bulk of the daily drinkers categorised under drinking pattern. The less number of years of uncontrolled drinking indicates relative recent origin of pathological drinking.\footnote{11}

In terms of drinking pattern, about one-third preferred weekly drinking, a third preferred monthly drinking, and one-fifth preferred daily drinking.

Over half of the patients felt their drinking was on the increase over the previous year; about one-quarter felt it was the same, and about one-fifth felt it was less.

AA was the most prominent method of treatment previously attempted. One-quarter tried to stop drinking without outside aid, one-tenth tried previous hospitalisation, and very few claimed having received specialised care. About one sixth claimed no previous treatment.

4.- Tabulation of the Data

For the purpose of this particular study all meetings of all therapy groups were recorded by tape in the presence of the members. Full recordings of the initial (sessions 1 & 2), middle (sessions 7 & 8), and final (sessions 14 & 15) phases were coded, using an application of learning theory principles operationally defined by Sanford.12

a) The Coding of Verbal Behavior. — The coding of the patients' verbal behavior was made through playbacks of the recorded sessions noted above. Each statement or verbal unit was considered a sample of behavior and was coded on a single IBM card. The notations, made in categories, included whether an individual happened to be engaged in non-task oriented or task oriented behavior. Statements in both categories were also tallied for affect, either disturbed or non-disturbed. Non-task oriented statements received no further coding.

Task oriented statements, on the other hand, were discriminated further using three type categories descriptive of the nature of the verbal operation. These were...

labeling, exploring and problem-solving. Task oriented statements were further categorized according to the primary referent, that is, self or non-self. The application of this notational system is shown below, as applied on IBM cards.

<table>
<thead>
<tr>
<th></th>
<th>LAB</th>
<th>EXP</th>
<th>PC</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTO</td>
<td>S N5</td>
<td>S N5</td>
<td>S N5</td>
</tr>
<tr>
<td>ND</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This indicates an exploring statement directed to the self, and is non-disturbed in affect.

A detailed definition of the criteria for each of these categories is given in Appendix 2. Additional information identifying person, group and session number was also indicated on each card, but is not shown here.

b) Reliability of Coding. — Using the above mentioned categories, independent coding of a random sample of therapy protocols by two psychologists yielded an overall agreement of 86.4%. An overall estimate of the scoring reliability of two scorers was calculated using the formula $r = \sqrt{1 - \frac{K^2}{1}}$. This yielded a scoring reliability estimate of +.93, which can be considered the highest possible agreement figure that could be reached by an objective evaluator. The disadvantage is that all three elements (type, affect, referents) were weighed as equally difficult. This was found not to be true.
The 13.6% disagreement between coders was not equally distributed over the three variables. 61% of the total disagreement occurred in the coding of affect as disturbed or non-disturbed from the tape recording. About 23.5% of the disagreement referred to the type of statement as non-task oriented, labeling, exploring or problem-solving. The remaining 16% was in terms of referents, as self or non-self. Disagreement between the coders showed no significant bias when the chi-square test was applied. Therefore, the results reported in the tables are based on coding by only one coder.

c) Process Goals as the Criteria. -- The data used in this experiment were based directly on 11 process goals isolated and defined by Sanford, which are operationally defined below. These 11 process goals were directly calculable from the coding system described previously. A brief, but more detailed conceptual definition of each of the criteria is presented in Appendix 3.

Nine of the goals or criteria were noted as indicating movement toward higher status in achievement by successful therapy; and two of which (Symptoms) indicated movement toward lower status in achievement in successful therapy.

---

14 Idem, ibidem.
The eleven process goals were:

1) Intercommunication (Int)...the total behavior units.

2) Motivation, Therapy Aided (MTA)...total task oriented statements.

3) Labeling (L)...total labeling statements.

4) Exploring (E)...total exploring statements.

5) Problem-Solving (PS)...total problem-solving statements.

6) Extinction and Reinforcement (E & R)...total exploring, plus problem-solving.

7) Motivation Self-Responsible (MSR)...total task oriented, self-reference statements.

8) Self-Esteem (SE)...total self-reference, non-disturbed statements.

9) Societal Contribution (SC)...total non-self, non-disturbed statements.

Symptoms:

10) Disturbed behavior (D)...total disturbed statements.

11) Non-Task Oriented behavior (NTO)...total non-task oriented statements.

The percent change in performance between the initial (sessions 1 and 2), and terminal (sessions 14 and 15) phases of treatment was calculated for each individual on each criterion. These difference scores were then transformed, using the Freeman-Tukey square root system to

normalize the distributions and increase the homogeneity of the variances. This procedure of transformation allowed a more efficacious use of the parametric techniques in analyzing the data.

5. Specific Hypotheses

A relatively comprehensive evaluation of the therapy effectiveness would of necessity involve an evaluation from two basic poles: Internal and External reliability and the relationship between these reliabilities. Although the analysis of this material was conducted with such an orientation, the focal point was developed around two hypotheses which were in the context of internal reliability only.

The first or main hypothesis was concerned with the comparative effectiveness of the methods of therapy. The secondary hypothesis was concerned with clarification of the method effectiveness with respect to population influences. This was deemed prudent because of the variability in the actuarial data reported by the patient population. They follow.

a) The Main Hypothesis. — In the treatment of non-psychotic, non-organic alcoholics there are no significant differences between the measured outcome of three
theory oriented group therapy methods and between each of these and a non-theory oriented method.

1. The differences between the three experimental methods of therapy were tested by the F test for a simple randomised design, using the means of the criteria.

2. The differences between each of the experimental methods of therapy and the control were tested by independent "t" tests, using the means of the criteria.

A one tailed test of significance was employed with this second part of the main hypothesis having been changed to a directional one, that is, that the therapy methods will show significantly greater therapeutic benefit than the control in the criteria.

b) The secondary hypothesis. — If differences in therapeutic gains are found it may be hypothesized that these gains are the results of other variables than the therapeutic methods themselves.

1. The relationship between therapeutic gain and certain actuarial variables was tested by the Fisher test of Exact Probabilities.

2. The datum used was individual performance on each criterion showing a mean therapeutic gain as:

   i) above the mean (+)
   ii) below the mean (−), and the existence of
six selected actuarial variables. 16

1) Evaluation of Parental home as:
   satisfactory; unsatisfactory.

ii) Evaluation of Personal home (marriage) as:
    satisfactory; unsatisfactory.

iii) Uncontrolled years drinking as:
     1-5 years; 6 years and over.

iv) Drinking pattern as:
    periodic; steady.

v) Drinking frequency change from previous year as:
    more; not more, (that is, equal or less).

vi) Previous treatment for drinking as:
    none; once or more.

16 Six variables only were selected from the obtained
histories due to the restrictive nature of the Fisher test
using only dichotomised information. In many events recorded
there was no adequate method to dichotomize and retain
information and accuracy.
CHAPTER III

RESULTS

In attempting to explain the results of the hypotheses tested by this project, the analysis of the data was conceived within the larger framework of internal and external reliability. Ideally, this concept provides the foci for a most adequate and comprehensive system for evaluating the therapy process. Information is more properly allocated, and most important, deficiencies are more accurately recognised and evaluated.

The results are discussed in four sections which herein are conceived within the reliability structure.

The internal reliability is evaluated from two basic foci; the variation of the criteria between the methods, and the variation of the criteria within each method.

The variation between the methods is discussed in Section 1.- Differences Between the Methods, and Section 2.- Similarities Between the Methods.

The variation within each method is considered in Section 3.- Therapeutic Gains Each Method.

The external reliability is treated in Section 4.- The Follow-up.
1.- Differences Between Methods.

This section is concerned with the criteria which have shown significant variation in effects from the methods of therapy employed in this project.

The discussion begins with Problem-Solving, Exploring, and Extinction and Reinforcement, the three criteria which benefited therapeutically by all the methods. This is followed by Symptom:NT, which was the only criterion differentially effected by the methods. Finally, Motivation-Therapy Aided and Labeling are then discussed as the criteria which were effected in a detrimental manner by all the methods.

A coding system was employed for convenience in identifying the various methods of therapy as they are shown in the tables. The symbols are: L - the learning method; PA - the psychoanalytic method; CC - the client-centered method and C - the control or non-theory oriented social discussion method.

A. Problem Solving. — All of the therapy methods, including the control, produced an increase in Problem Solving behavior in the 15 hours of group treatment.

In the comparison of these gains in the theory oriented methods, the analysis of variance revealed quite significant differences. This is shown in Table V.
Comparison of the gains between each therapy, presented in Table VI, revealed that the learning therapy possessed a significantly greater amount of Problem Solving behavior than either the psychoanalytic or client-centered methods. The differences in gain between the psychoanalytic and client-centered methods, revealed only chance variation.

Independent t tests of each therapy method with the control method were also shown in Table VI. Only the learning method showed a significantly greater amount of therapeutic gain in Problem Solving than the non-theory oriented social discussion.

The learning method then stands out unique in its therapeutic effect on Problem Solving by comparison with the other therapies and the control method. Such differences, however, were not the consequences of method alone. In learning therapy only, specific interaction effects were observed as strongly influencing the performance in Problem Solving. This can be observed in Table XVI.

B. Exploring. — Objectively, gains in Exploring were produced in only two therapy methods, i.e., learning and psychoanalytic. Client-centered therapy, however, produced a decrease in Exploring behavior in the 15 hours of group treatment.

Comparison of the experimental therapies by the analysis of variance revealed that quite significant
Table V - Analysis of Variance of Problem-Solving in Three Theory Oriented Methods of Group Therapy.

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Variance</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Methods</td>
<td>25</td>
<td>2</td>
<td>12.50</td>
<td>5.92</td>
<td>.01</td>
</tr>
<tr>
<td>Within Methods</td>
<td>97</td>
<td>46</td>
<td>2.11</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table VI - Significant Differences in Problem-Solving in Four Methods of Group Therapy.

<table>
<thead>
<tr>
<th>Methods Compared</th>
<th>Means</th>
<th>D</th>
<th>$\bar{C}_D$</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>L - PA</td>
<td>2.38</td>
<td>-.73</td>
<td>1.65</td>
<td>.29</td>
<td>5.69</td>
</tr>
<tr>
<td>L - GC</td>
<td>2.38</td>
<td>1.09</td>
<td>1.29</td>
<td>.29</td>
<td>4.45</td>
</tr>
<tr>
<td>L - C</td>
<td>2.38</td>
<td>1.23</td>
<td>1.15</td>
<td>.57</td>
<td>2.02</td>
</tr>
</tbody>
</table>

a  One tailed test of significance.
Table VII - Analysis of Variance of Exploring Behavior in Three Theory Oriented Methods of Therapy.

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Variance Estimate</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Methods</td>
<td>87</td>
<td>2</td>
<td>43.50</td>
<td>3.79</td>
<td>.05</td>
</tr>
<tr>
<td>Within Methods</td>
<td>528</td>
<td>46</td>
<td>11.48</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Table VIII - Significant Differences in Exploring Between Four Methods of Group Therapy.

<table>
<thead>
<tr>
<th>Methods Compared</th>
<th>Means</th>
<th>D</th>
<th>$\sigma_d$</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>L - CC</td>
<td>2.54 (-)</td>
<td>-0.73</td>
<td>3.27</td>
<td>4.78</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>A - CC</td>
<td>1.36 (-)</td>
<td>-0.73</td>
<td>2.09</td>
<td>3.06</td>
<td>&lt;.02</td>
</tr>
<tr>
<td>L - G</td>
<td>2.54 (-)</td>
<td>0.24</td>
<td>2.30</td>
<td>1.14</td>
<td>2.02</td>
</tr>
</tbody>
</table>

* a One tailed test of significance.
differences existed between them. The null hypothesis was rejected and is shown in Table VII. Both the learning and psychoanalytic methods were found to be significantly greater than the client-centered method, but only chance variation was found between the former two therapies. This is shown in Table VIII.

In the comparison of each therapy with the control method, the null hypothesis was rejected in one instance only. Learning therapy was found to be significantly greater in the production of Exploring behavior than the control method.

Interaction effects were not observed in the production of Exploring behavior in any of the methods.

C. Extinction and Reinforcement. — All methods produced an increase in Extinction and Reinforcement. However, only chance variation was found between the therapies, therefore, the null hypothesis was accepted.

Independent comparison of each therapy with the control revealed other evidence. Learning therapy only was found to be significantly more effective in producing an increase in Extinction and Reinforcement\(^1\). Only chance variation was found between psychoanalytic, client-centered

\(^1\) \, M_0 = 3.15, \sigma_0 = 1.71, t = 1.84, with a one tailed test, 32 df, \, p = .05.
RESULTS

and control methods; therefore, the null hypothesis was accepted in each instance.

There was no evidence of interaction effects in the production of Extinction and Reinforcement in any of the methods.

D. Symptom: NTO. — Considerable variation in effect on Symptom: NTO was produced by the different methods. Psychoanalytic therapy alone managed to decrease the amount of NTO behavior. All other methods, however, produced an increase in the incidence of NTO behavior.

In the analysis of variance of the therapies the null hypothesis was rejected. This is shown in Table IX. Psychoanalytic therapy alone was found to be most significantly effective in reducing Symptom: NTO.

Subjectively, however, learning therapy was also found to be significantly different from client-centered therapy. Inasmuch as both methods produced an increase in Symptom: NTO, however, it would be more proper to describe this phenomenon in other terms: that learning therapy was significantly less detrimental than client-centered therapy, in its effects on Symptom: NTO. This is shown in Table X.

Independent comparison of each therapy with the control revealed a similar picture. Psychoanalytic therapy alone was significantly more effective than the control
Table IX - Analysis of Variance of Symptom: NTO in Three Theory Oriented Methods of Group Therapy.

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Estimate Variance</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Methods</td>
<td>1802</td>
<td>2</td>
<td>901</td>
<td>14.01</td>
<td>.01</td>
</tr>
<tr>
<td>Within Methods</td>
<td>2959</td>
<td>46</td>
<td>64.33</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table X - Significant Differences in Symptoms: NTO in Four Methods of Group Therapy.

<table>
<thead>
<tr>
<th>Methods Compared</th>
<th>Means</th>
<th>( D )</th>
<th>( \sigma_D )</th>
<th>( t )</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA - CC</td>
<td>(-2.09) (-) 12.91</td>
<td>-15.00</td>
<td>1.62 9.26</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>L - CC</td>
<td>(4.0) (-) 12.09</td>
<td>-8.91</td>
<td>1.62 5.5</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>L - PA</td>
<td>(4.0) (-) -2.09</td>
<td>6.09</td>
<td>1.62 3.75</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>PA - C</td>
<td>(-2.09) (-) 7.62</td>
<td>-9.71</td>
<td>3.11 3.12</td>
<td>.001^{a}</td>
<td></td>
</tr>
</tbody>
</table>

\(^{a}\) One tailed test.
method in reducing NTU behavior. This is also shown in Table X.

Interaction effects were not observed in the performance of Symptom:NTU in any of the methods of therapy.

E. Motivation Therapy-Aided. — All therapies and the control method produced a common detrimental effect, i.e., decreased, in Motivation Therapy-Aided.

In the analysis of variance of the therapies, the null hypothesis, however, was rejected. This is shown in Table XI. Significant differences were found between each of the theory oriented therapies. The psychoanalytic method was least detrimental; the learning method was less detrimental than the client-centered method; and the client-centered method was found to be most detrimental. The data are presented in Table XII.

Independent comparison of each therapy method with the control indicated that in all tests the null hypothesis was accepted. None of the theory oriented methods was found to be significantly less detrimental than the control method.

Interaction effects were not observed to influence Motivation Therapy-Aided in any of the methods.

F. Labeling. — All of the therapy methods and the control also produced a decrease in Labeling behavior.
Table XI - Analysis of Variance of Motivation
Therapy-Aided in Three Theory Oriented Methods of Group Therapy.

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Estimate of Variance</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Methods</td>
<td>1034</td>
<td>2</td>
<td>517</td>
<td>6.81</td>
<td>.01</td>
</tr>
<tr>
<td>Within Methods</td>
<td>3491</td>
<td>46</td>
<td>75.89</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table XII - Significant Differences in Motivation Therapy-Aided Between Three Methods of Group Therapy.

<table>
<thead>
<tr>
<th>Methods Compared</th>
<th>Means</th>
<th>D</th>
<th>$\bar{\tau_D}$</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA - CC</td>
<td>- .23</td>
<td>-11.60</td>
<td>11.37</td>
<td>1.76</td>
<td>6.46</td>
</tr>
<tr>
<td>L - CC</td>
<td>- 5.01</td>
<td>-11.60</td>
<td>6.59</td>
<td>1.76</td>
<td>3.74</td>
</tr>
<tr>
<td>L - PA</td>
<td>- 5.01</td>
<td>- .23</td>
<td>- 4.73</td>
<td>1.76</td>
<td>2.72</td>
</tr>
</tbody>
</table>
# Table XIII - Analysis of Variance of Labeling Behavior in Three Theory Oriented Methods of Group Therapy

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Variance Estimate</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Methods</td>
<td>561</td>
<td>2</td>
<td>280.5</td>
<td>3.27</td>
<td>.05</td>
</tr>
<tr>
<td>Within Methods</td>
<td>3950</td>
<td>46</td>
<td>35.87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table XIV - Significant Differences in Labeling Behavior in Three Methods of Group Therapy.

<table>
<thead>
<tr>
<th>Methods Compared</th>
<th>Means</th>
<th>D</th>
<th>$\sigma_D$</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA - CC</td>
<td>-1.11 (-)</td>
<td>-9.15</td>
<td>8.04</td>
<td>1.87</td>
<td>4.30</td>
</tr>
<tr>
<td>L - PA</td>
<td>-6.90 (-)</td>
<td>-1.11</td>
<td>-5.79</td>
<td>1.87</td>
<td>3.10</td>
</tr>
</tbody>
</table>
Consequently the common effect on Labeling by the methods was considered as detrimental.

In the analysis of variance of the therapy oriented methods, the null hypothesis was rejected. This is shown in Table XIII. Non-chance differences were found between some of the methods. Table XIV shows that the psychoanalytic method was significantly less detrimental than either the learning or client-centered therapies. On the other hand, only chance variation was found between learning and client-centered therapies.

Independent comparison of each theory oriented method and the control revealed only chance variation, therefore, the null hypothesis was accepted in each instance.

Interaction effects were not observed to influence the Labeling behavior in any of the methods.

2.- Similarities Between Methods

This section discusses the criteria which were affected in a similar fashion by each of the methods.

Only chance variation was observed in the effects on Intercommunication, Societal Contribution, Symptom:D, Self-Esteem, and Motivation Self-Responsible among all methods of therapy and the control. Although interaction effects were found to be generally more prevalent among these criteria, there was no evidence of any pattern
consistency. For this reason the interaction effects will only be noted here, but will be discussed in more detail within each method of occurrence.

Some unique effects did occur with reference to these criteria which showed only chance differences between methods. For this reason each of these criteria will be briefly discussed in general terms of therapeutic gain or deficit.

A. Intercommunication. — All methods and the control produced an increase in Intercommunication, which was thereby considered a common beneficial effect. Interaction effects were observed in the psychoanalytic method and the control by the same actuarial data. However, the same data were influential in a diametrically opposed manner in each of these methods.

B. Societal Contribution. — All methods and the control produced an increase in Societal Contribution. This also was considered a common beneficial effect by the methods. Interaction effects were observed with this criterion only in the psychoanalytical method, and this by two of the actuarial variables.

D. Symptom: D. — All methods and the control produced a decrease in Symptom: D. This was considered a common beneficial effect. Interaction effects were observed only in the learning method.
D. Self-Esteem. -- All methods except the learning orientation produced an increase in Self-Esteem. Learning orientation alone produced an adverse effect on this criterion. Interaction effects were observed only in the Client-centered method.

E. Motivation Self-Responsible. -- The psychoanalytic method alone produced an increase or therapeutic gain in this criterion. All other methods, including the control, produced an adverse therapeutic effect. Interaction effects were observed in the psychoanalytic method alone.

3.- Therapeutic Gains Each Method

This section is concerned with the beneficial therapeutic effects of each method with respect to the initial criteria. Special attention is also directed to explanations of the interaction effects with actuarial data in the performance of certain criteria. The psychoanalytic method will be discussed first, followed by the learning method and client-centered method. Lastly, the control will be considered.

A. Psychoanalytically Oriented Group Therapy. -- The gross results of psychoanalytic therapy revealed therapeutically beneficial effects in nine of the eleven criteria, but only 2 of which were significant in the
fifteen hours of treatment. These are all indicated in Table XV.

**Significantly effected therapeutically were the two criteria of Problem-Solving and Self-Esteem.**

A noticeable trend toward therapeutically beneficial effects were observed in Intercommunication, Exploring, Extinction and Reinforcement, Societal Contribution, Motivation Self-Responsible, Symptom:NT0, and Symptom:D.

Three of the latter criteria were also found to be **significantly influenced by certain characteristics of the patients.** These are shown as Intercommunication, Societal Contribution, and Motivation Self-Responsible.

Patients who showed a marked increase in Intercommunication in the 15 hours of therapy indicated five or less years of uncontrolled drinking, while those who showed a marked decrease in Intercommunication indicated six or more years of uncontrolled drinking.

Societal Contribution was found to be influenced by two of the actuarial variables tested. Patients who produced an increase in Societal Contribution were drinking uncontrollably for six or more years and felt their personal homes were unsatisfactory, while those who produced a decrease in Societal Contribution were drinking uncontrollably for five or less years and felt their personal homes were satisfactory.
Table XV - Criteria with Therapeutic Gains and Significantly Related Actuarial Variables in Psychoanalytically Oriented Group Therapy.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>M</th>
<th>σM</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuarial Variables^b</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem Solving</td>
<td>0.73</td>
<td>0.38</td>
<td>1.92</td>
<td>.05</td>
</tr>
<tr>
<td>Self Esteem</td>
<td>2.31</td>
<td>1.28</td>
<td>1.80</td>
<td>.05</td>
</tr>
<tr>
<td>Intercommunication Uncontrolled Years</td>
<td>4.35</td>
<td>3.42</td>
<td>1.27</td>
<td>NS</td>
</tr>
<tr>
<td>Exploring</td>
<td>1.36</td>
<td>0.91</td>
<td>1.49</td>
<td>NS</td>
</tr>
<tr>
<td>Extinction and Reinforcement</td>
<td>1.43</td>
<td>1.02</td>
<td>1.40</td>
<td>NS</td>
</tr>
<tr>
<td>Societal Contribution Uncontrolled Years Personal Home</td>
<td>2.11</td>
<td>1.74</td>
<td>1.21</td>
<td>NS</td>
</tr>
<tr>
<td>Motivation Self-Responsible Personal Home</td>
<td></td>
<td>0.02</td>
<td>2.32</td>
<td>.006 NS</td>
</tr>
<tr>
<td>Symptom:NTO</td>
<td>-2.09</td>
<td>2.61</td>
<td></td>
<td>.50 NS</td>
</tr>
<tr>
<td>Symptom:D</td>
<td>-2.74</td>
<td>2.75</td>
<td></td>
<td>.99 NS</td>
</tr>
</tbody>
</table>

a One tailed test of significance.

b Fisher Test of exact probabilities, two tailed test, p = .10 or less.
Finally patients who experienced an increase in Motivation Self-Responsible felt their personal homes were satisfactory while those who experienced a decrease in Motivation Self-Responsible felt their personal homes were unsatisfactory.

B. Learning Therapy. — The gross effects of learning therapy revealed therapeutically beneficial effects in six of the eleven criteria, only three of which were statistically significant. The criteria, shown in Table XVI, were Problem-Solving, Exploring, and Extinction and Reinforcement, as significantly effected in the 15 hours of treatment. Trends toward therapeutically beneficial effects were also noted in Symptom:D, Intercommunication, and Societal Contribution.

Two of the criteria, Problem-Solving and Symptom:D were also found to be significantly influenced by certain characteristics of the patient population.

Patients who increased their Problem-Solving behavior felt their parental homes were unsatisfactory, while those who decreased their Problem-Solving behavior felt their parental homes were satisfactory.

The patients who experienced a decrease in Symptom:D were drinking less currently (that is, compared to previous year pattern), while those who experienced an increase in Symptom:D were drinking more currently.
Table XVI - Criteria with Therapeutic Gains and Significantly Related Actuarial Variables in Learning Oriented Group Therapy.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>M</th>
<th>σM</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Actuarial Variables</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Problem Solving</td>
<td>2.38</td>
<td>.45</td>
<td>5.29</td>
<td>.001</td>
</tr>
<tr>
<td>Parental Home</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exploring</td>
<td>2.54</td>
<td>.78</td>
<td>3.26</td>
<td>.001</td>
</tr>
<tr>
<td>Extinction and Reinforcement</td>
<td>3.23</td>
<td>1.13</td>
<td>2.86</td>
<td>.001</td>
</tr>
<tr>
<td>Symptom: D</td>
<td>-2.18</td>
<td>2.00</td>
<td>1.09</td>
<td>NS</td>
</tr>
<tr>
<td>Drinking Change</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercommunication</td>
<td>4.64</td>
<td>3.19</td>
<td>1.45</td>
<td>NS</td>
</tr>
<tr>
<td>Societal Contribution</td>
<td>1.68</td>
<td>1.73</td>
<td>.97</td>
<td>NS</td>
</tr>
</tbody>
</table>

a One tailed test.

b Fisher Exact Probability test, two tailed test, p = .10 or less.
C. Client-Centered Therapy. — The gross effects of the client-centered method revealed therapeutic gains in five of the eleven criteria, one of which improved significantly in the 15 hours of treatment. The five criteria are shown in Table XVII.

SymptomD showed the only significant therapeutic improvement (that is, was reduced) in the course of treatment. Societal Contribution, Self-Esteem, Intercommunication, and Extinction and Reinforcement showed noticeable trends toward therapeutic improvement.

Self-Esteem was the only criterion which showed interaction effects with patient characteristics. Patients who experienced a rise in Self-Esteem were drinking the same or less currently (that is, compared with the previous year), while those who experienced a decrease in Self-Esteem were drinking more currently.

D. Social Discussion (control). — The control method was not without merit internally. The gross effects in the social discussion groups revealed therapeutic gains in four of the eleven criteria, three of which were significant. These are shown in Table XVIII.

Intercommunication, Problem-Solving, and SymptomD were significantly affected therapeutically through social discussion, while the improvement in Societal Contribution alone was suggested as a trend.
Table XVII - Criteria with Therapeutic Gains and Significantly Related Patient Characteristics in Client-Centered Therapy.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>M</th>
<th>$C_M$</th>
<th>t</th>
<th>$p^a$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actuarial Variables</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symptom:D</td>
<td>-5.47</td>
<td>2.77</td>
<td>1.97</td>
<td>.02</td>
</tr>
<tr>
<td>Societal Contribution</td>
<td>2.00</td>
<td>2.37</td>
<td>.84</td>
<td>NS</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>.50</td>
<td>1.51</td>
<td>.33</td>
<td>NS</td>
</tr>
<tr>
<td>Drinking Change</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercommunication</td>
<td>1.03</td>
<td>3.14</td>
<td>.33</td>
<td>NS</td>
</tr>
<tr>
<td>Extinction and Reinforcement</td>
<td>.28</td>
<td>.91</td>
<td>.31</td>
<td>NS</td>
</tr>
</tbody>
</table>

a One tailed test of significance.

b Fisher Exact Probability, two tailed test, $p = .10$ or less.
Table XVIII - Criteria with Therapeutic Gains and Actuarial Variables in the Control Method.

<table>
<thead>
<tr>
<th>Criteria</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>$\sigma_M$</td>
<td>t</td>
<td>p^a</td>
</tr>
<tr>
<td><strong>Actuarial Variables</strong></td>
<td><strong>b</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intercommunication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncontrolled years</td>
<td>8.83</td>
<td>2.29</td>
<td>3.86</td>
<td>.001</td>
</tr>
<tr>
<td>Problem Solving</td>
<td>1.23</td>
<td>.34</td>
<td>3.62</td>
<td>.001</td>
</tr>
<tr>
<td>Symptom: D</td>
<td>-4.76</td>
<td>2.03</td>
<td>2.34</td>
<td>.02</td>
</tr>
<tr>
<td>Societal Contribution</td>
<td>3.23</td>
<td>2.45</td>
<td>1.32</td>
<td>NS</td>
</tr>
</tbody>
</table>

^a One tailed test of significance.

^b Fisher test of exact probabilities, two tailed test, p = .10 or less.
RESULTS

Intercommunication also showed interaction effects with one of the patient variables. Patients who increased Intercommunication experienced five or less years uncontrolled drinking, while those who decreased Intercommunication experienced six or more years loss of control.

4.- The Follow-up

This section discusses the relationship between the drinking aspect of post-hospital adjustment, as follow-up ratings, and participation in group psychotherapy.

Specifically it considers the relationship of the follow-up evaluations with: Participation in therapy vs. nontherapy, i.e., control; participation in method of therapy; individual criterion performance; and finally, the actuarial data.

The follow-up evaluation of patients in the hospital inebriate treatment program was standard procedure. The information is gathered by personal contact with former inebriate patients by the follow-up agent. Out of 66 patients in this study, only nineteen were able to be contacted in some way for an evaluation. Although this number was small, and the evaluation was primarily concerned with drinking behavior, this follow-up provided direct evidence of one aspect of their post-hospital adjustment. The original

2 Appendix 5, Table XXI.
ratings of the nineteen cases were condensed into a system of improved and unimproved ratings, which are shown in Table XIX.

This table shows that 11 cases improved out of the known nineteen; 4 out of four in the psychoanalytic method, 4 out of six in the learning method, 2 out of three in the client-centered method and 1 out of six in the control.

A. Therapy vs. Nontherapy (control). — Utilizing a directional hypothesis that a greater proportion of patients who participated in theory oriented therapy would improve than was the case of those who did not participate in therapy, i.e., control, the Fisher exact probabilities test was employed. The results, shown in Table XX supported the hypothesis. Patients who participated in theory oriented therapy showed a significantly greater proportion having improved as opposed to those patients in the control method.

Further analysis by the same test between each therapy method and the control method showed that only the psychoanalytic method possessed a significantly greater proportion of treated patients who had improved.

3 The figure for the control represented only chance variation from follow-up status of all patients in the hospital treatment program at the same time (i.e., including those above). In the gross evaluation of hospital treatment, 2 out of six actually improved as compared with the 1 out of six observed in the control.
Table XIX - Condensed Results of 12 Month Follow-up Status of 19 Alcoholics Treated in Group Therapy.

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Total N=19</th>
<th>Psychoanalytic N=4</th>
<th>Learning N=6</th>
<th>Client-Centered N=3</th>
<th>Control N=6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved</td>
<td>11</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Unimproved</td>
<td>8</td>
<td>0</td>
<td>2</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>

a  See Appendix 5 for original ratings.

b  Improved -- is a condensation of ratings 1, 2, and 3 of original ratings. These patients have been completely dry at least six months.

c  Unimproved is a condensation of ratings 4 and 5 of original ratings. These patients were known to have been drinking, or made no effort to maintain sobriety for any length of time approaching six months.
Table XX - Significant Differences in Follow-up of 19 Patients in Group Treatment.

<table>
<thead>
<tr>
<th>Methods Compared</th>
<th>Level of Significancea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Therapy vs. Control</td>
<td>.025</td>
</tr>
<tr>
<td>Psychoanalytic vs. Control</td>
<td>.025</td>
</tr>
</tbody>
</table>

a Fisher Exact Probabilities Test, one tailed test.
RESULTS

B. Method of Therapy Participation. — Each of the therapy methods was also compared with the other, using a two-tailed test of significance of the null hypothesis. However, only chance variation was found in each comparison, thereby supporting the null hypothesis.

C. Criterion Performance and Follow-up. — The relationship between criterion performance and follow-up was an attempt to establish predictive information from the therapy process to post-hospital adjustment. However, no significant relationships were found in any method between specific criterion performance and follow-up ratings.

D. Actuarial Data. — No relationship was found between the actuarial data as listed in Chapter II and the follow-up ratings.
DISCUSSION

INTRODUCTION

It would be presumptuous to assume that the psychotherapeutic process can be adequately measured and evaluated from the standpoint of a probability analysis alone. It remains and continues to be a highly complex process equal in difficulty to explorations in personality theory and construction. This dissertation, however, attempts to explore the concept of success or improvement in therapy, and to explain the sources of this success. As will be seen, the effectiveness is the product of the interactions of a multiplicity of variables, measurable and not measurable at this time.

Interpretation of the results was necessarily limited. Although the sample adequately represented hospitalized alcoholics, there was questionable representation of alcoholics in general. The more broad application of the results seemed justified, however, inasmuch as the sample represented the extremes on a pathological continuum concerning this syndrome. The selection system for participation in this study, that is, intelligence estimates and the sociometric scale, however, must not be ruled out as delimiting factors.
Hospitalization itself was a significant factor. The circumstances were not ideal for maximum therapeutic effectiveness. Many of the patients in the study were not in the hospital of their own accord. Also, attendance in group therapy was not by choice. These two conditions then, had considerable effect on the gross motivations of these patients in rehabilitating themselves.

Therapy duration and intensity was another factor. Therapy was essentially brief, amounting to 15 one-hour sessions over a five-week period. Yet, even as brief therapy, this was considered the minimum in attendance for an adequate evaluation.

The ultimate effectiveness of any psychotherapeutic procedure depends on validity in real life situations. In terms of this, the follow-up on the alcoholics in the various groups was conducted, and used as the focus for a retrospective evaluation of the various methods. This procedure was designed to remove the just criticism of a closed system of thinking, where only vague assumptions could be made concerning internal indices of therapeutic progress and their relevancy to real life situations.

The discussion begins with the external variation in the number of improved cases in the theory oriented therapies and the control. Next, the internal variation of the eleven criteria between the methods is treated,
emphasizing the relatively unique or significant effects of each method. This is followed by the relation between external improvement and the internal process of therapy, differentially defined in each method. Finally, the influence of the actuarial data of the patients is treated with respect to specific criteria performance, and therapy participation.
DISCUSSION

1. - External Variation Between Methods

A. Theory Oriented Methods. — The hypothesis of no differences between the therapeutic orientations was upheld. This indicated, at least externally, that such differences as were observed between the therapies appeared to be the result of sampling variation. The best estimate then, of the parameter of this theory oriented therapy population would be given by the number of improved cases pooled from the therapy samples.

B. Theory Oriented Methods Versus Control. — Utilizing the directional hypothesis as described in Chapter III, the patients who participated in theory oriented therapy showed a significantly greater proportion having improved as opposed to those patients in the control or social discussion method. Further analysis between each therapy and the control indicated that the psychoanalytic orientation alone possessed a significantly larger number of improved cases than the control.

The significantly greater number of improved cases among those who participated in the theory oriented methods can be explained by actual therapeutic participation. That such was so is indicated in Appendix 6, Table XXII. This shows that over 70% of the sampled statements in each
theoretical orientation were task-oriented, indicating a predominance of actual therapeutic focusing.

The relative lack of improvement in the control is also explainable by the question of task-orientation or therapeutic focusing during the group meetings. The control or social discussion groups were characterized by a common "laissez-faire" attitude, being allowed to discuss anything as freely as they wished. That such was the case is shown also in Appendix 6, Table XXII, where 70% of the sampled statements were of a non-task oriented nature.

It must be tentatively concluded then, that later abstinence from drinking in hospitalised alcoholics is a function of theory oriented therapy participation, because of actual holding to therapeutic focusing regardless of orientation.

The above interpretation, however, does not rule out the role and possible influence of some intervening variables. These may also explain the external picture; therefore, it would be prudent to take these into consideration as sources of the variation observed.

The first consideration is a number bias. Inasmuch as more patients participated in therapy than nontherapy, this suggests that simple availability of more people could have accounted for the variation observed. This, however, must be rejected on the ground that the technique employed
actually determines whether the two groups differed in the proportion with which they fall into the classifications of improved and unimproved.

The second consideration is a health bias. Do the 19 cases as distributed, represent the 66 who participated in the experiment? It is generally recognized in mental therapeutics that those who have improved tend to encourage communication of their status as opposed to those who do not improve. If the evaluations depended on voluntary communication by the patients, the health bias would probably be accepted. However, the fact that the follow-up was conducted by direct contact in the field by the hospital agent; and that the 19 cases contacted suggested only random variation from method to method, the health bias must also be rejected.

Finally, participation in AA is a major variable to be concerned with improvement generally. Although no detailed data were collected on this aspect, the majority of the contacts concerning the follow-up status of the patients was made through local AA groups. The information was more reliably obtained in this manner because they provide the most accurate picture of the former patient than any other source, including the wife and family; and also because of acquaintance with, and frequently affiliation with AA by the former patients. Concurrently other
rehabilitative techniques such as pastoral counseling, private psychiatric treatment and the like, although not a common occurrence, should also not be ruled out.

2.- Internal Variation Between Methods

Concern here is with the unique effects of each method, defined in terms of the criteria which have improved therapeutically "better than" at least one other method to a significant degree. A ranking system\(^1\) was employed where the relative significance of a particular criterion is quickly seen in discussing its contribution to the uniqueness of a particular method.

Such uniqueness, as defined above, will be treated in a unitary fashion, as if each criterion contributing to such uniqueness possessed equal weight. It must be stated at the outset that this is known not to be the case, but is an attempt to explain the observable uniqueness of the methods.

A. The Psychoanalytic Orientation. -- The unique effects in the psychoanalytic orientation were observed in

---

\(^1\) The ranking simply shows the position of the criterion in this method relative to the same criterion in the other methods, that is, rank 3 = in this method the criterion was significantly better than 3 methods; rank 2 = better than 2 methods; rank 1 = better than one other method. Social discussion or control is also considered a method in this ranking system.
4 of the criteria, none of which were associated with patient characteristics in any method. In this method then, their comparative uniqueness was attributed to the implemented orientation alone.

Using the rank system, this method showed relative unique effects in Symptom-JNTO (3); Motivation Therapy Aided (2); Labeling (2); and finally in Exploring Behavior (1).

The reduction in Symptom-JNTO, the pathological defenses against anxiety was significantly better than all other methods, in fact, was the only method which showed an actual reduction of such behavior. The increase in exploring behavior was indicated as more than the client-centered method only.

The reduction in the pathological defenses against anxiety can be partially explained by the specific therapeutic focusing on the problems of aggression inherent in this orientation. Since it has been demonstrated that conflicts over the expression of aggression and hostility contribute a major portion of the trouble and anxiety in alcoholics, it may be surmised, then, that such a direct therapeutic focusing on the major problems engendered the reduction of the anxiety, and defenses against anxiety.

attendant to these conflicts.

Motivation Therapy-Aided and Labeling must be treated together, but independently of the positive effects noted above. These criteria were effected in a detrimental fashion by all the methods, but least so in the psycho-analytic method of the therapies. It simply indicated that this method was the least damaging in increasing the negative perceptions of therapy and hospitalization.

Not to be ruled out in the unique effects in this orientation is the factor of implementation by the therapists. That is to say that the therapists experience and training in this orientation allowed them relatively greater freedom and comfort in which to exercise their orientation, resulting in the unique effects noted.

B. Learning Orientation. — The unique effects in the learning method were observed in 5 criteria, four of which indicated the relative unique effects were apparently due to the method, while one showed a significant relationship with patient characteristics.

Using the ranking system this method produced a comparatively unique increase in Problem Solving (3), Exploring (2), and Extinction and Reinforcement (1). At the same time it produced a relatively less detrimental effect on Motivation Therapy Aided (1) and Symptom: TO (1).
All of the above named criteria except Problem Solving were shown to have their relative standings changed as a consequence of the learning implementation. Problem Solving increase, however, was found to be significantly related with patients who felt unsatisfied with their parental home. Such interaction effects then, reduced the overall uniqueness described above as being solely the attributes of the orientation. In effect this indicates that this method has no bona fide goal effect which was better than all other methods.

If all the positive unique effects were treated as one, and with equal weight, this would include the more formal characteristics of the therapy process of Exploring, Problem Solving, and such uniqueness, although not all of it attributed to the method, can be traced to the implementation as described in Appendix 1.

Such a relative emphasis, however, on the more formal or intellectual aspects of therapy leads one to suspect the deeper benefits of such gains, since it has been demonstrated in individual therapy by Fiedler and

---

3 See Table XVI

Heine\textsuperscript{5} independently that such a relative emphasis is a correlate of lack of success or progress of the patients.

This suggests that helping the patients in this method to grow up to the demands of their consciences, and searching for conflicts with a primary repression of the superego or conscience may have only superficial beneficial effects on the personality.

The unique effect in highlighting the formal aspects of the therapy process can also be partially explained by the newness of the orientation emphasis to all the therapists, since it has been demonstrated by Strupp\textsuperscript{6} that technique emphasis is a correlate of lack of experience. The therapists may have felt it necessary to maintain a relatively high degree of formality of technique in order to comply with their concept of the proper orientation emphasis.


3.- Relation Between Internal and External Reliability

The information that there was no direct relationship between criterion performance in any method and follow-up evaluation should not be considered unusual. The drinking adjustment represents only the most obvious aspect of a more basic adjustment. This has been demonstrated earlier by Tiebout, and will be referred to in more detail at another point in the discussion. For the present then, specific performance on any one or combinations of criteria do not seem to account for the improvements in any of the methods.

That improvements could be a function of the relatively unique internal effects only, of the methods, on the criteria is also highly improbable. No methods show unique effects, but all methods have improvements. Irreducing the influence of intervening variables, improvement then is seen to be more a function of the total internal process, and is particularly attributable to the internal therapeutic benefits gained within each method. However, there was a marked degree of differentiation, indicating that improvement was differentially related to the type of therapy participation.

That such improvements are a function of the internal process is subject to qualification in the light of Tiebout's phenomena of surrender and compliance, both of which can account for sobriety. This in essence provided an answer to the kind of an improvement or adjustment made by the patients in each method of therapy.

He feels that the most effective adjustment for alcoholics was explainable by the surrender phenomenon, of which there are two types, the religious and the psychological. Grossly, this phenomenon is a kind of personality change based on the capacity of the individual to convert himself from one set of feelings to another. He describes this phenomenon as a 'yes' frame of mind reaching totally to the unconscious where the tension of indecision about the use of alcohol has been removed.

In treatment this is observed by: 1) Removing of unconscious forces of defiant individuality and grandiosity; when this happens the individual is wide open to reality; he can listen and learn without conflict and fighting back.

8 Idem, ibidem.

He is receptive to life, not antagonistic. He senses relatedness and oneness which become the sources of inner peace and serenity, the possession of which frees the individual from the compulsion to drink... No longer fights life but accepts it.

2) The abandonment of resistance, which may occur over a period of time or in one event, and 3) The acceptance of reality on a conscious level with no residual battle, with ensuing relaxation and freedom from conflict.

Compliance, which also may account for improvements, shows quite radical differences with the surrender concept.

It is characterized by a conscious "yes" with an unconscious "no" frame of mind. This is typified in therapy by: Mixed feelings, divided sentiments and grudging cooperation which blocks the capacity for true acceptance. This is exemplified by 1) Finding reasons alone, but not acting on them and behaving with rationality, that is, knowing the reasons, but not being reasonable; 2) A fear of passivity; and 3) Guilt and a sense of inferiority produced by the conscious "yes" and unconscious "no".

A. The psychoanalytic method. — The gross effects of the psychoanalytic method resemble most closely those observable aspects of the surrender phenomenon. Thereby suggesting that improvement here was a function of relatively central rather than peripheral changes in personality.

10 Tiebout, "The Act of Surrender in the Therapeutic..."
This was primarily indicated by this method having produced therapeutically beneficial effects in 9 out of the eleven criteria. The scope and lack of selectivity of such effects suggested that both the intellectual and emotional aspects of personality were favorably influenced to the most vital unconscious spheres. By the end of therapy the patients in this method had significantly improved their capacity to provide new solutions to their problems and had experienced a significant increase in their self-evaluative aspect of the self-perception.

Strong tendencies to therapeutic improvements were made in the ability to talk about their problems, searching for the motivations of their behavior, in the process of extinction and reinforcement, and in talking with others (that is, non-self) about their problems. Only to a bare minimum, however, did these patients experience an increase in self-responsible motivation.

Finally both aspects of symptoms were reduced. These patients did less non-therapeutic focused talking, thereby reducing their pathological defenses against anxiety, and experienced a reduction in the disturbing or affective components of their talking.

The therapeutic effects observed then, particularly the scope, indicated that changes being experienced were towards relatively deep aspects of the personality, although
this does not indicate that such changes were completely
effected. This can be observed by the predominance of the
tendencies to therapeutic improvement, and the very mini-
mal improvement in self-responsible motivation. It should
be noted, however, that these results hardly seem to indi-
cate that psychoanalytic concepts frighten alcoholics as
stated by Mueller.¹¹

It would seem then that the continuation of such
therapy would perpetuate such changes, allowing benefits
to penetrate even deeper into the crucial spheres of
personality.

Such effects were not entirely the consequences of
the orientation. Interaction effects were found to be
significantly influential in the improved status of these
criteria: Intercommunication, Societal Contribution and
Motivation self-responsible. Logically, this reduces some-
what the influence of the orientation in the performance
in these criteria. The degree of differential influence on
the performance in these criteria, however, cannot be
ascertained, but will be discussed separately in this report.

Totally, there was no pattern suggestive of a trend,
due to the infrequent, and differential association of the

actuarial data with the criteria in this orientation. Actuarial datum associated with improvement in one criterion was found to be associated with lack of improvement in another.12

Improvement in the remaining six criteria of Problem-Solving, Self-Esteem, Exploring, Extinction and Reinforcement, in Symptoms: D and NTO were ascribed to the implemented orientation or method.

Not to be ruled out as a source of influence in the noted effects of this orientation was the manner of interpersonal communication by each of the therapists. This is mentioned inasmuch as all of the therapists have had their training and experience in this orientation prior to this experiment. It is very probable that they were all able to implement this orientation to the maximal degree of effectiveness because of prior acceptance and integration of the orientation resulting in being able to emotionally communicate with the patients without going through the formalities of a technique, which orientation may not be accepted.

That this integrated implementation was a major source, if not the crucial aspect of success in psychotherapy.

12 See Table XI, Chapter III: 5 and less years uncontrolled drinking was associated with increased intercommunication and decreased Societal Contribution; unsatisfactory personal home was associated with increased Societal Contribution and decreased Self-Responsible Motivation.
is attested by Fiedler\textsuperscript{13} and Lipkin\textsuperscript{14}.

B. Learning orientation. -- Improvements in this method appear to be a function of benefits only in the more superficial aspects of personality as an instance of the compliance phenomenon. This is indicated for a number of reasons, primary among which was the improvement in only a select number of criteria, 6 out of eleven, and more so because of the particular criteria which improved.

In this orientation, the patients experienced a significant improvement in Problem-Solving, Exploring, and in extinction and reinforcement, the same criteria which accounted for the uniqueness of this method. Further, important tendencies to therapeutic gains were made in the reduction of symptoms, Intercommunication, or the amount of talk, and Societal Contribution, or concern for the welfare of others in the group.

The gains in those select criteria tend to confirm the suggestion made previously that the relative emphasis on the more formal aspects of therapeutics questions the

\textsuperscript{13} Fiedler, Op. Cit.

success or progress of such patients. This kind of progress suggests very strongly the conscious "yes" and unconscious "no" frame of mind described by Tiebout.

It is highly probable that in this orientation the patients have consciously gone through the more formal aspects of the therapy process, that is, they have come to know the reasons for their behavior, but have not experienced the more deep and emotionally satisfying gains in self-esteem, self-responsible motivation and in removing pathological defenses. In Tiebout's concepts they are not reasonable, still possess increasing amounts of guilt, and a sense of inferiority produced by the conscious "yes" and unconscious "no."

It is important to note that the gains observed in this orientation were also not the function of the method alone. Interaction effects with actuarial information was observed with the increased Problem-Solving behavior and the reduction of Symptoms:

---

17 Tiebout, "Surrender Versus Compliance..."
18 Idem, ibidem.
pattern. The variables associated with improvement in the criteria noted above referred to both current adjustment and developmental history of the patients.

The remainder of the improved criteria, that is, Exploring, Extinction and Reinforcement, Intercommunication, and Societal Contribution, appear to have been bona fide consequences of the implemented orientation.

C. The Client-Centered orientation. — Improvement in the Client-Centered orientation appears to have been a function of elements of both surrender and compliance.

This is suggested by a number of factors. Although there were actually fewer criteria improved than either of the other orientations, that is, only 5 out of eleven benefited therapeutically, the selection of these 5 appeared to make the difference.

The singular statistically significant benefit therapeutically was the reduction of the disturbing aspects of the therapy process. Important tendencies of therapeutic benefits were made, however, in the patients concern about the problems of others; their feelings of personal worth or self-esteem; the ability to talk about their problems; and finally in the crucial aspect of extinction and reinforcement.

19 Unsatisfactory parental homes were associated with increased Problem-Solving; while those who were drinking less currently were associated with decreased disturbance in their symptoms.
All of this strongly suggests that although these patients may not have been successful in finding the reasons for their behavior, apparently they were becoming more reasonable, they were beginning to accept reality on a conscious level with a certain degree of relaxation, but this did not penetrate deeply to the unconscious where still remained strong residuals of their conflicts.

The sources of the gains made in the criteria indicated that in only one, Self-Esteem, interaction effects were observed with patient characteristics, thereby reducing the influence of the method. The remaining improvements however, that is, Symptom, Societal Contribution, Intercommunication, and Extinction and Reinforcement, appeared to be solely the function of the implemented orientation.

D. Social Discussion (control). — Only four out of the eleven criteria were improved, even though three were improved to a significant degree in the 15 hours of treatment.

The patients in this method experienced a significant increase in the amount of talk, finding new solutions to their problems, and in reducing their affective disturbances in the therapeutic situation. A tendency to

---

20 Increased self-esteem was associated with patients who were drinking less or the same currently as compared to the year previous.
therapeutic gain was made in the concern for the problems of others.

Such therapeutic benefits from an internal standpoint would suggest unique favorable qualities compared to the theory oriented methods in this study. However, the selection of such criteria with improvement strengthens the concept that only superficial changes could have been experienced, which leaves such people with the unresolved conflict about their drinking. It would seem then, that the singular case of external improvement observed in this method could only be a function of some process resembling the compliance phenomenon.

The sources of the improvements noted indicated that is only one criterion, that is, Intercommunication, performance was associated with actuarial information, while the remaining improvements in Problem-Solving, reduction of Disturbed behavior, and improvement in Societal Contribution or the concern for others, were solely functions of the implemented social discussion.


22 Increased intercommunication was directly associated with those who were drinking uncontrollably for 5 or less years. See Table XIV.
4.- Influence of Actuarial Information

The influence of the patient characteristics will be discussed in terms of both the internal therapy process and external outcome.

A. Interaction with the therapy process. — Although there was repeated influence of certain characteristics on the therapy process generally, there was a notable lack of consistency for predictive purposes. This was shown by contradictory associations of the same actuarial data with different criteria in the same method, and contradictory association of actuarial information with the same criterion in different methods. At the same time some consistency was shown by the same actuarial data in one method, and in the same actuarial data from method to method. All of this indicates strongly that criterion improvement is a differential function of method and characteristics of the patients.

23 The psychoanalytic method.

24 Years uncontrolled drinking were differentially associated with intercommunication in the psychoanalytic and the social discussion methods.

25 Years uncontrolled drinking in the psychoanalytic method.

26 Drinking change in the learning and client-centered orientations.
The major question in the phenomenon of patient interaction in the therapy process is the ratio of influence of patient by the method on successful outcome of psychotherapy. This is not limited to alcoholics, but is a major question in the field of psychotherapy still scientifically unresolved. This can only be tentatively answered here, and is conditioned by the meaning of success (here it is improvement which refers strictly to drinking behavior), and the sampling of actuarial data employed.

Basically it must be presumed that the actuarial information obtained, such as attempted here, should be a precise and accurate sample of basic personality attributes which are relatively independent. This is known not to be the situation in this study. Secondly, the known interactions probably should be calculated in importance according to the ratio of actual interactions expected with the improvements observed. This is presuming that the interactions will evidence consistency, which was also shown not to be the case here. In any event, the ratios turn out to be four out of 54 for psychoanalytic; two out of 36 for learning, one out of 30 for client-centered; and one out of 24 for the control.

Presuming the ideal situations as described, the only conclusion warranted from this picture indicated that although interaction effects were observed, the overwhelming
major portion of the criteria improvement still remained with the implemented orientations.

B. Interaction with the Follow-up. — The information that there was no relationship between patient characteristics and follow-up status strongly precludes the argument that prior characteristics of the patients were the primary factors accounting for final status evaluation.

That improvement was in fact a function of therapy participation was shown in a number of instances. This was shown to a significant degree where participation in therapy was associated with improvement in the case of 1) steady drinkers, and 2) those who were drinking less in the current year; at the same time the same kinds of people who participated in nontherapy were associated with non-improvement.27

Similar tendencies were also observed in patients with those characteristics of satisfactory and unsatisfactory personal homes; both healthy and unhealthy parental homes; and number of years excessive drinking.

27 Fisher exact Probabilities, one way test, in each case, p = .025.
SUMMARY AND CONCLUSIONS

In the analysis of three methods of theory-oriented group psychotherapy with hospitalized alcoholics, it was found that:

1. A. The hypothesis of no significant differences in the number of improved cases between the theory-oriented methods was upheld.
   B. The significantly greater proportion of improved cases in the theory-oriented methods as compared to the control method was found to be a function of actual task-oriented primacy in the verbal behavior of the patients, regardless of orientation.

2. The null hypothesis of the internal variation between methods was rejected in part; that is, six criteria were found to be uniquely affected, but only in two of the theory-oriented methods.
   A. The psychoanalytic orientation showed relatively unique effects as defined, in the four criteria of Symptom: NTO; Motivation Therapy Aided; Labeling; and in Exploring Behavior. These unique effects were found to be solely the function of the implemented method.
   B. The Learning orientation showed relatively unique effects, as defined, in Problem-Solving; Exploring; Extinction and Reinforcement; Motivation Therapy Aided and Symptom: NTO. The uniqueness of the criteria noted except
Problem-Solving, was found to be a function of the implemented method. Problem-Solving increase was found to be influenced by certain patient characteristics.

The specificity, and limitedness of these formal aspects of therapy raised the questions of actual therapeutic benefit, and that they were possibly functions of the lack of experience of the therapists in this orientation.

3. External or follow-up improvement was a function of the total internal process occurring in therapy; therefore, improvement was differentially related and defined in terms of the type of therapy participation.

A. Improvement in the psychoanalytic method was a function of therapeutic gains experienced in 9 out of the eleven criteria; Problem-Solving, Self-Esteem, Intercommunication, Exploring, Extinction and Reinforcement, Societal Contribution, and to a minimal extent Motivation Self-Responsible. Both aspects of Symptoms; disturbed behavior, and non-task oriented behavior, were reduced.

This was interpreted as affecting relatively central rather than peripheral changes in the therapy process. The lack of selectivity of such effects suggested that both intellectual and emotional aspects of personality were benefited to the most vital unconscious spheres, thereby bearing the closest resemblance to Viertel's surrender phenomenon.
The sources of the improvements were found to be the product of the orientation emphasis or method primarily; a relatively integrated implementation of all the therapists by virtue of their basic training and background prior to this experiment; and interaction of certain patient characteristics.

B. External improvement in the learning orientation was exemplified by improvement in 6 out of the eleven criteria, i.e., Problem-Solving, Exploring, Extinction and Reinforcement, Intercommunication, Societal Contribution, and reduction in Symptoms.

This was interpreted as reflecting only peripheral gains in the therapy process strongly reflecting Tiebout's compliance phenomenon. This indicated that although the patients had gone through these formal aspects of the therapy process, they did not experience the more deep and emotionally satisfying gains such as self-esteem, feelings of being personally responsible for the efforts made in the therapy process, and in removing their pathological defenses.

The sources of the kind of improvements observed were found to be primarily a function of the implemented method; secondly, interaction of certain patient characteristics; and possibly the inexperience of all the therapists in implementing this orientation.
C. External improvement in the Client-Centered orientation was exemplified by improvements in 5 out of the eleven criteria: Reduction in Symptoms; and increased status in Societal Contribution, Self-Esteem, Intercommunication, and Extinction and Reinforcement.

This was interpreted as reflecting relatively peripheral but approaching moderately central gains in the therapy process. Although these people were not successful in finding reasons for their behavior they were becoming more reasonable, and were beginning to accept reality on a conscious level with a certain degree of relaxation. However, strong residuals of their conflicts remained.

Here again, the sources of the improvements were primarily the method; and secondly, interaction influence by patient characteristics.

D. Improvement in the social discussion method was found to be the function of gains made in 4 of the eleven criteria: Intercommunication, Problem-Solving, reducing disturbed behavior, and increasing their concern for others.

This was interpreted as only extremely superficial or peripheral changes being effected closely resembling Tiebout's compliance phenomenon.
The sources of the improvements indicated the method was primary, with interaction effects showing a minor influence.

4. A. In the analysis of the interaction effects of the patient's characteristics with the therapy process it was found that:

   1) Although there was repeated influence of certain characteristics on the therapy process, there was a noticeable lack of consistency for predictive purposes.

   2) Criterion improvement was a differential function of method and characteristics of the patients.

   3) Although interaction effects were observed in all methods, the major influence in the criteria improvement still remained with the methods.

B. In the analysis of the interaction effects of the patient's characteristics with the follow-up evaluations it was found that:

   1) There was no relationship between patient characteristics and follow-up status thereby indicating that prior condition of the patients was not primary in accounting for final outcome evaluation.

   2) Improvement was in fact a function of actual participation in therapy.
Two major suggestions for future research emerge from this study:

A. The issue of the relative influence of the patient characteristics in the therapy process. Since it has been demonstrated that certain characteristics were important influencing variables, the problem is still to determine which are the basic ones to be concerned with in evaluating the therapy process. This problem would be feasible with any group or type of therapy patients, i.e., psychoneurotic, alcoholics and whether outpatient or inpatient.

B. The issue of brief group psychotherapy with alcoholics or psychoneurotics as a means to study the effectiveness of such procedures in an outpatient setting. This investigation is recommended, however, with modifications made in the light of the present study:

1. Use experts in whatever orientations are employed.
2. Use a post-facto study to remove experimental pressures on the patients, and particularly the therapists.
3. Conduct a detailed evaluation on the follow-up with particular attention to possible intervening variables.
4. Use a dynamic formulation of the patients' problems prior to therapy participation.
BIBLIOGRAPHY


The committee, concerned with the psychiatric, clinical, and social aspects of alcoholism concentrated on the practical and specific aspects of the problem. A reliable source for an operable definition and description of the progressive symptoms in alcoholism.


The "big book" of Alcoholics Anonymous which recounts the recovery experiences of thousands of alcoholics. This is the prime source in the understanding of alcoholics.


The third article in a series of four. This one dealing with the dynamic processes primarily relevant to hospitalised male alcoholics, i.e., in terms of manner of relating defense mechanisms, identification patterns, etc. A valuable and relatively reliable evaluation of hospitalised alcoholics not presented before.


The author defends the state hospital role in treatment of alcoholics. A fair source for hospital treatment.


Presents suggestions on the employment of group therapy procedures, emphasising the facilitation of future participation in AA groups. It was used with considerable reserve.

Ends, E., and C. W. Page, A Study of Three Types of Group Psychotherapy Emphasizing a Hospitalized Male Inebriate Patients, Mimeographed Report of a Research Project Supported by the Department of Public Welfare of the State of Minnesota, William State Hospital, Minnesota, June 1955, 85 p, Appendices A, B, C. The outcome a result of this same project, recommended, but difficult to read.

A very scientific application and analysis of group discussion and methodology with alcoholics. Strongly recommended.


A classic study of the patients perception of effects of therapy, in terms of their perception of the therapeutic relationship.


A most valuable characterization of the types of group psychotherapy with modifications of the original work by Thomas.


Role playing was emphasized as the most successful group procedure in the treatment of hospitalized alcoholics. The report was not detailed enough.


Group procedures with merchant seamen are described emphasizing special problems of isolation. A unique contribution in modification of ideas and procedures for effectiveness with outpatient seamen alcoholics.


The description of the various types of programs, i.e., governmental, institutional, religious, etc., in the rehabilitation of alcoholics, most significant to this paper were the results of these various programs indicating the numerical superiority of AA.

The classic study of the progressive symptoms of alcoholism. An absolute must in understanding this phenomenon of addiction in alcoholics.


Group therapy was modified in form, i.e., rotating therapists, then changed to allow therapists to work more in terms of their own personality. Valuable in terms of method of selecting patients for group participation.


This report covers more the general aspects of a Rehabilitation program for alcoholics in a military setting. It is only moderately helpful in understanding group therapy procedures.


This report discusses a 5 day treatment program for hospitalised alcoholics. It was used with considerable reserve.


A clear, concise, interactional analysis of group processes within a unique setting. Highly recommended.


Analysis of verbal behavior in three types of formulations, i.e., 1) role, 2) feeling, 3) combination role and feeling. It was particularly valuable in the method of selecting clients for participation in a group.

The series elaborates the specific topics and content of group meetings over extended time with out-patients. Particularly valuable for understanding what concepts should necessarily be the concern on the part of therapists.


The objectives of the transcribed series described above presented in a more formal manner. Recommended for explanation of theoretical objectives in group therapy.


A valuable guide for advanced statistical problems in research which are not handled in standard statistical texts, i.e., transformations, the matching problem, etc.


The exposition of the learning orientation which reverses Freudian theoretic orientation, and therapeutic emphasis. A primary source.


This report discussed group therapy with male alcoholics in a V.A. hospital. A valuable contribution to the insight of group processes, and particularly the effects of inspiration.
BIBLIOGRAPHY


Role, feeling, and combination role and feeling formulations are evaluated in terms of testing, and verbal behavior. Particularly valuable in supplying the prototype of the design in the present study.


An unique effective contribution to group treatment in the form of group hypnotherapy.


This report discusses free association techniques, with transcriptions of the group processes. Particularly valuable in showing the relationship between therapy participation and follow-up status of the patients.


Contains the theoretical foundations, practical applications and reports of research on various aspects of the client-centered orientation. A primary source.


A model compendium of goals in the major methods of therapy explained and elaborated in a learning context with operational applications. A major contribution in methodology to the study of psychotherapeutic process in a group setting.


A theoretical paper on the diverse applications of psychotherapy as conceived in more general terms of learning theory. It presents very persuasive arguments for the learning process, and is extremely valuable for a cohesive view of psychotherapy generally.
This report discusses analytically oriented group therapy with hospitalized males, but gives a poor picture of the follow-up evaluations.

Contains the theoretical foundations, emphasizing practical application of the psychoanalytically oriented group therapy as used in this study. A highly recommended text.

This is a most valuable and elaborate report on the issues of empathy as a technique and goal in the process of group interaction, and an effective method of general private hospital treatment of male alcoholics.

The first objective comparative study of actual verbal techniques of therapists in different orientations catalogued in terms of Bales interaction process analysis. Strongly recommended in the context of experience and training of therapists.

The original description of the types of group psychotherapy in use. A most valuable primary source for understanding the group processes.

Analytically oriented group therapy with male hospitalized veterans. Questionable value.
A classic phenomenon in the treatment of alcoholics is discussed by the originator as an absolute in the total recovery of an alcoholic. A must in understanding alcoholics.

An elaboration on his classical phenomena, describing the observable characteristics in treatment. Most highly recommended for those working with alcoholics in any capacity.

The description of an out-patient facility for alcoholics is described. The questionable value for this work was only brief mention that psychodrama was a therapeutic procedure in use.

An elaborate discussion of treatment methods in alcoholism. Highly recommended in the understanding of the treatment methods and personality problems of alcoholics.
APPENDIX 1

A BRIEF RATIONALE OF THE TWO-FACTOR THEORY OF LEARNING AND A METHOD OF APPLICATION

Mowrer's proposal for a two-factor theory of learning and psychotherapy have developed as a resynthesis of the Freudian concepts of the genesis of a neurosis. Although he agrees with the analysts in "...opposing repression and in the working for conscious recognition and assimilation of all the forces within the entire personality"¹, he feels they have made a major error in the direction and content of repression. In so doing, Mowrer does not feel that a neurosis specifically arises because of the repression of sex and aggression.

Reformulating the Freudian hypothesis in terms of learning, Mowrer also presents an alternative view both in Freudian and learning terms.

"In Freudian terms, this alternative view is that neurosis arises, not when an excessively severe super-ego develops and over-powers the ego, thus forcing a repudiation or repression of id forces, but rather when the ego, which is initially under the complete sway of the id, remains essentially id-dominated and directs repressive action against the superego. In terms of two factor learning theory, this alternative view holds that the neurotic individual is one in whom the primary drives not only have had but still have major control

over the problem-solving processes and cause these to be directed toward the blocking, inhibition, or nullification of the secondary, acquired drives of guilt, obligation, or fear. The problem-solving activity which is usually referred to clinically as self-protectiveness or defensiveness thus functions in the interest of the primary drives or id, rather than, as Freud posited, in the service of the socially derived forces of the superego.²

From this standpoint the description of a neurotic individual as an "immature" person is more adequately substantiated in clinical experience and theory. Clarification, however, is in order for Mowrer's translation into his two-factor learning theory.

This fundamental premise of this theory is that there are two basic learning processes, conditioning, and problem-solving, and that rationality is a complex derivation of these two.³

Conditioning, or sign learning involves the autonomic nervous system and visceral-vascular tissue and results in those involuntary reactions which we call "attitude," "feelings," or "meanings."⁴ Emotional tone and feelings become attached to objects, ideas and situations by association and involves what may be termed stimulus substitution. In this manner more and more contiguously related stimuli may come

² Idea, ibidem.


⁴ O. H. Mowrer, "Neurosis, Psychotherapy and Two-Factor Learning Theory..."
to elicit a fear response which formerly did not elicit such a reaction.

Solution or problem-solving learning involves the central nervous system and the skeletal musculature and results in those voluntary, instrumental response patterns which we call "acts" or "habits".\(^5\) This involves response substitution. The organism tries to find ways of reducing or perhaps avoiding drives, both those which are organically given and those which are acquired in the sign learning process.

Essential to this theory is the fact that we not only learn solutions to problems, but that we also learn problems. As such then, we are motivated not only by primary drives but also by secondary drives, which are acquired on the basis of these two kinds of learning. Also, while both forms of learning are similar in the sense that they make for increased chances of survival, they are quite dissimilar though complimentary, in the ways in which they work.\(^6\)

In discussing the concept of neurosis, the question arises whether it is a problem of sign learning or solution learning\(^7\). It is constantly verified that the nature of

\(^5\) Idem, ibidem.

\(^6\) Idem, ibidem.

\(^7\) Idem, ibidem.
neurotic illness is essentially emotional: a problem of conditioning, but that it also represents inadequate and inappropriate habits of dealing with these same emotions. Nowrner goes on to state that independent of theoretical emphasis, the major therapeutic efforts are directed to the "formation of new habits or solutions—be they called 'gain in ego strength', 'self-actualization', or something else." Neurosis then is seen as a problem of both sign and solution learning, and more particularly it is a function of the interaction of the two types of learning.

In the neurotic, this interaction becomes one of competition, whereas in the 'normal' person there appears to be the harmonious interaction implied by their complementary functions as mentioned previously. As such in the neurotic, sign learning is directed against solution learning and becomes problem making rather than problem solving. Here is the focus of psychopathology, as Sawyer states,

"...when an organism begins using problem-solving capacities defensively, begins to engage in actions that protect the organism against new conditioning and attitude change, which in the long run, would be useful to the organism, then and there, psychological dysfunction or abnormality has begun."

In effect, this individual is learning not to learn. Problem solving behavior, (the id dominated ego), is directed

---

3 Idem, ibidem.
9 Idem, ibidem.
against sign learning or conditioning, (superego), so as to avoid new emotional learning or paralyze existing emotional reactions. Temporarily, then through regression, association, rationalization, etc., removes the immediate effect of the troubled conscience and the individual neurotic can maintain and perpetuate his protective inability to learn.

Because of this acquired inability, two salient features of the person emerge: neurotic anxiety, and inappropriate and disproportionate emotions.

This neurotic anxiety is the consequence of habitual pathological measures utilized to ward off, not the external conflict or problem, but the many times normal anxiety attending the conflict. When these dissociated elements try to re-enter consciousness, out of context and without warning, the resulting anxiety is perceived as abysmal and malevolent so that the only efforts which will immediately reduce this perception will be employed. In such a manner, various forms of non-integrated, dissociative behavior are used with their consequences of immediate reward and remote punishment.

The inappropriate and disproportionate emotions are explained in a similar fashion. According to Bowser, the neurotic's emotions only appear disproportionate because they are dissociated, and when this individual takes a realistic

10 Idem, ibidem.
problem-solving approach and allows his experiences to come back together, his emotions will be both appropriate and proportionate in proper context.

But how is all this integrating to be accomplished? On the assumption that the neurotic is a consequence of a perversion of the problem-solving process or habits, therapy techniques must specifically be aimed at this area. That is to say that integrative, associative thinking must replace the habits of dissociation.

This, Mowrer makes quite explicit in stating "...the fundamental task of psychotherapy is not that of emotionally re-educating the patient but of helping establish problem-solving habits which will enable emotions to operate as they are normally intended to."\(^{11}\)

In answer to this problem a method of therapy was proposed by Page\(^ {12}\) which utilized an indirect approach to emotional change by focusing on the behavioral or problem-solving aspects in the patients.

This proposed approach utilized the dynamisms of psychoanalytic oriented therapy but operated within the bonds of the two-factor theory. That is to say, instead of searching

---

11 Idem, ibidem.

for repressed "wishes", the therapist constantly searches for conflicts which have been solved dissociatively with the element which has fallen under repression being some kind of obligation or 'ought'. In so doing, a 'set' of the therapist is to help the neurotic grow up to the demands of his conscience.

Three therapeutic steps were involved in this technique. In the early stages of treatment the therapist focuses on the patient's behavior and feelings, which although immediately satisfying have previously produced social rejection and punishment. The patient's habits of responding which have been used with significant people are now turned toward the therapist, but instead of reacting to these maneuvers as others have, the therapist does several things as the need arises.

First, he labels such behavior in the therapeutic situation, and has the patient label such behavior, feelings, and ideas of self-concept to the extent that the patient becomes aware of what he is doing, has done, is feeling or has felt in his relationships and within himself. In terms of this particular process, the labeling is concerned with such behavior, feeling and self-concept, which have been previously recognized or perceived, but not necessarily

---

13 Idem, ibidem.
verbalized. This is the first step in this therapy emphasis and is simply referred to as labeling.

Secondly, the therapist explores and aids the patient to explore the reasons for participating in this labeled behavior and feelings, i.e., why is this behavior being engaged in? In terms of this, the combined efforts of therapist and patient are directed to discover relationships between the factors of actions, feeling and self-concept, of which the patient has previously not been aware, or has incorrectly labeled. In principle this technique is similar as in psychoanalytic oriented therapy, of talking

"...about symptoms, feelings, interpersonal difficulties, past experiences, dreams, phantasies, anything that comes to mind, relevantly or irrelavently... The patient will in the beginning necessarily speak selectively... the therapist will soon begin to "see connections" between the seemingly unrelated, heterogeneous mass of things that constitute the patient's productions." 14

In terms of this, the therapist appropriately begins to offer his associations to the patient. It is these associations which constitute "...the essence of "interpretation" and which set in motion forces which are designed to arrest and reverse the dissociative trends within the patient." 15


15 Idem, ibidem.
Thirdly, the patient is now at a stage where he has discarded old modes of behavior, at least intellectually, and is actively looking for ways of responding which are more efficient. This step is referred to as problem solving and focuses on the questions of how this can be more economically done.

In essence then, this proposed method of therapy involves operations which take into account the indirect solution of emotional conflicts through an emphasis on establishing healthy associative habits to substitute for and reverse the dissociative solutions to problems utilized by the neurotic.

16 C. W. Page, _Op. Cit._
A statement or verbal unit was defined as one complete verbal production on any theme no matter how short or incomplete, nor how long and involved. If two individuals were conversing, each alternation of speaker regardless of length of elaboration would be counted as a separate statement.

1. Non-take oriented statements were those which had no bearing on the problems of the members. Examples of such statements would concern such topics as the weather, baseball, repeated pointless elaborations of binges and dissociated statements.

2. Task oriented statements were those statements which had some bearing on either the speaker’s difficulties or the problems of other members of the group. Such statements were further categorized in terms of the patient’s approach to four factors important in the therapeutic situation. These factors are feeling, action, self-concept, and interpersonal relationships.

   a) Labeling. This was defined as narration, elaboration, repetition, reformulation, or identification of the four factors or of relationships between them, which had been previously recognized or perceived, but not necessarily
verbalized by the patient. Labeling was also noted as being directed to the **self**, or to the **non-self**, i.e., another member of the group.

b) **Exploring.** This was defined as the process of searching to discover and label relationships between the factors which have previously existed or now exist, and which have had or now have dynamic significance, but of which the patient has not been aware, has not recognized or has incorrectly labeled. The notations of being directed to the **self** or **non-self** were also applied here.

c) **Problem-Solving.** This was defined as the process of attempting to discover the optimal or at least a better relationship between these factors, and modifying any or all of these factors if necessary. In the hospital setting, Problem-solving behavior must necessarily be of the nature of a tentative solution subject to validation in life outside the hospital. Again, the notations of reference were made concerning **self** or **non-self**.

3) The affective value of each statement, whether task oriented or non-task oriented, was noted in two possible ways.

a) **Disturbed** affect was defined as any departure of the patient from his normal emotional climate, e.g., guilt, remorse, aggression, fear, anxiety, hostility and elation.

b) **Non-disturbed** affect was defined as relative lack of emotional involvement.
The eleven criteria, which will be briefly described below, are the goals of therapy considered by the leading schools of therapy. Although they have not been adequately factored, and perhaps could be grouped more economically, they represent a current estimate of the systematization of therapy. The goals were inductively arrived at, and were made on the basis of process rather than content, thereby permitting a common frame of reference.

1. Intercommunication (Int). This is the ability to verbally communicate ideas, images, feelings, etc. Such verbal communication is subject to organic limitations, e.g., low mental ability, speech defects; and dynamic limitations, e.g., inadequate education, and emotional blockage.

Operationally, it was the proportion of the total type behavior statements of each phase relative to the grand total behavior units or statements.

---

This deals with motivation which determines whether a subject will take part in the therapy process.

Operationally, it was the proportion of the task oriented statements (labeling plus exploring plus problem-solving) relative to the total overall type statements for the same phase.

3. Labeling (LAB). This is conceptually defined in Appendix 2.

Operationally, it was the proportion of total labeling statements relative to the total overall type statements for the same phase.

4. Exploring (EXP). This is conceptually defined in Appendix 2.

Operationally it was the proportion of exploring statements relative to the total overall type statements for the same phase.

5. Problem-Solving (PS). This is also conceptually defined in Appendix 2.

Operationally, this was the proportion of problem-solving statements relative to the total overall type statements for the same phase.

6. Extinction and Reinforcement (E & R). This is considered by most schools the most important of the process goals. It is grossly defined as an individual's
repetitious series of labeling, exploration and problem-solving processes which deal with his adjustmental reactions and are accompanied by appropriate affect stimuli.

Operationally, this was the proportion of exploring plus problem-solving relative to the total task oriented statements in each phase.

7. Motivation for Self-Responsible Growth (MSR). Basically, this appears to be a reflection of the therapist-patient relationship in process; as things the patient must learn to do, but not as things the therapist must do to the patient.

Operationally, this was the proportion of self, task-oriented statements relative to the total task oriented statements in the same phase.

8. Self-Esteem (SE). This is commonly sought by all schools, that the client should have "adequate" self-esteem before leaving therapy. Although there is little definition of what self-esteem means, it appears to be one aspect of the totality of self-perception, i.e., the self evaluative aspect.

Operationally, this was the proportion of self, non-disturbed statements relative to total task oriented statements in the same phase.

9. Societal Contribution (SC). This is a subsidiary of self-esteem conceptually, feeling that others view
one's self with approval and not disapproval when making contributions. The question involved is "can the increased self-esteem be maintained and further increased out of the therapy situation." Essentially, then, one is concerned with the social effectiveness of an individual outside of the therapy situation.

Operationally, this is the proportion of non-self, non-disturbed statements relative to the total task oriented statements in the same phase.

Symptoms.

10) Disturbed behavior (D), is concerned with the affective aspect of behavior which indicates any departure from a patient's normal emotional climate, e.g., guilt, remorse, aggression, fear, anxiety, hostility, and elation.

This was operationally defined as total disturbed statements relative to the total overall type statements in the same phase.

11) Non-task oriented behavior (NTO), is described somewhat in Appendix 2, essentially as statements which had no bearing on the problems of members and has been understood in terms of defenses against anxiety. Although such defenses are closely related to the problems of anxiety and other symptoms as described above, they are essentially and logically distinct.
This was operationally defined as the proportion of non-task oriented statements for each phase relative to the total overall type statements for the same phase.
APPENDIX 4

SOCIAL HISTORY DATA

Name ___________________________ Age __ Date __________

1. Occupation ______________________

2. Steady employment for past year? Yes ___ No ___

3. Number of jobs held in past year ______

4. Consider self successful in his work? Yes ___ No ___

5. Living standard he is able to maintain:
   Below average ______________
   Average ______________
   Above average ______________

6. On relief or other emergency aid in past year? Yes ___ No ___
   Own family or relatives ___ City __________
   County ___ State __________
   Other ________________________(Name agency)

7. Number of brothers and sisters (Count even if now deceased)
   Brothers ___ Sisters ___ None ___

8. Life in parental home:
   Parents separated ___ Divorced ___
   Continual conflict between parents ___
   Parents got along as well as most ___
   Parents exceptionally happy in marriage ___
   Not reared at home; reared by __________
   (For example, orphanage, aunt, grandparents)

9. Marital status:
   Single ___ Married ___ Remarried ___
   Separated ___ Divorced ___ Widower ___

10. Number of children from own marriage ___
11. Life in own home: (If married)
   Continual conflict ___ Could be much better ___
   Not along as well as most ___ Very happy ___

12. Number years drinking _____

13. Number years uncontrolled drinking _____

14. Frequency of binges __________________________

15. Drink some nearly every day? Yes ___ No ___

16. Drinking more or less than last year? More ___ Less ___

17. Always get drunk when he starts drinking? Yes ___ No ___

18. Tried to stop drinking?
   Never tried before _____ Tried on own _____
   Tried special cure _____ Name of cure ______________________
   Tried A.A. _____ Number of times tried ______
   Tried W. S. H. _____ Number of times here ______

Comments (Use back if necessary)
APPENDIX 5

STANDARDS FOR EVALUATION OF INEBRIATE PATIENTS (COPY)

(1) EXCELLENT Has done no drinking since discharge from the hospital, (1 year or more), OR has had some difficulty, but at present is dry a minimum of TWO YEARS.

(2) GOOD Has not been drinking since discharge for a period of NOT LESS than SIX MONTHS, OR has had some difficulty but at present is dry and has been for a minimum of ONE YEAR.

(3) FAIR Might have had some difficulty but at present has been dry for at least SIX MONTHS.

(4) IMPROVED Might have had some difficulty but has shown a definite overall improvement over past behavior.

(5) UNIMPROVED Has shown NO definite overall improvement over past behavior.

(6) UNCLASSIFIED Whereabouts unknown or unable to gather enough information to evaluate or because of restricting factors, (Prison, Sanatorium, Hospital, etc.).

(7) DEAD
Table XXI - Original 12 Month Follow-up Rating of 66 Inebriates in Group Therapy. Willmar State Hospital, Minn., 1954.

<table>
<thead>
<tr>
<th>Rating</th>
<th>Learning</th>
<th>Psychoanalytic</th>
<th>Cl. Centered</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Excellent</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2 Good</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Fair</td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Improved</td>
<td>2</td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>5 Unimproved</td>
<td></td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>6 Unclassified</td>
<td>11</td>
<td>13</td>
<td>12</td>
<td>11</td>
</tr>
</tbody>
</table>

a Criteria for Rating shown in Appendix 5, STANDARDS FOR EVALUATION OF INEBRIATE PATIENTS.
### Table XXII - Averaged Percent Content of Type Statements in Group Psychotherapy.

<table>
<thead>
<tr>
<th>Method</th>
<th>Goals</th>
<th>Learning-Psychoanalytic-Centered-Control</th>
<th>N=362a</th>
<th>N=4157a</th>
<th>N=2893a</th>
<th>N=4613a</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Labeling</td>
<td></td>
<td>72.2</td>
<td>69.2</td>
<td>68.1</td>
<td>27.8</td>
</tr>
<tr>
<td></td>
<td>Non Task</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Oriented</td>
<td></td>
<td>21.3</td>
<td>26.2</td>
<td>29.5</td>
<td>69.9</td>
</tr>
<tr>
<td></td>
<td>Exploring</td>
<td></td>
<td>5</td>
<td>4</td>
<td>2.2</td>
<td>1.6</td>
</tr>
<tr>
<td></td>
<td>Problem</td>
<td></td>
<td>1.5</td>
<td>.5</td>
<td>.2</td>
<td>.6</td>
</tr>
<tr>
<td></td>
<td>Solving</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Total number type statements in therapy sessions sampled.
ABSTRACT OF

A PROCESS ANALYSIS OF THREE TYPES OF GROUP THERAPY
WITH HOSPITALIZED ALCOHOLICS

Three types of group therapy have been identified currently in use with alcoholics: repressive-inspirational; didactic-dynamic; and analytic-constructive. Although group therapy has received much attention in the literature, no clear evidence has been demonstrated of the comparative effectiveness of one method with another, nor of the reasons for the effectiveness of any one method.

The psychoanalytic, client-centered and a learning orientation of therapy modeled after Mowrer's two-factor concept were utilized under experimental conditions to test their comparative effectiveness. This was done internally, through the analysis of eleven process goals; and externally, through a one year direct contact follow-up.

Each of four therapists employed each method described along with a non-theory oriented social discussion group as a control. Non-psychotic, non-organic alcoholics were selected according to criteria for age, intelligence.

1 Ph.D. Dissertation presented by Jean J. Rossi, to the Faculty of Arts of the University of Ottawa, May 1957, x-132 pages.
and a sociometric evaluation to produce 6 men in a group, or twenty-four in a method. Sixty-six patients completed the 15 one-hour meetings over the 5 week period with relatively equal distribution of the n among the methods. The 19 which were contacted twelve months later were also relatively evenly distributed among the methods, including the control.

The hypothesis of no significant differences in the number of improved cases (i.e., continuous abstinence from 6–12 months) between the theory-oriented methods was upheld. The significantly greater proportion of improved cases in the theory-oriented methods, as compared to the control, was found to be a function of actual task oriented primacy in the verbal behavior of the patients, regardless of orientation.

Improvement was a function of the total internal process occurring in therapy; therefore improvement was differentially related and qualitatively defined in terms of the type of therapy participation.

Improvement in the psychoanalytic orientation was interpreted as effecting relatively central rather than peripheral changes by producing improvements in 9 out of the eleven process goals. The lack of selectivity of such effects suggested that both intellectual and emotional aspects of personality were benefited to the vital unconscious spheres, thereby bearing the closest resemblance to
the observable phenomenon of Tiebout's surrender concept.

Sources of the improvement were the orientation; the implementation, which was relatively integrated by virtue of previous training and background of all therapists in the psychoanalytic method; and certain characteristics of the patients.

Improvement in the learning orientation was interpreted as reflecting only peripheral gains in the therapy process strongly resembling Tiebout's compliance phenomenon. The gains indicated that although the patients had improved in the more formal aspects of the therapy process, they did not experience the deeper satisfying gains in self-esteem, feelings of being personally responsible for the efforts made in the therapy process, and in removing their pathological defenses. The quality of improvements was found to be primarily a function of the orientation; the inexperience of all the therapists in implementing this orientation; and interaction of certain patient characteristics.

Improvement in the client-centered method was interpreted as reflecting relatively peripheral, but approaching moderately central gains in the therapy process. Although these patients were not successful in finding reasons for their behavior, they were becoming more reasonable, and were beginning to accept reality on a conscious level with a certain degree of relaxation. However, strong residuals
of their conflicts remained.

The sources of improvements were method; and secondly, the interaction influence by patient characteristics.

The relationship of actuarial data with the therapy process revealed that there was a notable lack of consistency for predictive purposes; and that criterion improvement was primarily a function of the method. The relationship of actuarial data with follow-up evaluation revealed that improvement was in fact a function of theory-oriented therapy participation. Suggestions for further research were made in the area of significant patient characteristics to be concerned with in evaluating the therapy process; and in the use of group therapy procedures with outpatients as a means in studying the process, and their relative effectiveness.