THE EFFECTS OF GROUP THERAPY ON VALUES AND BEHAVIORAL
ADJUSTMENT OF CHRONIC HOSPITALIZED PATIENTS

by

Rahmatola Simnegar

A dissertation submitted in partial fulfillment
of the requirements for the degree
of
DOCTOR OF PHILOSOPHY
in
Psychology

Approved:

UTAH STATE UNIVERSITY
Logan, Utah

1977
ACKNOWLEDGMENTS

Appreciation is gratefully expressed to individuals who contributed directly or indirectly to the completion of this project.

E. Wayne Wright, my Committee Chairman, contributed greatly through his support and advice. I am grateful for his belief in my potential, his personal concern and his friendship.

My Committee Members were always available when needed and their encouragement and professional curiosity as well as their concern for my professional stand helped me develop my professional identity.

Michael Bertoch, for his encouragement and help in developing a well designed and valid study. William Dobson, who helped me think and behave like a clinician and a concerned humanist. His intelligence and insight as well as experiences and knowledge were always stimulating to me.

Richard Powers, who became a close friend and colleague and through being himself helped me make the transition from being a student to being a professional. His research orientation helped me become more curious and search for answers to unsolved questions in behavioral sciences. His friendship and caring as well as sharing, helped me immensely in my journey to self actualization.

I am also grateful to William Dotts of the Department of Special Education and C. Jay Skidmore of the Department of Family Life, who contributed by their expert advice from their respective fields in expanding my horizon.
To Reed Morrill, Lucille Harris and Dennis Kilstrom, I express my appreciation in helping me collect the data and run the experiment at Wyoming State Hospital.

Robert Van Noord, my supervisor and a very close friend and colleague at Pine Rest Christian Hospital has been a major source of support during my internship. Through his sharing, concern, friendship, intimacy and by being himself, he contributed greatly to my growth and identity. He was a "model" for me and he always will be.

I appreciate Ramin Simnegar's help throughout the completion of this project. Darfush Gitisetan provided the emotional support, encouragement and friendship that I needed. My father, Dadash, and Nemat provided financial, emotional and moral support which made it all possible.

And finally, I am thankful to Jean, Chris and Susan, whose love and warmth brought joy to my life and made me feel at home and accepted, and therefore, enabled me to reach my goals in life.

Rahmatola Simnegar
DEDICATION

To my parents and brothers, whose love, support and encouragement have provided the impetus for it all.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>ii</td>
</tr>
<tr>
<td>DEDICATION</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vii</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>ix</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>I. Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Background and Need for the Study</td>
<td>1</td>
</tr>
<tr>
<td>Research in Group Therapy</td>
<td>2</td>
</tr>
<tr>
<td>Research with Patient Values</td>
<td>3</td>
</tr>
<tr>
<td>Research with Behavior Adjustment</td>
<td>8</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>11</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>12</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>12</td>
</tr>
<tr>
<td>II. Review of Literature</td>
<td>15</td>
</tr>
<tr>
<td>Value Changes in General</td>
<td>15</td>
</tr>
<tr>
<td>Value Changes Related to Individual Therapy</td>
<td>18</td>
</tr>
<tr>
<td>Group Movement, Group Therapy and Values</td>
<td>29</td>
</tr>
<tr>
<td>Leadership Style and Its Effects on Values</td>
<td>35</td>
</tr>
<tr>
<td>Leadership Style and General Changes in Clients</td>
<td>47</td>
</tr>
<tr>
<td>Review of Literature on Instruments Used in the Present Study</td>
<td>64</td>
</tr>
<tr>
<td>Research Related to the Present Study</td>
<td>76</td>
</tr>
<tr>
<td>III. Method</td>
<td>85</td>
</tr>
<tr>
<td>Subjects</td>
<td>85</td>
</tr>
<tr>
<td>Subject Mortality</td>
<td>86</td>
</tr>
<tr>
<td>Materials</td>
<td>86</td>
</tr>
<tr>
<td>Administration of Tests</td>
<td>90</td>
</tr>
<tr>
<td>Time, Length and Duration of Group Meetings</td>
<td>92</td>
</tr>
<tr>
<td>Physical Environments</td>
<td>92</td>
</tr>
<tr>
<td>Description of Treatments</td>
<td>93</td>
</tr>
<tr>
<td>Design</td>
<td>93</td>
</tr>
</tbody>
</table>
TABLE OF CONTENTS (Continued)

<table>
<thead>
<tr>
<th>IV. Results</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value Preferences and Pretest-Posttest Comparisons of Values</td>
<td>95</td>
</tr>
<tr>
<td>Pretest-Posttest Comparisons of Behavioral Adjustment</td>
<td>104</td>
</tr>
<tr>
<td>Analysis of the Group Leaders' Responses</td>
<td>108</td>
</tr>
<tr>
<td>Analysis of Individual Subject Characteristics and Movement: Descriptive Comparisons by Subgroups of Subjects</td>
<td>111</td>
</tr>
<tr>
<td>Comparisons of Individual Changes By Psychiatric Diagnosis and Number of Hospitalizations</td>
<td>114</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>V. Discussion</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis of Values Changes</td>
<td>126</td>
</tr>
<tr>
<td>Analysis of Behavioral Changes</td>
<td>132</td>
</tr>
<tr>
<td>Analysis of the Two Types of Leadership Style (Directive and Non-directive)</td>
<td>135</td>
</tr>
<tr>
<td>Discussion of Individual and Subgroup Comparisons</td>
<td>138</td>
</tr>
<tr>
<td>Implications of the Present Study</td>
<td>144</td>
</tr>
<tr>
<td>Delimitations of the Present Study</td>
<td>145</td>
</tr>
<tr>
<td>Recommendations for Further Research</td>
<td>148</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>References</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>151</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reference Notes</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>170</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>APPENDICES</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>171</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Appendix A. Rokeach Value Survey</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>172</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Appendix B. The MACC Behavioral Adjustment Scale</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>176</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Appendix C. Consent Form</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>180</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>VITA</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>182</td>
</tr>
</tbody>
</table>
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rank Order of Preferred Terminal Values for the Combined Study Sample</td>
<td>96</td>
</tr>
<tr>
<td>2. Rank Order of Preferred Instrumental Values for the Combined Study Sample</td>
<td>98</td>
</tr>
<tr>
<td>3. Comparison of Changes in Values of the Combined Treatment Groups (I and II) vs. the Control Group (III)</td>
<td>99</td>
</tr>
<tr>
<td>4. Comparison of Changes in Pretest-Posttest Value Rankings Within Each Group, And Analysis of Posttest Differences Between Groups</td>
<td>101</td>
</tr>
<tr>
<td>5. Summary of Analysis of Covariance Results for Changes in Behavior Adjustment of Group I vs. Group III</td>
<td>105</td>
</tr>
<tr>
<td>6. Summary of Analysis of Covariance Results for Changes in Behavior Adjustment of Group II vs. Group III</td>
<td>105</td>
</tr>
<tr>
<td>7. Summary of Analysis of Covariance Results for Changes in Behavior Adjustment of Combined Treatment Groups vs. Control Group</td>
<td>106</td>
</tr>
<tr>
<td>8. Group Leaders' Responses According to Porter's (1950) Categories</td>
<td>110</td>
</tr>
<tr>
<td>9. Summary of Changes in Value and Behavior of Each Individual Subject, and Comparison of Individual Subjects by Age, Sex, Psychiatric Diagnosis, Number of Hospitalizations and Assigned Group in the Study</td>
<td>112</td>
</tr>
<tr>
<td>10. Comparison of Value Changes of Subjects by Diagnostic Classification</td>
<td>115</td>
</tr>
<tr>
<td>11. Analysis of Pretest and Posttest Ratings of Behavioral Adjustment for Each Individual Subject</td>
<td>117</td>
</tr>
<tr>
<td>12. Analysis of Individual Posttest Ratings Over Pretest Ratings of Behavioral Adjustment By Psychiatric Diagnosis of Subjects</td>
<td>118</td>
</tr>
<tr>
<td>13. Comparison of the Number of Hospitalizations of Subjects By Diagnostic Classification</td>
<td>121</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>14.</td>
<td>Mean Number of Hospitalizations of Subjects by Diagnostic Classification</td>
</tr>
<tr>
<td>15.</td>
<td>Analysis of Behavioral Adjustment Changes of Subjects</td>
</tr>
<tr>
<td></td>
<td>By Number of Subjects' Hospitalizations</td>
</tr>
</tbody>
</table>
The Effects of Group Therapy on Values and Behavioral Adjustment of Chronic Hospitalized Patients

by

Rahmatola Simnegar, Doctor of Philosophy

Utah State University, 1977

Major Professor: Dr. E. Wayne Wright
Department: Psychology

The present study investigated (a) the effects of group therapy on values and behavioral adjustment of hospitalized psychiatric patients, and (b) differential effects of directive versus non-directive group therapy in effecting desired therapy outcomes. Thirty subjects selected from among patients at Wyoming State Hospital were matched on age and sex and then randomly assigned to two experimental groups and one control group. Experimental group I received directive group therapy, experimental group II received non-directive group therapy and the control group participated in recreational activities. Both experimental groups and the control group participated in 12 weekly sessions, which were structured according to the respective objectives, mode of leadership style and/or activity intended for each group.

All subjects were administered the Rokeach Value Survey prior to, and following the 12 group sessions. Each subject was also rated on the MACC Behavioral Adjustment Scale by two independent raters (hospital ward attendants) both before and after the experimental
period. Porter's (1950, pp. 180-182) "counseling categories" were used to measure directiveness and non-directiveness of the group therapy leaders.

Pretest comparisons among the experimental and control groups showed the groups to be essentially comparable (not significantly different) either in median rankings of values on the Rokeach Value Survey or in ward attendant ratings of the subjects on the MACC Behavioral Adjustment Scale.

Posttest comparisons on the same variables (i.e., value rankings and ratings of behavior) indicated significant differences among the experimental and control groups on two of the 18 instrumental values of the Rokeach Value Survey, but no differences on any of Rokeach's 18 terminal values. Posttest changes over pretest value rankings occurred as much in the control group as in the experimental groups and the direction of changes varied with each group. Thus, no definitive benefits of one type of group procedure over another occurred. Further, the limited number of values for which posttest differences were observed between the experimental and control groups were well within the amount of normal change that could be expected from chance probabilities alone. It was therefore concluded that these particular changes in value rankings were essentially negligible and thus not attributable to either of the treatment modalities.

Possible effects of group therapy in general, as well as any differential effects of directive versus non-directive group therapy were also studied in terms of behavioral ratings of subjects by hospital ward attendants. Statistically significant results on this
variable clearly supported the value of both therapy groups over the control group for effecting positive changes in post-treatment behavioral ratings of the study's hospitalized subjects. However, the results did not demonstrate sufficient differences between the two experimental groups to conclude superiority of one leadership style over the other. A descriptive analysis of individual movement (direction and amount of change) from pretest to posttest ratings of behavioral adjustment was presented, and posttest differences between subjects subgrouped according to psychiatric diagnosis and number of psychiatric hospitalizations were discussed in terms of clinical rather than statistical inferences.

The results of the study were discussed in reference to previous research related to human values, and Rokeach's viewpoint with regard to personal values and value changes was considered in light of the findings of the present study.

Some possible implications of the study results were suggested, with particular reference to some of the unique characteristics of the study sample, including differing psychiatric diagnoses and chronicity of subgroups of the subjects, and a possible lack of motivation on the part of some subjects for participation in therapy groups. Several delimitations of the study were discussed, and recommendations for further research of this nature were offered.
CHAPTER I

Introduction

Background and Need for the Study

Although the development of group methods can be traced back to 1906 and the development of group psychotherapy to 1931 (Moreno, 1967), comparative studies utilizing sound experimental designs are relatively rare (Lubin, Lubin, & Sargeant, 1972; Martin, 1974; Pattison, 1966). Further scientific and empirical investigation of group therapy with appropriate methodology and adequate experimental control to properly study cause and effect relationships of group therapy are therefore indicated and needed.

In order to properly study group therapy, investigation of the therapeutic goals and processes would seem to be one of the initial steps, and possibly a prerequisite for further investigation of group therapy. However, therapeutic processes and goals have different meanings for different therapists and theorists. Some theorists consider therapeutic processes and goals to involve removal of symptoms and modification of behavior. Others, such as Freudians and neo-Freudians consider patients' insight into faulty interpersonal relationships and childhood traumas to be the main focus. Most therapists, however, agree that values play a central role in the therapeutic process and some see values as "permeating the whole of the counseling process" (Williamson, 1958).
Values are directly related to behavior (Rokeach, 1973) and values have been defined as canalized drives that provide anchor points for goal seeking behavior. Investigation of therapeutic processes and goals without considering behavior of the patient would seem to be incomplete. The present investigation was an attempt to study group processes and goals in terms of patient values as well as behaviors.

Research in three areas has contributed to the development of the present study: (a) the process of group therapy, (b) patient values, and (c) behavior adjustment of patients in hospital settings. A brief summary of relevant research in these three areas is presented below as an overview and rationale for the present study. A more detailed review of related research will be found in Chapter II.

Research in Group Therapy

Although the number of published articles on group therapy is extensive, most of the earlier articles deal with theoretical issues and lack proper empirical design and statistical analysis of comparative data. The number of experimental investigations in this area has increased considerably during the past two decades. Moreno (1967) traced the origin of group methods to 1906 and group psychotherapy to 1931. Most of the recent reviews on group therapy indicate the difficulty in generalizability of results due to improper and inadequate experimental designs (Martin, 1974). A thorough review of research in group psychotherapy covering the years 1956 to 1965 identified less than 10 experimental type studies (Kessel & McBrearty, 1967). Two different reviews of group therapy literature by MacLennan and Levy (1970; 1971) did not reveal
much more adequate investigations. A review by Lubin, Lubin and Sar­
geant (1972) showed similar findings. Brammer and Shostrom (1968)
indicated a need for further research in the area of group therapy,
although they admitted the difficulty involved in doing research in
this area. However, they also pointed out several advantages in finding
further information about group processes and goals, with the main ad­
vantage being the notion that understanding group functions "can provide
a great potential for helping large numbers of people with minimum
of professional intervention" (p. 345).

In summary, further investigation of the relative merits of group
therapy, processes and goals seems indicated and needed.

Research with Patient Values

Although values have been an area of interest for investigators in
the fields of social sciences, humanities, religion and behavioral
sciences for many years, the particular significance and applicability
of values in the therapeutic process have only recently attracted the
attention of researchers. The ratio of call for research and theoreti­
cal articles dealing with changes in values compared to actual empirical
investigations of the role of values in therapy is about 10 to 1. A
number of prominent writers in the field of psychology have indicated the
importance that values play in the therapeutic process (Frankl, 1966;
that 48% of psychotherapists believe in the direct influence of values
in therapy and 24% believe in the indirect influence of values in therapy.
These beliefs provide further support for the important role that values
play.
Rosenthal's (1955) study was one of the pioneering empirical investigations regarding values in therapy. Rosenthal found that moral values of neurotic patients were influenced by long term therapy, and these moral values became more consistent with one another and more important to these patients as therapy progressed. Other researchers (Lanfield, Welkowitz, Ortmeyer, & Cohen, 1967; Lowe, 1969b; Nawas & Lanfield, 1963; Parloff, Iflund, & Goldstein, 1960) carried out further research in this area with generally inconclusive results.

Much of the above research deals mainly with individual therapy, and considerably less with the study of values as they relate to group therapy. In a pilot study Squatriglia (1970) investigated the effect of group therapy on individual values as well as on the respective personalities of men and women group members. Women's values changed 15 times more often then men's values. Changes in personality of men and women were not significantly different. Bagdassaroff and Chambers (1970) attempted to study the change in values of educators who were racially different (blacks and whites) and who were attending a marathon encounter group. Bagdassaroff and Chambers' hypothesis regarding racial differences in value changes was supported. The white subjects placed greater importance on the values, aesthetics and conformity while black subjects gave more importance to the values of respect and benevolence.

Given the above, it seems evident that clear cut conclusions cannot be made on the relationship of values and group therapy. The variables cited in the above mentioned studies have been sex variables
or race variables. A total picture of the role of values in the
group therapy cannot be drawn solely on the basis of the above studies
because of their narrow scope. A more comprehensive study which
deals with the role of values in group therapy is therefore needed.

To go one step further, it should be kept in mind that not all
group therapies are led in the same manner since differences exist
in the style of leadership that the group leader adopts.

The difference in leadership style of group leaders as pointed
out by Lewin (1944) is generally believed to fall on a continuum of
directiveness and non-directiveness. In short, the difference lies
in whether the group leader is the "authority" and is active in
giving answers to his clients or whether most of the responsibility
for problem solving is placed on group members with some help from
the group leader (Lewin, 1944).

It is generally accepted that leadership style can affect per­
sonality as well as values behavior (Femichel, 1955; Glad, 1960;
Hill, 1965; Hobbs, 1962; Patterson, 1973; Pentony, 1966; Reidy, 1969;
Scott & Laura, 1972). For example, Fabry (1974) suggested that
logotherapy (a non-directive method) is most effective when the group
leader combines logotherapy with a directive method. Abramowitz,
Abramowitz, Roback and Jackson (1974) showed that clients who believe
in internal control (those who consider themselves to be responsible
for events) functioned better with non-directive therapists and that
clients who believed in external control made more improvement in
therapy (decrease in anxiety and guilt) when they were treated by
directive group therapists.
A few investigators, on the other hand, have not found any differences between the two approaches. Roback (1970, 1972), reported that the results of his study on the difference between directive and non-directive therapy on psychopathology and behavior of hospitalized patients was non-significant. Carlson and Vandever (1951) did not report differential personality changes by clients who were receiving non-directive therapy versus those who were receiving directive therapy. Tyler (1969) believed that the difference between directiveness and non-directiveness is quite arbitrary and only adds to the confusion of counselor trainees.

In summary, the differential effect of directive and non-directive group therapy on values and behavior is inconclusive and further studies are needed.

As pointed out by Ehrlich and Wiener (1961) and by Kessel and McBrearty (1967), there are basic sampling difficulties inherent in research on values and therapy (as with most other kinds of research). A careful analysis of previous research on values and therapy, with close attention to the types of subjects used, points out the possible effect of subject characteristics on the outcome of the investigation.

For example, several investigations of group therapy have shown that group therapy produced significant effects on the values of group members who were not hospitalized patients (Bagdassaroff & Chambers, 1970; Baumgartel & Goldstein, 1967; Bensley, 1970; Katkin, 1970; and Smith, 1973). On the other hand, some studies with hospitalized and/or chronic subjects have produced nonsignificant effects.
of therapy on values or other dependent variables (Carlson & Vandever, 1951; McGee & Williams, 1971; Roback, 1970, 1972). In the above studies the diagnoses of patients ranged from schizophrenia (McGee & Williams, 1971) to severe drug dependency (Carlson & Vandever, 1951).

This is not to imply that hospitalization and/or chronicity of a mental illness alone would necessarily indicate futility or impossibility of treatment. However, a well-known and frequently cited study by Abramowitz, Abramowitz, Roback and Jackson (1974) has established the importance of considering subjects' characteristics in every investigation. In their study, Abramowitz et al. (1974) noted that clients' beliefs as to whether they were responsible for events that occur in their life (internal control) or whether events were determined by luck (external control) did influence the differential effectiveness of directive versus non-directive group therapy. Individuals who believed in internal control were more responsive to non-directive methods and externally oriented individuals were more responsive to directive group therapy.

Ellsworth (1957) has provided empirical evidence supportive of the premise that clear-cut differences can be shown between the adjustment of patients with severe and chronic patients as compared with patients having less severe psychopathology (the former group showing less personal-social adjustment). Other investigators, however, are not unified on this point and many do not agree with one another that severity of illness, chronicity and even diagnostic category of the patient's illness influences the degree of improvement that a particular patient might make in treatment. For example, Rappaport (1969)
considers traditional treatment approaches to be ineffective in treating most hospitalized patients, particularly those with long history and duration of illness. On the other hand, Ellsworth and Maroney (1972) and Hill, Howell, Liebroder, Long and Morrill (1959) view hospitalized patients as being amenable to therapeutic improvements.

In view of the above contradictions in previous studies, it is felt that personal-diagnostic characteristics of subjects should be taken into account in this type of research, particularly with hospitalized subjects. Thus, the present study will include an analysis of available information on subject characteristics such as diagnosis and chronicity of illness.

Research with Behavior Adjustment

Measurement of improvement in therapy solely on the basis of decrease in psychopathology or removal of symptoms was a source of dissatisfaction to Ellsworth and Clayton (1959). With the emergence of behavior therapy based on learning theories more emphasis was being put on the behavior of individuals. Ellsworth (1957), who was specifically interested in the behavior of patients in the hospital ward, attempted to measure behaviors that individuals typically showed there. Ellsworth's interest in studying behavior of patients was based on the fact that often times decrease in psychopathology did not result in behavior improvement and adjustment. Ellsworth suggested that by focusing on both change in psychopathology and improvement in behavior (which Ellsworth referred to as behavioral adjustment) a multi-dimensional viewpoint on patient's progress would be available.
During the same year, Ellsworth (1957) developed a scale called MACC Behavioral Adjustment Scale by which typical behavior of patients in the ward can be measured.

Following introduction of the MACC Behavioral Adjustment Scale several investigators studied the relationship of behavior to the improvement in therapy and/or general changes in clients receiving therapy.

Ellsworth and Clayton (1959) reported that psychopathology and behavioral adjustment had a negative correlation to one another: as psychopathology decreased for hospitalized patients under study, behavior adjustment improved. In another study, Ellsworth and Clayton (1959) reported that behavior adjustment is a better indicator of improvement in therapy than psychopathology. This report was based on findings that the MACC Behavioral Adjustment Scale was a better predictor of rehospitalization than the results of the Lorr Multi-Dimensional Rating Scale (a measure of psychopathology).

Thereafter, the relationship between behavioral adjustment and other variables such as an individual's personality (Smith, Pryer, & Distefano, 1971), behavioral adjustment and goals in therapy (Culmer, 1971), and placement in a family versus the follow-up outpatient treatment (Rittenhouse, 1970), were studied.

Although some investigators feel that changes in values lead to changes in behavior (Rokeach, 1973), others feel that the two are not related at all (Chaffee & Linder, 1969). Current psychological literature does not include studies in which behavior (and/or behavior
adjustment in hospital settings) of patients have been examined in relation to values.

Relationships between behavior and attitude have been examined in the past. Disteffano and Pryer (1968) studied the relationship between the ratings of patients on the MACC Behavioral Adjustment Scale and the patients' attitudes towards work. Patients who were seen as being more behaviorally adjusted were also found to be more oriented towards work.

Self-concept has also been found to be positively correlated to behavioral adjustment (Thompson, 1960). Thompson reported that when behavioral adjustment of hospitalized patients changed, self-concept also improved significantly.

Rokeach (1973) clearly differentiates between values and attitudes, or self-concept. Values are considered by Rokeach to be more stable than attitudes and he therefore concludes that values can be studied more systematically. The two studies mentioned above did not actually measure values but investigated variables such as attitude and self-concept, which appear to be similar to values but are far from being identical with values. Further investigation of the relationship between changes in values of individuals and behavioral adjustment are therefore needed. It is felt that by doing further investigation of the relationship between values and behavioral adjustment another dimension would be added to that proposed by Ellsworth and Clayton (1959). In other words, a true multi-dimensional view of changes in clients who are undergoing psychotherapy or group
therapy seems to be incomplete without considering the role of values as well as behavioral adjustment.

Statement of the Problem

Although several investigators have pointed out the need for empirical investigation of the process and goals of group therapy, very little empirical research has been carried out. The role of group members' values and behavioral adjustment in the therapeutic process, especially for hospitalized patients, deserves careful consideration and analysis, since the results of previous research have generally been inconclusive and fragmentary.

The major objective of the present study was to investigate the effects of group therapy on values and behavior adjustment. The differential effects of directive and non-directive leadership styles on patient values and behavior adjustment was also investigated.

The research was justified from several perspectives: (a) It attempted to study changes in patients' values as brought about by group therapy, the importance of which is directly related both to the process and the goals of group therapy. (b) It attempted to show the direction of change in patient values. (c) Since previous research with value changes through group therapy has not shown whether changes in patient values also result in behavioral changes, it was felt that by studying the behavioral adjustment of patients, a better understanding of possible relationships between group therapy and behavioral change as related to values could be provided. Further, the study utilized an instrument of values (Rokeach Value Survey).
that is considered not only valid and reliable but also comprehensive in scope (i.e., it measures 36 values as compared to other instruments in the field that deal only with a few values). While the Rokeach Value Survey has not been used previously to study value changes as related to either individual or group therapy, the study was considered to have potential significance in investigating possible differences in therapeutic approach and leadership styles as they affect values and behavioral adjustment of hospitalized patients. Finally, the study was an attempt at an empirical and scientific examination of the group therapy process.

Hypotheses

The study was designed to test the following hypotheses:

1. There will be a significant change in value rankings of the two treatment groups undergoing group therapy, as indicated by a pretest versus a posttest measure of values.

2. There will be a significant difference in value rankings of the two treatment groups as compared to the control group and measured by the posttest.

3. There will be a greater degree of behavioral adjustment for the treatment groups than for the control group, as measured by the MACC Behavioral Adjustment Scale.

Definition of Terms

The following terms are sometimes interpreted differently by different investigators. In order to avoid ambiguity, the following
definitions of terms will be used throughout the present study:

**Values.** The definition of values offered by Rokeach (1973) seems to be most applicable to the present study: A value is an "enduring belief that a specific mode of conduct or end state of existence is personally or socially preferable to an opposite or converse mode of conduct or end state of existence" (p. 7).

**Value system.** "A value system is an organization of belief concerning preferable modes of conduct or end states of existence along a continuum of relative importance" (p. 7).

**Rokeach Value Survey.** This survey is a tool which measures 36 instrumental and terminal values.

**Instrumental values.** These are values which relate to modes of conduct, e.g., honesty.

**Terminal values.** These are values which relate to the end states of existence, e.g., wisdom.

**MACC Behavioral Adjustment Scale.** This instrument was developed by Ellsworth (1957) and it measures the typical behavior of hospitalized psychiatric patients. The scale measures four areas defined as motility, affect, cooperation, and communication. The scale also yields a single "adjustment" score.

**Directive leadership style.** When therapists use probing, value judgment and disapproval, persuasion, approval and encouragement, propose client activity and give information and explanation, they are considered to be using a directive leadership style (Porter, 1950).
Non-directive leadership style. When psychotherapists give non-directive responses to feelings (i.e. empathic responses), restate content or the stated problem, clarify and recognize feelings, offer acceptance, encourage their clients to choose and develop topics and ask open-ended questions, they are considered to be using a non-directive approach (Porter, 1950).

Behavioral adjustment. Behavioral adjustment in a hospital setting is defined as improvement in those behaviors that are considered appropriate to the patients' adaptation to the hospital. Ellsworth (1957) has proposed improvement in communication, social contact, cooperation and motility to be indicative of better adjustment to the psychiatric hospitals.
CHAPTER II

Review of Literature

The main focus of this review of literature will be on seven areas of previous research.

1. Value change studies in general.
2. Studies that deal with values as related to individual therapy.
3. Research concerned with values as they have been studied or considered in group therapy process.
4. Leadership style and its effect on patient/client values.
5. Leadership style and client changes.
6. Research with instruments used in the present study.
7. Research related to the present study.

Value Changes in General

Before an attempt is made to study the literature dealing with the effects of psychotherapy on values, it seems appropriate, first, to investigate whether, or to what extent, human values are subject to change. The relationship of values to mental health and psychotherapy can then be studied.

Several studies show that values change as a result of experimental manipulation as well as by the action of an independent variable such as graduate school attendance. Gordon and Mensch (1962) studied the effects of graduate school attendance on values of a cross
sectional sample of medical students. The results of their study indicated significant decreases in the ranking of conformity values from the first to the fourth year of medical school. Significant increases were found in the rankings of support, recognition and independent values as measured by the Allport-Vernon-Lindzey Study of Values.

Kirchner (1970) did a similar study but he used psychology graduate students as his sample. He found significant increases in valuing support, benevolence and social values and a decrease in the economic values of the Allport-Vernon-Lindzey Study of Values.

Allport-Vernon-Lindzey Study (AVS) of Values was the measuring instrument used in a study by May and Ilardi (1973). Subjects for the study were nursing students. Aesthetic values became more important for these students and religious values became less important during their course of study in college. May and Ilardi (1973) speculated that the main reason for using the AVS scale generally results in significant changes is because often change in one scale will result in change in other scales due to the utilization of a forced-choice technique for the AVS scale.

The effects of psychiatric hospital's social milieu environment on values of patients was the focus of study by Almond, Keniston and Boltax (1969). The investigators used a questionnaire and also case study materials to determine whether the subject's values were subject to change. Values of these patients changed towards the "norm" values of the wards in which they were staying. The norm values of
the ward emphasized openness and social involvement, and as a result of being in the milieu, these patients became more open and socially more involved.

Bachtold (1969) experimentally manipulated the values of gifted adolescents by encouraging behavior relating to certain values such as independence. The results of Bachtold's study indicated that although there were some differences in value changes between males and females, the importance of the value, independence, increased significantly for both. In other words, encouragement for independent behavior and thinking brought about positive changes in value ranking of that particular value. Interpersonal values were also modified in the direction of program goals (increase in interpersonal interaction).

Several other investigations in which the Rokeach Value Survey has been utilized as the measuring instrument of values have produced significant changes in values of college students (Feather, 1971, 1972, 1973; Rim & Kurzweil, 1971; Rokeach, 1968, 1971, 1973; Simnegar & Powers, Note 1). However, since all these studies have been thoroughly described in another section of this thesis, the reader is referred to the section on "Review of Literature on the Rokeach Value Survey."

The above investigations seem to have uniformly produced results that can be used as evidence that human values are subject to change. However, two studies have produced results that turned out to be contrary to the above mentioned findings. The possible changes in values of students in the NDEA program in a college setting were
studied by Rochester (1970). These students were administered a pretest of a Study of Values and a posttest of the same instrument was administered two years later. No changes were found in the values of these students.

Traweek, Simnegar and Jarvis (Note 2) studied values of Vietnam era veterans to see whether the experience of being in a hostile environment such as Southeast Asia was a significant enough experience to bring about changes in the values of the veterans. The authors found no significant changes in the values of Vietnam era veterans.

**Value Changes Related to Individual Therapy**

Literature that deals with values as related to individual therapy can easily be traced back to Freud (1933); however, the majority of literature on this topic has been published within the last two decades. Theoretical articles outnumber empirical ones almost 10 to 1.

Meehl (1959) discussed the role of values in therapy and encouraged research related to values in psychotherapy. He stated: "I think it is of great importance that quantitative empirical investigations along these lines be carried out" (p. 257). Buhler (1962), while referring to the role of values in therapy said, "it is our conviction that values permeate our development and personality to such a degree that they can never be left out of the picture" (p. 10). Krasner (1965) viewed psychotherapists as behavior controllers and emphasized the role that values play in the therapeutic process.
Strupp (1974) indicated that value-free therapy is a fiction and he stated that therapists are very influential in bringing about changes in the values of their patients.

Lowe (1969a) described the role of values in therapy quite well, and his philosophy regarding the nature and mechanism of the role values play in therapy seems to be shared by most authorities in this field. Lowe (1969a) believed that one of the major problems of individuals with emotional difficulties is their inability to formulate a set of values that are satisfying to them.

Every individual must find a system of attitudes and values that will enable him to arrange hierarchically his choices and experiences so that he can arrange for himself a schema or inner psychological core that would enable him to confront with confidence a world he experiences as being structured and predictable." (p. 269)

Lowe believed that psychotherapy is a major source of values for the majority of bewildered individuals. He expressed hope that the final product of an individual's successful therapeutic experience would be an individual whose humanistic, theological and psychological values have found an authentic fulfillment.

Frankl (1966) also provided a useful explanation of the role of values in therapy. He suggested that man is basically oriented toward meaning and values in life and that the western civilization reduces man's desires to find meaning by treating him as an object. Frankl considered meaning and values to be relative in the sense that they are related to a specific person and a specific situation. Frankl therefore questioned a universal meaning of life and stated that "there are unique meanings of individual situations." Values,
on the other hand, are shared by the society and are transmitted to other generations throughout history. Frankl believed that when values collide with one another individuals are faced with a conflict which is usually the basis for formation of neurosis and emotional difficulties.

Frankl suggested that man finds meaning in life through three types of values: (a) creative (what he offers to the world as a result of his own creation); (b) experiential (what he takes from the world as a result of his experiences); and (c) attitudinal values (the position a person takes when he does not have the power to change what is happening to him). Frankl utilized these concepts in his approach to therapy, which he called logotherapy. Frankl believed that man is caught in a feeling of aimlessness and emptiness because universal values are waning, and he referred to this phenomenon as "existential vacuum."

Stevens (1971) discussed the impact of the therapist's values as representing societal values, on female patients. She questioned the propriety of the societal stereotype of woman's role as a mother and a housewife and suggested that these stereotypes are common causes of psychopathology among women. She indicated that the women's liberation movement is making women aware of these facts and she suggested that therapists be aware of values that they overtly or covertly convey to female patients.

Several investigators have pointed out the relationship between one's mental health and his/her values. In response to a controversial
article by Szaz (1960), in which Szaz suggested that the distinction between mental health and mental illness is quite arbitrary and that problems of mental illness are in fact problems of living and are therefore an individual's responsibility to cope; several investigators expressed their opinion about the important role that values play in mental health, mental illness and therefore in psychotherapy.

For example, Ausubel (1961), in response to Szaz's position, indicated that even if the localization of responsibility for clients becomes the focus for mental health practitioners, psychologists need to let society know which values are best to live by. Smith (1961) also seemed to take a similar stand to Ausubel's in suggesting that psychologists need only to announce their own values to the public and make sure that these values have scientific merit.

In relating values to mental health, Smith (1961) mentioned that:

our business, be it research or service is properly concerned with specific valued dimensions or attributes of behavior or personality. In our focus on these dimensions we are not at all handicapped by lack of satisfactory conceptual definition of mental health. (p. 305)

Smith suggested that in the future some values may acquire pre-eminence since they have satisfied empirical criteria.

Rosenham and London (1969) questioned whether any therapy can occur in a vacuum and suggested that there are often value shifts going on in therapy. Rosenham and London asserted that the crucial issue is to decide what values are associated with mental health and what values are related to mental illness. Pruyser (1973) also
suggested that the relationship between psychotherapy and values is a very complex issue and that mental health practitioners need to set up guidelines regarding the role of values in therapy.

Solomon (1970) was quite encouraged by the current emphasis on the role of values in psychotherapy. He predicted that in the future behavioral scientists' roles would evolve around integrating the research findings on values, and he suggested that this could help individuals realize social realities and thus cope more adequately.

Peterson (1969) examined the relationship between counseling and values, and after reviewing the literature on this topic he made the following suggestions:

1. The counselor should attempt to understand the society of which he is a part, especially the value conflicts stemming from it.
2. The quest for identity is a search for meaning. The counselor should be mindful that this is a value-laden quest.
3. The counselor should attempt to understand the nature philosophy of value because value plays an important part in the counseling process.
4. The philosophy of value should be recognized as an important part of the curriculum in counselor education.
5. The belief in the worth and dignity of the individual and his right to free choice must be uppermost in the counselor's hierarchy of values.
6. The counselor should work toward enhancing the freedom of his client. Intermediate and immediate goals will derive meaning from his broader framework.
7. A counselor cannot avoid influencing the client and he must be aware of and concerned about the direction of his influence.
8. The counselor's values need not be imposing when presented in an atmosphere of complete acceptance, when the client is fully capable of rejecting such values.
9. The client must be free to choose his own values.
10. The client discovers and creates his values through the development of meaning resulting from the interplay between the polarities of subjective experiencing and objective world.
11. The counselor should recognize that he is regarded as a role model by his clients and should consider the responsibility that this entails.
12. The counselor must make his own values explicit to himself, and when appropriate, to his client. Appropriateness should be decided on the basis of when the counselor's own values are hindering the counseling process by limiting the client's freedom of choice.

13. The client must be permitted to discuss value questions openly in the counseling relationship.

14. Most important counselor values are those of acceptance, understanding, and faith in the individual, as well as openness and creativity represented in the fully-functioning person.

15. The counselor should think of "vocation" in terms of the "whole" person within a context of total life goals.

16. The counselor should recognize the importance of group influence upon individuals. There is a growing need to diagnose group restrictions upon freedom and then to seek methods by which change can be facilitated. (pp. 38-39)

Meissner (1971) stressed the importance of considering values in therapy and suggested that they underlie personality and human behavior and that in combination with symbolic processes, instinctual needs, defenses, sublimations and repressions values determine a person's personality and behavior.

The following comments by several investigators lend further support to the notion that values play an important role in therapy. Glad (1959) suggested that in order for therapists to be able to convey an acceptance message to their clients, they need to share the same philosophy and values. Alexander (1963) stated that a common therapeutic barrier is the discrepancy between the patients' values and their therapists' values. Pentony (1966) recognized the notion that there is a convergence of values in psychotherapy.

Callieri and Frighi (1966) discussed the importance of the role of therapists' values and warned psychotherapists against untimely confrontation and discussion of patients' values. Callieri and Frighi
suggested that in order for the therapeutic relationship to be maintained, therapists should be tolerant of patients' deviation from their own values. Arguing that individuals cannot be considered guilty for having chosen one action over another, Khana (1969) suggested that therapists should adequately allow for patients' deviations in values from therapists' and societal values.

The possibility of conflict between cultural differences in values held by Western psychologists and psychiatrists who treat African natives, for example, and the discrepancy of these therapists' values and those of the Africans (or other cultures) was suggested by Collomb (1973). Collomb pointed out the need for therapists to adequately understand the cultural values of their respective patients.

Garfield (1974) also commented on the role of values in therapy and suggested that therapists' values determine whether clients' goals are desirable or not. Rogers (1964), on the other hand, suggested that individuals who are experiencing difficulty in coping need to recognize their own values and that therapy helps individuals get in touch with their own values so that the individual can become a fully functioning person moving towards self-actualization.

Wolff (1962) conducted a survey to determine how psychotherapists view the effects of values in therapy. Seventy-two percent of the psychotherapists agreed that the role values play in therapy is important and that, even though there have been frequent calls for empirical research on the relationship between values and psychotherapy, the number of such research studies is not large. Kessel and McBrearty (1967)
(1967), in reviewing the research relating to values and therapy, stated: "Despite this call for research and the large body of theoretical literature concerned with this problem, there have been relatively few empirical investigations dealing with the effect of values in psychotherapy" (p. 675). Ehrlich and Wiener (1969) offered the following explanation for the lack of proper studies of value changes in psychotherapy. They stated that the non-availability of appropriate instruments, the technical condition under which they have to be employed, the confusion about the meaning of change in values, the loss of cases during the period of study and above all, the frequent reluctance on the part of therapists to admit that his values enter into the therapeutic relation have tended to discourage empirical work in this area. (p. 365)

A few empirical studies which have been carried on this topic are discussed below.

Rosenthal's (1955) study on changes in values of clients is the most widely mentioned investigation cited in the literature, and one of the first empirical studies of value changes related to therapy. Rosenthal used only neurotic patients and measured changes in the patients' values after they had undergone therapy. He found significant changes in moral values centering around authority, aggression and sex. Rosenthal found further, that the patients who were considered "most improved" had changed their values in the direction of the therapists' values. Those who were rated as "least improved" displayed their therapists' values to a lesser degree.

Pepinsky and Karst (1964), following Rosenthal's study, called this phenomenon (changing values in the direction of therapists'
values) "convergence." They make an interesting analogy between Rosenthal's findings and Frank's notion of persuasion and healing. Pepinsky and Karst considered Rosenthal's study to be empirical support for Frank's theories regarding goals and process of therapy involving value changes. Nawas and Lanfield (1963) attempted to replicate Rosenthal's study and they found that although their subjects adopted therapists' values, the therapeutically-improved subjects adopted fewer of their therapist's values than did the less-improved subjects. Nawas and Lanfield discussed the fact that they used a value survey different from Rosenthal's as one explanation for their contradictory results. Rosenthal's value survey was a very specific one (Moral Values Q-Sort) that dealt only with moral values, while Nawas and Lanfield used a more comprehensive instrument (Role Construct Repertory Test).

Holtzman (1961) devised a value survey and compared the value changes of inpatients and outpatients who were diagnosed as psychotic or neurotic. She found that only the outpatients' values changed significantly towards the values of their therapists. The outpatients whose values changed in the direction of their therapists' values were rated as the most improved subjects. The opposite relationship held for inpatients, i.e., the most improved inpatients were those whose values changed least. Holtzman concluded that convergence of patient-therapist values can be expected only when the patient's life situation is similar to the life situation of his/her therapist. Inpatients who have been hospitalized for extended periods of time
(Holtzman's subjects were all chronic psychotic patients) were found to have life styles quite different from their therapists.

Parloff, Iflund and Goldstein (1960) approached the measurement of values and changes in these values quite differently. They asked independent observers to indicate values communicated during each therapy session by each patient and his/her therapist. They then asked the therapists and patients to rank the values communicated. Parloff et al. found changes in the values of one of the patients towards the therapist's values and changes in the values of the other patient away from the values of the therapist. Due to the small sample used, generalizability of the results of this study is highly questionable.

Lanfield, Welkowitz, Ortmeyer and Cohen (1967) used the Strong Interest Vocational Blank and the Ways to Live Scale to measure values of patients undergoing therapy. The therapists were psychoanalytically oriented, and subjects were seeking therapy in four different clinics in New York City. The results of this study indicated that the patients' values changed as a result of therapy. Lanfield et al. reported further that therapists did not have homogeneous value systems and that therapists and their own subjects (after termination of therapy), were closer to each other's value systems than therapists and nonpatients. This study had the biasing effect of a non-random pairing of patients with their therapists and a difference in the duration of therapy for the patients.
Bitzen (1961), questioning the discounting of the moral-religious aspect of psychotherapy, carried out a study in which a psychologist and a clergyman worked as co-therapists in psychotherapy. Patients were instructed to state their religious values and then the patients were asked to introspect and determine whether their beliefs and actual behavior corresponded. Bitzen reported that the major difficulty with a majority of patients was the discrepancy between their values and behavior. When patients tried to bring their beliefs in line with their behavior, the outcome was positive in that the degree of guilt and often psychopathology decreased. Gershberg (1971) suggested that a relationship existed between the values a child learns from his family and the values he holds towards society. He used seven case histories to support his point. He concluded that therapists should study the values a person holds and trace back how these values are transmitted from parents to children, in order to have a better understanding of each patient's development.

Lilliston (1972) explained the role of values in psychotherapy from a verbal conditioning point of view. He asked subjects to choose materials (words) that were either consistent or inconsistent with the subjects' value orientation, and he then measured the rate of acquisition of these words. Subjects who were conditioned to select words consistent with their values showed a steeper acquisition curve when they were compared to subjects who were conditioned to words inconsistent with their values. Lilliston further suggested that the personal and relational aspect of a therapeutic relationship
plays an important part in the conditionability of subjects. Sugges-
tions were made for therapists to direct their attention to recognition
of their own value systems and the relationship between both patients'
and therapists' values and conditioning.

Some therapists have reported nonsignificant changes in the
values of patients undergoing individual therapy. For example,
Haase (1968) compared 27 counseled and 27 non-counseled subjects
and found no significant differences in the value changes of these
two groups after therapy. Haase also found no significant conver-
gence of client values with counselor values. Similar results were
noted by Banning (1965), who investigated the effects of counselors'
values on the reduction of personal dysjunction (discrepancy between
values and expectancy of the clients). Banning's study resulted in
the following findings: (a) Clients undergoing counseling showed
significant decreases in their personal dysjunction (values and
expectations became closer). (b) The overall values of these clients
did not significantly change. (c) There were no significant differ-
ences in individual value changes of clients that perceived the
therapists' values clearly and those who did not.

Group Movement, Group Therapy

and Values

Most of the studies noted above deal with the effects of indivi-
dual therapy on values. However, it should be kept in mind that some
of the articles were intended by their authors to address the effects
of group as well as individual therapy (Ehlrich & Wiener, 1969; Rogers,
1964).
Group psychotherapy and the group movement, just like individual therapy is in a relatively early stage of its development as compared with other sciences. An historical overview of the group development may help the reader get in touch with some of the previous attempts at studying group therapy.

From an historical point of view, a phenomenon similar to group therapy has been going on for many years in the forms of Greek drama, medieval plays, Mesmer's institute, etc. Mullan and Rosenbaum (1962) believe that group psychotherapy is uniquely American and is a product of American pragmatism. Hersey Pratt (1906) is considered to be a pioneer group therapist. He worked mainly with patients who were suffering from tuberculosis and his groups were therefore homogeneous in terms of the patients' common disease. The group activity and therapy used by Pratt helped his patients to cope better with their disease. Pratt, who was quite supportive in his group leadership, wrote, "a fine spirit of comraderie has developed [as a result of group therapy]. They [the patients], never discuss their symptoms and are almost invariably in good spirits" (Pratt, 1907).

Pratt was not aware at first of which aspects or mechanisms of the group process actually helped individuals with their psychological or emotional problems. Many years later, however, Pratt (1953) stated that he was convinced that psychotherapy and group therapy do help with the psychological components of diseases. Pratt (1953) mentioned that he had been influenced by group therapy treatment of psychoneurosis by a French physician named Joseph Jules Dejerine.
Mullan and Rosenbaum (1962) concluded that Pratt's group therapy must have developed concurrently with that of Dejerine's (1913).

Dejerine and Gauchler (1913) used persuasion and reeducation to treat patients who were suffering from psychoneurosis. Dejerine felt that his group therapy method was effective and stated that psychotherapy depends on beneficial influence of the therapist over his patient.

In 1918, Lazell (1921, 1930) used a lecture to treat schizophrenics. Lazell suggested that the group method helped patients socialize with others and also with the therapists.

At about the same time, Marsh (1935) also used group therapy to help psychiatric patients at Worcester State Hospital in Massachusetts. Marsh, who was a minister and a psychiatrist, used formal lectures, art classes, and dances to help patients socialize and be supportive of each other.

In Europe, a group movement was also taking place. Jones (1955) discussed some of Freud's early work in which a form of group therapy was used to analyze patient's dreams. Jones stated that "during the voyage the three companions analyzed each other's dreams---the first example of group analysis" (p. 55). Dreikurs (1959a, 1959b) also referred to some of Adler's group therapy with the working class. Dreikurs believed that Adler was applying psychoanalysis in a group setting.

Moreno (1911) described his method of group therapy, called psychodrama, in which individuals with emotional difficulties were asked to enact or role-play their life situations and to get in touch
with the sources and manifestations of their problems. In several other articles and books, Moreno (1911, 1946, 1953) elaborated on his technique, and several authors (Martin, 1974; Mullan & Rosenbaum, 1962) believe Moreno to be the originator of group psychotherapy, since he began the use of group psychodrama in 1910. Moreno introduced his method of group therapy (psychodrama) into the United States in 1925, and the Moreno Institute is still training group therapists in New York City.

Psychoanalytic group therapy, which can be traced back to Freud (1922), was later used extensively by Adler (Mullan & Rosenbaum, 1962). Wender (1936) used psychoanalytically oriented group work in 1929. Wender believed that group psychotherapy was only applicable to treatment of mild disorders of affect. Schilder (1940) and Slavson (1943) also used psychoanalytic concepts in a group setting.

Although Carl Rogers (1942a, b) was initially interested primarily in individual therapy, he encouraged his students to apply the client-centered method to group settings; and after World War II some of Rogers' disciples did initiate client-centered, or non-directive, group therapy (Mullan & Rosenbaum, 1962).

The client centered approach to therapy has been seen by many as quite significant and different from earlier methods, in that it focused on the client's attitudes towards himself and others, and the value system to which the client adhered. In contrast, the psychoanalytic method was not expected to focus so much on intra-psychic components of the client's personality but rather to
get the client "in touch" with the pathological roots of his/her conflicts and problems (Mullan & Rosenbaum, 1962). Over the years, with a general movement away from strictly Freudian theories and more towards neo-Freudian and humanistic approaches, more and more emphasis has been given to intrapsychic processes in therapy, and as a result, to client attitudes and values. Moreno's (1911) psychodrama, Sullivan's (1953) interpersonal orientation, Perls, Hefferline and Goodman's (1951) Gestalt therapy, Ellis' (1962) rational emotive therapy, and Rogers' (1947) client centered therapy all seem to place a major emphasis on intrapsychic principles.

Current psychological literature leads one to believe that demonstrated effects of group therapy on values have not attracted the attention they deserve. Haiman (1951) urged group leaders to be aware of the deviation of some group members' values from the norm values of the group and to be aware of cultural and subcultural differences that often result in values that might be different from the majority of society's values.

Hill (1965) approached the issue of values as related to group therapy from a different perspective. Hill developed an instrument (The Hill Interaction Matrix) for classifying the different types of verbal responses of group members. The responses of group members considered by Hill to be most therapeutic are seen as value laden and, thus, to be inherently related to the value system to which each individual adheres.

The Hill Interaction Matrix was used by Gross (1959) to compare the interaction of a homogeneous versus a heterogeneous group (in
terms of their pretest scores on the Firo-B). Gross asked the group leader to be "bland and unobtrusive" in order that the interactions of group members might be studied without their interactions being influenced by the group leader. A typescript of members' interactions was rated "blind" by an experienced rater. Gross's study produced the following results: (a) the homogeneous group interactions were rated as being more therapeutically valued than the heterogeneous group interactions; (b) the heterogeneous group's topics of discussion were generally more neutral and non-person centered, while the homogeneous group focused more on personal and interpersonal topics. Gross concluded that group composition in terms of homogeneity or heterogeneity has a significant influence on the interaction of group members and that homogeneity is essential in helping clients engage in interactions that are therapeutically valued. Gross's study supported Hill's (1961, 1965) assertion that "short-run therapy necessitates homogeneity in composition" (p. 73).

Squatriglia (1970) investigated the differential effects of group therapy on personality variables and values of men and women. The California Psychological Inventory and the Allport-Vernon-Lindzey Study of Values were used. The frequency of change in values rather than specific value changes were studied. Women's values changed 15 times more often than men's values. Changes on the California Psychological Inventory, however, were not significantly different for men and women.

Bagdassaroff and Chambers (1970) attempted to study the value patterns and shift in values of educators who were racially different,
and who were attending a marathon encounter group. Bagdassaroff and Chambers found that educators who were participating in the encounter group showed significant increases in the affection, religious, and social values. Further differences were found among blacks and whites in that the white experimental group increased in the affection, aesthetic, support and conformity values, while blacks in the experimental group increased on the values of affection, respect and benevolence.

It seems evident from the above literature that although group therapy in the United States was originated by Pratt primarily to help individuals develop better attitudes towards themselves despite their physical diseases, the focus changed to that of help group participants to get in touch with their psychopathology. Attitudes and attitude change received relatively little attention. Thus, the role of values in group therapy remains to be studied.

Leadership Style and Its Effects on Values

Therapists' styles of therapy are generally considered to fall somewhere on a continuum of directiveness or non-directiveness (Patterson, 1973; Porter, 1950). Porter's (1943, 1950) definition and distinction of these dichotomies regarding therapy style seem to be widely accepted. Porter suggested that when a therapist is operating through a non-directive approach, he is minimizing external intervention and maximizing self-exploration. In the non-directive style, an attempt is made to understand the client from client's internal
frame of reference. Within the non-directive framework, the client is considered to be basically rational and self-actualizing, and a conscious attempt is made by therapists within this framework to help clients find their own values, preferences, options and solutions to problems.

Rogers (1942a) suggested the following basic difference between non-directive and directive therapies. In non-directive therapy the underlying assumption is that clients have the right to choose their own goals even though these goals might be different than their counselor’s, while the directive counselor is assumed to be the expert and he/she often suggests goals appropriate for clients.

Generally speaking, proponents of the directive method reflect various theoretical orientations of psychotherapy such as rational-emotive therapy, neo-Freudian eclecticism, behaviorists, etc. On the other hand, advocates of the non-directive approach seem more clearly, to adhere more to Rogerian (client-centered) and other humanistic orientations. Freud (1933), who is considered to be the father and originator of psychotherapy, cannot easily be placed on either extreme of the continuum. Freud (1933) discussed the "pedagogic measures" that have to be used to pressure patients into making new decisions, which seems to indicate that the Freudian approach could be viewed as being closer to the directive end of the continuum suggested by Porter (1950). At the same time Freud was also well known for his method of "free association" and relatively infrequent interventions by the therapist. At the present time both directive
and non-directive approaches appear to be widely accepted, and both modalities are used in a variety of settings and with a variety of individuals, e.g., in industrial settings (Canter, 1945; Gardner, 1944; Roethlisberger & Dickson, 1943), United States Armed Forces (Rogers & Wallen, 1946), with mentally retarded (Bills, 1947), with children (Allen, 1942; Axline, 1947), and with college students (Rogers, 1957; Rudikoff, 1957).

The relationship between psychotherapy and values has been suggested by Glad (Note 3), Hobbs (1962), Femichel (1955), and Rogers (1959). Also, a closer look at psychotherapy in terms of therapist style shows a relationship between values and therapeutic style.

Glad (Note 3), basing his judgment on research to date stated that: "research beginning and informed opinions are conveying towards the proposal that particular method of therapy or leadership produces its own value-form in clients treated by it" (p. 4). Glad also compared Rogers' client centered therapy, Rank's dynamic relation therapy, and Freudian psychoanalysis, and he concluded that: (a) clients who are democratic in their attitudes can benefit most from the non-directive approach; (b) clients who are struggling to belong and to overcome their feelings of alienation benefit most from the Rankian dynamic-reation therapy; and (c) clients who express paternalistic attitudes benefit most from psychoanalysis.

Glad supported and justified the assumptions mentioned above on the basis that personality is only modified when the direction
is provided towards the value form that it fits. Glad then proposed
the following relationship between values and leadership style.

How people behave is related to their philosophies of life
or value systems. Comparative studies of theoretically systematic
psychotherapy operations indicate that personality is modified
in the direction prized by particular theory. It appears that
exposure to theoretically consistent operations leads the
clients or research subjects to adopt the value systems inherent
in psychotherapy theory.

The following propositions seem to summarize the positions previously
suggested by Glad (1955) and by Ferguson (1956): (a) Psychoanalysis
promotes values around psychosexual maturity. (b) Dynamic relation
theories enhance values related to creative individuality. (c)
Sullivan's (1954) interpersonal theories promote values related to
social integration. (d) Client centered therapy brings about changes
in self acceptance as well as respect for others.

The relationship between therapy and leadership style is neither
clearly nor absolutely defined. Macklin (1973), for example, felt
that even in non-directive approaches, either consciously or uncon-
sciously, therapists convey their opinions and values to their clients.
Fémichel (1955) studied the way different therapists with different
styles function in therapy and he stated that just because psycho-
analytic therapists go through psychoanalysis themselves does not
immune them from taking a non-neutral stand in therapy. Other in-
vestigators, such as Glover (1958), suggested that "the abandonment
of neutrality is the disadvantage inherent in active methods" (p. 175).

Psychological studies on the relationship between leadership,
therapy style, and values can be subdivided into two areas:
(a) directive versus non-directive individual therapy and values; and (b) directive versus non-directive group therapy and values. Some studies which overlap between individual and group methods are discussed under these two separate headings, below.

Directive versus non-directive individual therapy and values. Rogers (1959) approached the topic of values in terms of "organismic valuing." Rogers defined organismic valuing as: "an ongoing process in which values are never fixed and rigid, but experiences are being accurately symbolized and continually and freshly valued in terms of satisfaction organismically experienced" (p. 210). Rogers (1961) suggested that the individual's valuing process is based on the individual's own values rather than on external values. Rogers suggested that, as a result of openness to experience, organismic valuing is positively correlated with empathy received from others.

Pearson (1969) tested Rogers' (1961) hypothesis regarding empathic understanding, openness to experience, and organismic valuing and found a nonsignificant relationship between these variables. In other words, Rogers' propositions failed to be validated in Pearson's (1969) study. Pearson devised her own instruments to measure these variables and she questioned the validity of the measures used in her study.

Rogers' (1964) explanation for how values change in individual therapy is quite interesting. Rogers proposed that human beings generally know their values in infancy. However, during the process of growth, one's experiences sometimes become remote from values.
This is due to social rejection. He suggested that within the therapeu­tic relationship, a client can find and recognize his values. Clients usually do not choose values that are unacceptable by society, but they will choose those values that help their growth.

Rogers (1946) suggested that the techniques of non-directive therapy are quite different from directive therapy. Non-directive therapy produces changes in attitudes, values, self-concepts, behavior, and personality structure of the clients. Rogers indicated that most previous researchers have based their results on a very small number of subjects and that generalizing those results was questionable.

More recently, Borton (1974) elaborated on the relationship of non-directive therapy to values, and he stated that:

The basic problem with a neurotic client who comes to therapy is that he has departed from his own values by taking on the values of others. Therefore, the client centered therapist, especially does not want to impose his own values on the person. Rogers first introduced his view of therapy as "non-directive" out of a tradition of democratic humanism and protestant individualism. He wanted to move away from any notion of therapist authority or priority of vision. It is not the therapists' values, opinions and feelings that count, rather the center of therapeutic process must reside in the client. (p. 177)

Reidy (1969) studied the values conveyed by subjects, by examining their language in therapy. She believed that by studying the language an individual uses, one can study goals, needs, attitudes, and values. She concluded that humanistic and non-directive theories of personality provide a useful approach in studying needs, values, and attitudes because these theories consider people to be basically healthy, goal directed, realistic, and self-actualizing. Pentony
(1966) studied the values of non-directive psychotherapists and their clients and found that the values of the clients resembled their therapists' values after therapy was terminated.

Frazier and Laura (1972), on the other hand, studied the role of values in reality therapy (a directive approach). They stated that therapists have to be aware of societal as well as individual clients' standards. It was recommended that value judgments conveyed by therapists taking a directive approach be carefully studied.

Wilder (1969) suggested that a relationship exists between psychoanalysis and values. He mentioned that although psychoanalysis includes consideration of human values and their effects on the psyche, due to Freud's neglect of the role values in therapy, consideration of values in psychoanalysis have not been adequately emphasized. Wilder then asserted that now is the time to bring the role of values in psychoanalysis into the focus of exploration. Gelfman (1970) suggested that the psychoanalytic notion of consciousness includes a system of values. For example, those individuals who are diagnosed as obsessive-compulsive have values which revolve around giving others illusions of superiority.

Vaughn (1971) devised a value survey based on therapeutic approaches such as the client centered approach and psychoanalysis. This value survey was able to significantly differentiate inpatients from outpatients, and it also identified normals. Inpatients valued rigid self-control, obedience, conformity, passivity and cynicism. Outpatients and normal people were differentiated by the values of
cautiousness, passivity, conformity and moderate rigidity. Vaughn found a continuum of value differences similar to that of psychopathology. Vaughn encouraged an approach to personality disturbance through an investigation of values.

A study which compared the effects of different leadership styles was reported by Shlien (1964). Shlien studied the effects of non-directive and Adlerian leadership styles on the self-esteem of clients undergoing therapy. The self-esteem of clients was measured by studying their self concept and their ideal concept (ideal self). These concepts (self and ideal) were not measured by standardized measures, but Shlien suggested a similarity of self, ideal self, and values. The results of Shlien's study indicated that non-directive and Adlerian therapy were both equally effective in improving the self-esteem of the clients who participated in the study. Shlien did not establish any criteria for validating non-directiveness or Adlerian orientation of the therapists. Although Shlien's study might be viewed as having some shortcomings in sampling and in differences between therapists, the results of the study do suggest the importance of further research in this area.

Directive versus non-directive group therapy and values. Although the dichotomy of directiveness versus non-directiveness applies to group as well as individual therapy, some authors, such as Arbiser (1973), suggest that the majority of group therapies can fall under three major categories: (a) the psychoanalytic framework, (b) group psychotherapy with an active leader, and (c) psychotherapy
centered in the group (similar to client-centered or non-directive). Thus, while it appears appropriate to continue the present review of literature in terms of the directive-non-directive dichotomy, one must also keep in mind the continuum that actually exists between the opposite polarities of directiveness and non-directiveness.

A few studies have been reported in which the non-directive method has been used as the leadership style and values have been the dependent variables studied. Baumgartel and Goldstein (1967) predicted that college students would change their values to emulate those members who were highly valued during a human relations training group. Baumgartel and Goldstein used the Study of Values (Allport & Vernon, 1960) as the measuring instrument. Only religious values of the subjects changed in this particular study. As predicted, the direction of change was towards the values of the most-liked group members. Following Baumgartel and Goldstein's study, Murphy (1972) encouraged the utilization of the non-directive style of group therapy in teaching religious values and suggested that non-directive group therapy helps group members' personalities to develop to a point where "collective self actualization" can be the end result.

Smith (1973) compared the effectiveness of two different treatment modalities for drug addicts. These two modalities were drug education versus value clarification through the non-directive approach. The non-directive method proved to be superior to drug education in reducing emotional problems associated with drug abuse. The non-directive method brought about a higher degree of group cohesion than did the drug education method.
Bensley (1970) was interested in utilizing the non-directive method in a classroom setting. Bensley trained school teachers to lead classes through a non-directive approach. The dependent variables for this study were values, intelligence, and achievement. Values were measured by the Murphy Inventory of Values; intelligence was measured by the Otis Quick Scoring Mental Abilities Test, Alpha Test, and Lorge Thorndike Intelligence Test; and achievement was measured by the Stanford Achievement Test. Results of a factor analytic study by Bensley indicated that although changes in I.Q. and achievement did not reach a significant level, changes in values did. Students in the experimental group valued affection, respect, well being, rectitude, wealth, skills, enlightenment, and power more than did the control group. Although Bensley's study did not involve group therapy, the classroom teacher's activity in the study can be viewed somewhat as resembling group therapy.

The directive approach and its effects on the values of group members have also attracted the attention of a few investigators. Alger (1970) explored the relationship between values, social conflict and superego development. Language was considered to be the vehicle for teaching values. However, variables such as environmental threat (population explosion, nuclear threats, etc.) were thought to constitute the conflicts in one's values. This variable seems to make the superego quite flexible and keeps a person from coping. Alger suggested that directive group therapy would be a promising method of teaching new values.
Rational-emotive therapy, developed and espoused by Ellis (1974), was considered by him to be an appropriate vehicle in group therapy to help clients get rid of inappropriate emotions that are caused by irrational beliefs and values.

Katkin (1970) studied the relationship between values and emotional adjustment. The Minnesota Multiphasic Personality Inventory (MMPI) was used as an index of emotional maladjustment, and a list of values was devised to measure values. The result of Katkin's study indicated that adjusted students value self interpretation and achievement more than do maladjusted students. Maladjusted students, on the other hand, preferred humanistic-support and relationship values. Katkin concluded that adjusted students preferred supportive psychotherapy and maladjusted students preferred insight-oriented psychotherapy.

Hill (1965), as a result of developing the Hill Interaction Matrix (an instrument which classifies group members' interaction) encouraged several research attempts to compare directive and non-directive styles of group leadership in therapy. It should be kept in mind that the Hill Interaction Matrix does not measure values as such, but Hill believes that the instrument does arrive indirectly at values, through assessment of group interactions which are value related. Hill, Howell, Long, Liebroder, and Morrill (1959) compared the interaction of group members who received group therapy either by a ward attendant or a psychologist, with a non-therapy control group. In other words, the psychological sophistication of the therapists was the independent variable. The results of the study
showed that the groups run by the psychologist improved the most (higher ratings in terms of Hill Interaction Matrix's), and their responses were more highly valued from a therapeutic point of view. Although the interaction of group members in the ward attendant's group changed, this change was not considered to be therapeutically valued. The control group did not show any significant changes.

Liebroder (1962) compared interaction of group members who received group therapy. Three different groups were composed and one therapist was instructed to lead group 1 in a psychoanalytic style, group 2 in a "group analytic" style and group number 3 in a non-directive approach. The subjects for Liebroder's study were psychiatric patients at Utah State Hospital who were matched on sex, age, intelligence, and length of hospitalization. The subjects received 20 sessions of group therapy. The interaction of group members was different for the three groups. The group analytic group members' interaction was considered to be based on topics related to interpersonal relationships; psychoanalytic group members' interaction revolved around intrapersonal topics; and the non-directive group members discussed topics related to the general interests of its members. Liebroder concluded that the non-directive group members interacted in a manner that was of less value in terms of the therapeutic progress. The "group analytic" and the psychoanalytic group both showed progress in terms of interactions that were therapeutically valued on the Hill Interaction Matrix.

Review of the literature dealing with directive and non-directive therapy, both individual and group, leaves the present writer somewhat
surprised at the lack of adequate attention apparently given to this topic previously. Most studies appear to be generally descriptive, with direct comparisons between directive and non-directive therapy and their effects on values being quite infrequent. This seems to have convinced some investigators that the lack of experimental data to support assumptions regarding therapeutic techniques and styles should be a basis for the rejection of these styles. Abramowitz (1971), however, felt that the above is not a sound argument and said that empiricism is not the only answer to therapeutic concerns. Abramowitz encouraged psychotherapists to go beyond empiricism and explained that when techniques in therapy are not verified they do not have to be necessarily rejected. However, no one seems to reject the notion that there is an advantage in empirical support for psychotherapeutic issues.

Leadership Style and General Changes in Clients

One of the earliest works on the differences of leadership style was by Lewin (1944). Lewin classified leadership styles into democratic and autocratic styles. He suggested that group members relate differently when they are exposed to different leadership styles. Lewin was in favor of democratic leadership in group therapy and concluded that democratic leadership improves the group's efficiency and results in changed behavior of group members (in the direction that members desired to go). Dreikurs (Note 4), Ohlsen (1964, 1970), Gordon (1955),
and Zanders (1960) all suggest similar notions. Although democratic and autocratic leadership styles are not identical concepts to directive and non-directive group therapy respectively, the general assumptions seem to be quite similar (Ohlsen, 1970).

Hare (1962) suggested the following differences between directive and non-directive group leadership. Non-directive leadership produces better morale and behavior change, while directive leadership brings about changes mainly in behavior. Fiedler (1964) mentioned that in his experience, directive leadership has been more effective when members have been either highly favorable or highly unfavorable in their attitudes toward the group leader. Non-directive group leadership, on the other hand, has proved to Fiedler to be more helpful when group members have been either neutral in their attitude towards the group leader or only moderately favorable.

Shaw and Blum (1966) elaborated on Fiedler's above mentioned propositions and suggested a different interpretation:

direct leadership is more effective than non-directive when there is only one solution and one way (or only a few ways) of obtaining this solution. The requirements for leadership are quite limited, and non-directive leader behaviors may only interfere with the problem solving process. However, on tasks that require varied information and approaches, non-directive leadership is clearly more effective. On such tasks the requirements for leadership are great. Contribution from all members must be encouraged and this requires motivating, advising, rewarding, giving support, in short, non-directive leadership. (p. 241)

Similarly, Brammer (1973) emphasized the importance of matching the characteristics of "helpers" and "helpees" and suggested that compatibility in terms of the personalities of helpers and helpees is one of the main requirements for a successful relationship.
Barahal, Brammer and Shostrom (1950) suggested that the client centered method is more effective than the directive method for counseling clients. Forgy and Black (1954) indicated that groups treated by the two methods seemed to function similarly, and in their experience, the two methods have been equally effective.

Porter (1950) suggested that directive and non-directiveness fall on a continuum and he suggested several categories of counselor responses to distinguish differing degrees of directiveness and non-directiveness. Some authors such as Tyler (1969), who based her judgment on a review of literature, suggested that:

In the light of all this evidence, there would seem to be reason for the directive, non-directive in discussion of counseling. Its principle consequence may be to induce inexperienced counselors and counseling trainees to behave in an unnatural way during counseling interviews. (p. 255)

Despite Tyler's opinion mentioned above, studies of the differences between different leadership styles have been going on for many years. Apfelbaum (1958) suggested that, generally, male clients expect directive (defined as critical, analytical and non-indulgent) therapy and that female clients prefer non-directive therapists who are non-judgmental and permissive listeners. Tinsley and Harris (1976) validated Apfelbaum's proposition. In Tinsley and Harris's study a questionnaire was administered to male and female clients to assess their preference for directive or non-directive therapy. Females expected more acceptance, and males expected more directiveness.

Sonne and Goldman (1957) asked high school students who were classified as either authoritarian or non-authoritarian to listen to
recorded interviews of counseling sessions in which therapists were either eclectic or client centered. The results of this study showed that regardless of the level of these students' authoritarianism, they preferred the eclectic counseling approach. Sonne and Goldstein suggested that clients prefer active participation rather than passive listening on the part of counselors. In a similar study by Canter (1971), a relationship was found to exist between authoritarianism and the preference for directiveness versus non-directiveness in therapy. Canter used a large number of hospitalized patients (125 men and 95 women) and administered the Rokeach F Scale to them to measure their degree of authoritarianism. The MMPI was also administered to add another variable (psychopathology). Authoritarian clients preferred the more structured (directive) approach to therapy. However, a relationship was not found to exist between psychopathology and preference for directive or non-directive therapy.

There were several studies during the 1940's in which the non-directive method, which had just been elaborated on by Rogers (1939, 1942a) was thoroughly investigated, and in some cases compared with the directive method.

Thorne (1944) compared and contrasted directive and non-directive methods and suggested the following advantages and disadvantages of the non-directive method:

**Advantages:**

1. Relationship was emphasized.
2. Growth was emphasized.
3. Expression of feelings and development of insight was focused upon.

4. The therapist did not project his own feelings.

5. Goals were established by clients.

**Disadvantages:**

1. Research up to 1944 was considered to be inadequate because it was based primarily on case histories.

2. Family members were often not interviewed.

3. The therapist rigidly adhered to one method.

4. The single approach is not suitable for all clients.

5. Non-directive therapists were felt to have superficial contact with clients.

Thorne did not discuss any presumed advantages or disadvantages of directive therapy.

Thorne's main data for the above assertions regarding non-directive therapy was based on an article by Snyder (1943) in which the short term treatment of an adult was thoroughly discussed. Following Thorne's study, Snyder (1945) analyzed counseling interviews by four non-directive psychotherapists in 48 sessions of therapy. Both clients' and therapists' responses were classified and analyzed. Snyder's analysis yielded the following results:

1. In a typical non-directive counseling session 50% of the statements deal with feelings.

2. Even in non-directive therapy, persuasion, disapproval, criticism, approval, and discouragement, which are typically directive
responses, are used 10% of the time. However, directive counseling responses decrease during the course of treatment.

3. Interpretation, persuasion and disapproval are rarely used to formulate the client's problem.

4. Clients who are receiving non-directive psychotherapy often reject interpretation, criticism, disapproval and persuasion.

Snyder concluded that the non-directive method is a powerful tool that can be used to bring about positive changes in the attitudes and behavior of clients and that the non-directive method is subject to scientific investigation.

Madigan (1945) used a case study to show how the non-directive method can be used over a short period to help a client present his/her problem, release feelings, feel accepted and therefore have a better understanding of the problem and appropriate solutions. Fleming and Snyder (1946) undertook a study to test whether non-directive therapy could bring about changes in the social and personal adjustment of children as measured by Rogers' Personality Test and Fleming's Sociometric Test. The results of Fleming and Snyder's study showed that adjustment changes took place for four out of seven subjects. Female subjects, however, showed a greater amount of positive changes in personal and social adjustment.

Subsequent work with client centered therapy research was carried out by Rogers (1957a, b) and his colleagues at the University of Chicago Counseling Center. These studies were not comparative studies, but attempts were made to examine non-directive therapy thoroughly. In
one such attempt, several researchers collaborated and made an exhaustive effort over an extended period of time to study the process and outcome of non-directive therapy. The outcomes of this research are summarized below:

1. There was significant progress towards self-actualization as a result of client centered therapy. The self concept of clients reached their ideal concept (Butler & Haigh, 1957; Rogers, 1957b; Rudikoff, 1957). Clients further showed more self understanding, greater confidence, optimism, and more responsibility (Rogers, 1957b; Rudikoff, 1957).

2. Subconscious material came to the surface for the treatment group (Rogers, 1957b).

3. TAT results indicated that clients' psychopathology decreased significantly during the course of therapy (Dymond, 1957b). When clients in therapy were compared with control-group clients, who were asked to wait for 60 days before they would begin therapy, counseled clients exhibited more personality change than non-counseled clients (Gruman & John, 1957).

4. Although changes in the clients' attitudes towards others was not significant, there was a tendency towards more acceptance of others (Gordon & Cartwright, 1957).

5. Clients' perception of their own behavior changed positively (Rogers, 1957b). This change in behavior was towards engaging in more mature behavior (as judged by clinicians). However, when this change in behavior was rated by friends of the clients, the change was not considered to be significant.
6. Female clients showed more overall progress than male clients (Dymond, 1957; Seeman, 1957).

7. Clients rated as less democratic were not considered to have benefited from therapy (Gordon & Cartwright, 1957; Tougas, 1957).

The role of reassurance in the directive method was examined by Andrews (1945), who concluded that reassurance can be used to restore confidence and self assurance in clients.

Besides the research by Rogers and his colleagues, the directive and non-directive methods have been studied by several other investigators. Gump (1944) compared psychoanalysis with non-directive psychotherapy by studying the responses of the therapists belonging to these two schools. The results of Gump's comparison showed that (a) analysts use directive responses 22% of the time, interpretation 32%, acceptance 9%, and information giving 8%; and (b) non-directive therapists, on the other hand, use reflection and clarification of feelings 32%, acceptance 27%, interpretation 8%, and directive questions 5%. Gump suggested that interpretation is the major tool of psychoanalysis and that reflection of attitudes and feelings is the most emphasized technique in the non-directive method.

Snyder (1953) studied the relationship between directiveness and non-directiveness with success in therapy. Two different criteria were set for success. The first criterion was success as measured by the Counselor Post-Therapy Scale. The second criterion was the client's rating of success. Snyder's study indicated that clients who were treated by a more directive method were less certain of their
improvement in therapy. The relationship between success in therapy and the score on the Counselor Post-Therapy Scale was not significant.

Because factors other than the therapist's directiveness or non-directiveness are at work in therapy, Snyder explained that the relationship between the two could be an association rather than a cause and effect relationship. Snyder suggested that directiveness and non-directiveness seem to fall on a continuum and that therapists' responses fall somewhere between the two extremes.

Abramczitk (1972) asked group therapists who were leading a group consisting of hospitalized psychiatric patients, to play a directive role during the first six months of group therapy and a non-directive role during the second six months of group therapy. The findings of Abramczitk's study showed that when patients were treated with the directive method, the topics they discussed generally revolved around housekeeping chores and complaints about adjustment difficulties. During the non-directive treatment, emotional problems and mental illness were more often the topics discussed. Abramczitk suggested that the directive leadership style leads to focus on more realistic goals and problem solving behavior.

Some studies, however, have not produced significant differences between the effects of directive versus non-directive therapy. Fiedler (1950a, b) compared therapists from psychoanalytic, non-directive and Adlerian schools and used a factor analytic technique to differentiate between these therapists. There were no distinguishing factors between the three groups as far as the relationship between the
therapists and their clients were concerned. Fiedler suggested that the main factor was the therapist's expertness in terms of his ability to communicate with and understand his patients. Carlson and Vandever (1951) found no differences in the personality changes of clients who were counseled by directive or non-directive methods for vocational problems.

On the other hand, the style of leadership and type of therapy of a group leader has been shown by some to affect several dimensions of a client's personality. Jensen and McGrew (1974) hypothesized that directive and non-directive leadership styles have differential effects on anxiety experienced by hospitalized patients. In this interesting study, Jensen and McGrew conducted two groups. Group one had a leader who was in a directive role. Group two had a non-directive leader. Subjects for the study were all chronic schizophrenics. The State Trait Anxiety Inventory was chosen as the instrument for measuring anxiety. Blood pressure and pulse rate were also measured to determine physiological arousal. The results of Jensen and McGrew's study revealed that subjects who were participating in the directive group showed a higher level of anxiety and a higher blood pressure when they were compared with members of the non-directive group. Pulse rates were not different for the two groups, however. Overall differences between males and females were also assessed, and male subjects had a significantly higher anxiety score.

Speisman (1959) suggested that therapists who belong to different
schools and have different leadership styles use different types of interpretative responses (interpretations). To test this hypothesis, Speisman designed a study to examine which kinds of interpretations produced the most resistance in clients. The types of interpretations studied were found to have direct correlation with resistance in therapy. Deep interpretation (analytic) produced the most amount of resistance in therapy. Superficial interpretations produced moderate resistance, and moderate interpretation (interpretations that barely touched on deeper levels of consciousness) resulted in the least amount of resistance.

Differential effects of directive and non-directive methods on a client's personality was also suggested by Fabry (1974). While elaborating on the uses of logotherapy, Fabry suggested that even though logotherapy can be used in a variety of settings, it is most effective when it is combined with directive methods. Fabry was assuming that logotherapy was essentially a non-directive method.

Abramowitz, Abramowitz, Roback and Jackson (1974) investigated the differential effects of directive versus non-directive therapy on clients who either used an internal locus of control (clients who believed that events which occur to them are a result of their own initiatives) or an external locus of control (events determined either by luck or outside forces). A sophisticated design of client modality was used to insure exploration of interaction effects. Best results in terms of reduction of guilt, shame, anxiety, and alienation were gained when clients were matched with their therapists. More clients with internal control
improved as a result of non-directive therapy, while clients with an external control improved more from directive therapy. Abramowitz et al.'s study therefore validated a proposition by McLachlan (1972) in which compatibility of client personality and therapeutic improvement was encouraged.

Roback (1970, 1972) studied the effects of different therapy groups (insight oriented versus non-insight oriented, as well as insight and interaction) on a subject's general functioning (psychopathology and behavioral ratings as rated by psychiatric attendants). The difference between these groups was not statistically significant on any of the measures.

The differential effects of various treatment modalities on behavior and behavioral adjustment of clients receiving individual as well as group therapy have been proposed by several investigators. May (1974) suggested that differences in treatment effectiveness exist among therapists with different personalities and approaches, and he suggested further validation of this hypothesis. May advised researchers to guard against biasing effects of experimenter expectations, socioeconomic factors and sample differences between therapists and their patients.

One of the first studies on this subject (leadership style and behavior) was carried out by Gorlow, Hoch and Teleschow (1952). The non-directive method of group therapy was studied and found to be quite effective in increasing positive (socially acceptable) behavior and decreasing negative behavior of the study subjects (graduate students). The self-concept of the subjects also became more positive.
A comparison of the effectiveness of client centered therapy versus behavior therapy was the focus of a study by Gumaer and Myrick (1974). Both of these methods were found to be equally effective in decreasing disruptive behavior of children in a classroom. In a similar study, Dana and Dana (1969) investigated the effects of directive and non-directive group therapy on children's behavior, e.g., playing, speech, watching, etc. The children who were treated by directive group therapy were found to show significant increases in positive behaviors.

Boll (1971) replicated Dana and Dana's (1969) study and reported contradictory results to the earlier research. In Boll's study, the non-directive method was found to be the more effective method for increasing positive behavior of children. But due to differences in the samples of the two studies, direct comparison of these two studies was not justified.

Other leadership styles, which were neither directive nor non-directive by definition, have been studied by several investigators. For example, Mainord, Burk, and Collins (1965) compared the results of three groups: (a) a therapy group in which the therapist made a conscious effort in diverting comments away from personal to impersonal statements; (b) a group in which the therapist was quite confrontive in his approach to group members; and (c) a control group which did not receive group therapy. The confrontive approach produced the least results in terms of positive changes in subject behavior, such as increased outside visits, self initiated activities, and seeking employment. Subjects in the control group did not show any change.
Hatcher (1970) compared the relative effectiveness of two methods of group therapy, namely circular discussion, and circular discussion based on group members' behavior. Positive behavior as rated by nurses was significantly improved for subjects who were treated by the circular discussion method. Self concept of subjects was also measured but the differential effect of the two methods of group therapy on self concept was not significant.

Behavioral improvement and personal adjustment of hospitalized patients were also thought to be related to the duration of group therapy, which could affect the approach that a therapist takes in a group (McGee & Williams, 1971). However, limited time versus an unlimited time structure did not have a differential effect on behavioral adjustment of chronic schizophrenic patients who were receiving group therapy.

All in all, the results of previous studies regarding the effects of leadership style, or therapist orientation on personality, psychopathology and behavioral adjustment have been somewhat limited and inconclusive. Frequently, it has been assumed that group leaders function strictly within a particular school of thought and that their theoretical orientation and leadership style are self evident. With exception of a few studies, adequate criteria have not been used to firmly establish and validate the therapy and leadership styles of various group leaders. Thus, based on the studies cited above, the advantages of one leadership style over another does not seem to have been established.
In addition, it seems apparent from previous studies that the type of subjects used in a study will also affect the results. In a review of previous research on psychotherapy and values (Kessel & McBrearty, 1967), and also in a previous discussion of the effects of psychotherapy on values and other attributes of personality (Ehrlich & Wiener, 1969), the importance of research populations and subject characteristics has been noted. Comparisons of similar research with non-identical or dissimilar samples potentiates serious problems in interpretation of results.

A comparison of a few studies might clarify this point further. Dana and Dana (1969) found that a directive approach in a classroom setting had a tendency to produce positive and adaptive behavior among students. Two years later, Boll (1971) replicated Dana's study in a different classroom and found the non-directive approach to be superior. Although subject characteristics for the above two studies were not systematically analyzed, possible differences among the two samples precluded definite conclusions from the contradictory findings of the two studies. In a different study, Gumaer and Myrick (1974) found client centered and behavior therapy to be equally effective in decreasing disruptive behavior of children in the classroom.

Katkin (1970) speculated that values and emotional adjustment are related. He then divided students on the basis of emotional adjustment (as shown by MMPI). Adjusted students were found to value achievement and self interpretation more than did the maladjusted students. On the basis of the above findings, Katkin (1970)
recommended the use of supportive psychotherapy for adjusted students and insight-oriented therapy for maladjusted students.

McGee and Williams (1971) compared the differential effects of time-limited therapy versus unlimited time for group therapy on the behavioral adjustment of chronic schizophrenic patients. The study showed no significant differences between the two treatments.

Several other studies of hospitalized and/or chronic patients have produced nonsignificant effects from therapy. For example, Roback (1970, 1972, 1974) compared the differential effects of insight- versus interaction-group therapy on psychopathology and behavior of hospitalized patients (chronic schizophrenic patients with an average of 9.7 years stay in hospitals). Roback (1972) suggested further investigations before drawing conclusions about his research, since he felt that the diagnostic categories and chronicity of his subjects limited the generalizations which might be drawn from his findings. Roback's (1972) research was in fact a replication of Coons' (1955, 1957) research in which comparison of insight versus non-treatment (control) did not produce significant differences (as measured by the Wechsler-Bellevue and Rorschach). The subjects for both studies (Roback and Coons) were similar.

The difficulty in treating chronic, hospitalized patients has been shown by Beck, Kantor, and Gelineau (1963) and by Poser (1966). These authors found that after four years of hospitalization only 3% of patients were likely to be discharged, and the authors therefore expected a poor prognosis for chronic patients. Rappaport and
Chinsky (1970) questioned the validity of using any psychological tests on chronic patients because of the possibility that psychological tests might be contaminated by socio-economic factors which might differ significantly for chronic patients as compared with acute patients. Rappaport and Chinsky (1970) considered behavioral observation to be better suited than psychological tests for assessing characteristics of chronic patients. In a follow-up article, Chinsky and Rappaport (1970) concluded that "the ineffectiveness of traditional treatment approaches for a large number of patients (e.g., chronic schizophrenics) have led to a search for new approaches to mental health problems" (p. 388). Chinsky and Rappaport (1970) suggested the use of paraprofessionals to at least improve attitude and morale of chronic hospitalized patients.

Although some therapists make clear differentiation between severity of illness, chronicity, and treatability, other investigators have shown that even acute and chronic hospitalized patients show improvements. Ellsworth and Maroney (1972), and Hanlon, Nussbaum, Wittig, Hanlon, and Kurland (1964) have provided evidence that chronic hospitalized patients can be helped to make behavioral improvements. Hill, Howell, Liebroder, Long and Morrill (1959) and Liebroder (1962) have also shown that chronic hospitalized patients can be helped to engage in interactions that are judged to be therapeutically valuable.

In summary, the question of chronicity, as well as the degree and type of therapeutic improvement possible with patients of some
diagnostic categories remains uncertain from previous research. Subjects' characteristics will therefore be taken into consideration in the present study.

Review of Literature on Instruments Used in the Present Study

The Rokeach Value Survey. The Rokeach Value Survey (RVS) is a fairly new instrument (first edition published in 1968), and therefore the number of studies in which this instrument is used is minimal. The psychological literature does not indicate utilization of the RVS for any investigations that deal directly with therapeutic settings.

The Rokeach Value Survey was developed by Milton Rokeach (1973) and consists of 18 instrumental and 18 terminal values. Instrumental and terminal values are two interconnected systems. Rokeach (1973) has defined instrumental values as being those values that refer to "idealized modes of conduct" (e.g., a comfortable life). Terminal values, on the other hand, refer to end states of existence (e.g., salvation). In other words, instrumental values are means, and terminal values are ends. Most other value surveys which have become quite popular, such as Allport-Vernon-Lindzey Survey of Values (1960); Maslow (1959) and the Morris (1956) Ways to Live Scale are mostly concerned with terminal values or end states. The Rokeach Value Survey is the only available instrument of its kind that is concerned with both instrumental and terminal values.

Rokeach (1973) has obtained the value rankings of different age groups as well as the values of individuals with different
educational, cultural, political, and religious backgrounds. The Rokeach Value Survey has good reliability for both the terminal values (test-retest reliabilities of .78 to .80) and for instrumental values (reliability .70 to .72) (Rokeach, 1973). Validity studies have indicated that the values, honesty and salvation, could significantly characterize the difference between honest and dishonest individuals (Shotland & Burger, 1970). Shotland and Burger's (1970) study suggested predictive validity of the Rokeach Value Survey by showing the relationship between the value rankings of honesty and salvation and the behavior correlates of these values, as evidenced by the number of subjects who returned borrowed pencils after the subjects in the experiment had finished using the pencils for the purpose of filling out the Rokeach Value Survey.

Rokeach (1973), who constructed the Rokeach Value Survey, has also conducted major research with his instrument. Rokeach believes, along with many contemporary social psychologists, that the major prerequisite for personal changes in values and attitudes is the presence of a state of imbalance in the individual cognitive repertoire. Therefore, most of the studies dealing with changes in values and attitudes have either experimentally created such a state of cognitive imbalance for the individual or they have assumed that natural processes, such as the experience of being in a school or university, create such a state of imbalance.

Rokeach (1971) carried out three experiments to see whether the above theory (state of imbalance leading to changes in values)
could be experimentally verified. In these experiments, Rokeach created a state of imbalance by making his subjects become dissatisfied with some aspect of their belief system. In one experiment, Rokeach asked his subjects (college students) to rank order the Rokeach Value Survey and then to indicate their stand on civil rights demonstrations. In order to create a state of imbalance he reported the average rankings offered by other students and pointed out each subject’s inconsistencies between the value rankings of freedom and equality and their stand on civil rights demonstrations. Rokeach hypothesized that a subject’s dissatisfaction with the inconsistency between his values of freedom and equality, and his stand on the civil rights movement would create a state of cognitive imbalance. A post-test given later showed that when individuals were faced with inconsistencies within their value-attitude system a highly significant change occurred in their values.

In subsequent experiments, the procedure was the same as above, except for Rokeach’s intention to study whether bringing about a state of imbalance would have any long-term effects on values. The follow-up experiments differed in the length of time before the post-test. Rokeach further studied behavioral changes that related to the values under investigation. The results of the two latter studies verified that a state of imbalance resulting from self dissatisfaction led to long-term effects on values as well as to attitude and behavioral changes.

In another experiment, Rokeach (1971) merely pointed out to students who ranked the value, freedom, higher than equality, that
they (the students) were apparently more concerned about their own freedom. The subjects were tested again (Rokeach Value Survey) and when their subsequent ranking of values was compared with a control group's rankings of the same values, freedom was found to have changed for the experimental subjects. In other words, the value, freedom, became less important for the students in the experimental group, with equality being more highly esteemed on the second ranking. Rokeach discussed the possibility that dissatisfaction with one's values brings about a change in one's value rankings.

Feather (1971, 1972, 1973) carried out several experiments to study value changes in school settings as a result of natural (not experimentally induced) independent variables. Feather (1971) studied whether or not values of college students would resemble their school's perceived value system (schools of humanities, social sciences, physical sciences, etc.) after these students had been exposed to certain values while they attended their respective schools. Students entering each of these schools were administered the Rokeach Value Survey. After completing the course work for each school they were administered the post-test of the RVS. The results of Feather's study showed that the values of his subjects significantly resembled (correlated with) the values of their classmates even after graduation. In a similar study with high school students as subjects, Feather (1972) attempted to study the relationship between the subjects' values, similarity or dissimilarity, and their classmates' values, and also their adjustment to that school. The results of Feather's
study indicated that subjects who were more adjusted and more satisfied with their school had values that were quite similar to their classmates' values. In other words, the more similarity between one's values and the values of his fellow students, the greater the personal adjustment evidenced by the subject.

In his most recently published study, Feather (1973) indicated that the experience of attending a university can significantly bring about changes in the values of college students. In this well-designed study, (in terms of safeguarding for confounding effects) Feather administered a pretest of the RVS to a randomly selected group of college freshmen. He then administered a post-test with the same test after three years. He reported that several values of the students had changed significantly as a result of attending a university.

Rim and Kurzweil (1971) investigated the relationship between the Ten Commandments (Moses' teachings in the Jewish religion) and Rokeach's value survey. Subjects for this study were male Jewish individuals in Israel. The results of the study showed that subjects who ranked the first four commandments (man's duty to God) high, also tended to consider the following values important: courageousness, happiness, self control, imagination, pleasure, cheerfulness, and salvation. Subjects who ranked the last six commandments as being important to them (involving man's duty to fellow man) considered the following values to be the most important: independence, obedience, world peace, social recognition, national security, freedom, helpfulness, forgiveness, broadmindedness, equality, self respect, and an exciting life.
In a recent study, Simnegar and Powers (Note 1) measured value changes of Persian students attending Utah State University and found that although some values of these students changed, more values of female students were subject to change than was true with males. Simnegar and Powers also found several value differences between American and Persian college students, which verifies Rokeach's (1973) hypothesis regarding the cultural uniqueness of values.

The above mentioned studies in which the Rokeach Value Survey has been utilized as a measuring instrument, seem to support the notion that the Rokeach Value Survey is a sensitive instrument, with the ability to differentiate individual and group differences, changes in values, and the direction of these changes. High reliability and validity, as well as comprehensiveness of the Rokeach Value Survey, has made its use for purposes of research highly desirable. However, due to its relative novelty, the instrument seems to have not yet had widespread usage.

MACC Behavioral Adjustment Scale. The notion that mental illness is a disease entity and that it is based on the absence or presence of psychopathology has been a source of dissatisfaction for many psychologists (Ellsworth & Clayton, 1959). A different viewpoint of mental illness, based on behavior of the individual, was suggested by Ellsworth (1957), who devised a scale based on the behavior of in-patients. The scale assesses the adjustment of psychiatric patients. This scale, called the MACC Behavioral Adjustment Scale, measures typical behavior of hospitalized patients. The MACC Behavioral
Adjustment Scale consists of 14 5-point scales that yield 4 different cluster scores. Scales of motility, affect, cooperation and communication yield a total adjustment score.

Several studies have shown that the MACC Behavioral Adjustment Scale is both reliable and valid. Inter-rater reliability coefficients of .86 and .89 have been reported by Ellsworth (1957) and by Ellsworth and Clayton (1959). Ellsworth (1957) reported that the MACC Behavioral Adjustment Scale is valid, based on its ability to differentiate patients hospitalized in open wards versus those hospitalized in closed wards.

Predictive validity of the MACC Behavioral Adjustment Scale was reported by Ellsworth and Clayton (1959), who showed the highest degree of behavioral adjustment to be among patients who were hospitalized for the shortest amount of time. Rehospitalization was found to occur significantly less often for patients who had the highest degree of behavioral adjustment. Thus, Ellsworth and Clayton reported a negative correlation between psychopathology and behavioral adjustment.

In another study, Ellsworth and Clayton (1959) attempted to measure the level of adjustment of patients in a hospital setting with the level of adjustment of patients 3 months after their discharge. The relationship between adjustment and psychopathology was also studied. Twenty-five patients were rated on the MACC Behavioral Adjustment Scale and the Lorr Multi-dimensional Rating Scale (a measure of psychopathology). Three months later, these patients were rated on their post-hospital adjustment as well as on their degree of
psychopathology. Results of the study indicated that while the subjects were hospitalized, the higher the level of their adjustment, and conversely, the less their degree of psychopathology. In other words, the patients who were most adjusted, as measured by the MACC Behavioral Adjustment Scale, showed the lowest degree of psychopathology as indicated by the Lorr Multi-dimensional Rating Scale. After leaving the hospital, the patients who showed improvement in behavioral adjustment, also showed improvement in their psychopathology. The study further showed that patients who had the highest level of behavioral adjustment upon admission, tended to be hospitalized for the shortest time. However, the extent of psychopathology as measured by the Lorr Multi-dimensional Rating Scale, was not related to the length of hospitalization. In other words, behavioral adjustment was more highly related to improvement than to psychopathology.

A few years later McKeever and May (1964) cross-validated Ellsworth and Clayton’s 1959 study and investigated the way in which the MACC scale differed in its predictive value with regard to sex and type of treatment. One hundred male and female hospitalized subjects receiving different kinds of treatment such as psychotherapy, psychotherapy plus Stelazine, Stelazine alone, and Electro-Convulsive Therapy, were administered the MACC before and after therapy. The authors indicated that the MACC had value in predicting the required length of hospital stay for males but not for female subjects. Treatment plus Stelazine reportedly brought about the most improvement for these patients, while the other treatments did not significantly differ from each other in predicting behavioral adjustment.
The effects of industrial therapy on the self concept and behavioral adjustment of patients hospitalized in a Veterans Administration hospital was studied by Thompson (1960). Behavioral adjustment of these patients changed significantly in a positive direction, and the self concept of all individuals except paranoid schizophrenics improved as a result of industrial therapy.

Anker and Walsh (1961) compared the efficacy of group therapy, drama therapy, and heterogeneous group structure on improving behavioral adjustment of schizophrenic patients. The MACC Behavioral Adjustment Scale was used as the measuring instrument. The results of the study indicated that drama group therapy was the only approach that resulted in significant improvement in behavioral adjustment.

Hanlon, Nussbaum, Wittig, Hanlon, and Kurland (1964) investigated the effects of four treatments (amitriptyline, perphenazine, amitriptyline-perphenazine combined medications, and placebo) on behavioral adjustment of psychotic female patients in a state hospital. Placebo treatment did not have a significant effect on behavioral adjustment. Although the effects of amitriptyline and perphenazine drug treatments were noticeable on behavior adjustment, they did not reach a statistical level of significance. Combined amitriptyline-perphenazine produced significant improvement in behavioral adjustment of these patients.

Marks, Stauffacher, and Lyle (1966), who were interested in the outcome of treatment and rehospitalization with schizophrenics, followed up a group of these types of patients for a year after their
initial release from the hospital. The relationship between the three variables of adjustment, psychopathology and length of time since their first admission to the hospital, on one hand, and re-admission to the hospital on the other hand, was investigated. None of the variables studied significantly predicted the return of these particular patients for rehospitalization.

Gassner (1968) investigated the relationship between behavioral adjustment as measured by the MACC Behavioral Adjustment Scale and the compatibility of patients with their therapist at the time of termination of the therapeutic relationship. The Firo-B was used to measure compatibility. Patients who were found to be compatible with their therapists were not shown to be better adjusted behaviorally, as was hypothesized.

The relationship between behavioral adjustment of formerly hospitalized psychiatric patients and the psychological needs of these patients' wives, as measured by the Edwards Personal Preference Schedule, was studied by Urban (1968). The results of Urban's study showed that the psychological needs of one's mate have a direct bearing on behavioral adjustment. Those spouses who had high nurturance needs contributed positively to behavioral adjustment of their husbands. On the other hand, patients whose wives had high abasement needs showed a decrease in behavioral adjustment.

Rittenhouse's (1970) study was somewhat similar to Urban's (1968) in that an attempt was made to determine any differences in the post discharge adjustment of patients who were placed in family
units as compared with patients who were given follow-up treatment in hospitals. The results of Rittenhouse's study indicated that although psychopathology increased and that adjustment decreased for both groups of patients, those who were placed in family situations had fewer readmissions.

Distefano and Pryer (1968) were interested in the relationship between the MACC Behavioral Adjustment Scale and one's attitudes towards work. Better adjusted subjects were found to be more oriented towards work when compared with individuals who showed poor behavioral adjustment.

Ellsworth, Foster, Childers and Kroeker (1968), on the other hand, did not find significant correlations between patients' behavioral adjustment while in the hospital and their behavior adjustment in the community after discharged from the hospital. In other words, subjects who showed good adjustment during their hospitalization did not necessarily show good behavioral adjustment after their discharge. Ellsworth and Maroney (1972) found that, to a great extent, receptivity and availability of staff while patients were hospitalized influenced the behavioral adjustment of patients after discharge. Patients who were in psychiatric wards where the staff were readily accessible and who showed a receptive attitude toward the patients showed better adjustment in their communities after they were discharged.

McDowell (1969) compared the effectiveness of two treatment programs on the behavioral adjustment of adolescents. These treatment modalities differed in the fact that one program included an
educational opportunity, while the second program did not provide the educational opportunity. Although the MACC Behavioral Adjustment Scale did not significantly differentiate between subjects of the two programs, students who participated and took advantage of the educational opportunity had a shorter length of hospitalization.

The relationship between behavioral adjustment and other variables and measures have been investigated in three different studies. Smith, Pryer, and Distefano (1971) studied the relationship between the MACC Behavioral Adjustment Scale and Rotter's Internal-External Control Scale. Individuals who were showing adequate behavioral adjustment were found to exhibit a higher degree of external control. Ellsworth and Clayton (1959) found psychopathology and behavioral adjustment to be negatively correlated. Culmer (1971), however, did not find a relationship between behavioral adjustment of patients and the congruence of goals between staff and patients. In other words, the proposition that better adjusted patients tend to see their goals in therapy eye to eye with the staff was not supported.

Although the MACC Behavioral Adjustment Scale has been shown to provide good inter-rater reliability (Ellsworth, 1957), some investigators have put this assumption to test. Rappaport and Chinsky (1976) compared psychiatric attendants' ratings of patients on the MACC Behavioral Adjustment Scale with ratings done by undergraduate students who had less contact (twice a week) with the patients. Ratings by these two groups of raters were quite highly correlated ($r = .42$), reaching statistical significance for this study. Rappaport and
Chinsky (1970) suggested that the MACC Behavioral Adjustment Scale measures fairly stable components of hospitalized patients' behavior patterns. Sato (1970), who studied variations in behavioral adjustment ratings by seven attendants and patients' personality, found that patients who tended to act out their anxiety in interpersonal relationships were also viewed as having more variability in their ratings by the attendants.

Martin's (1975) study seems to be the most recent investigation in which the MACC Behavioral Adjustment Scale has been utilized. In Martin's study, an attempt was made to investigate the effects of contingent and non-contingent reinforcement on behavioral adjustment of chronic hospitalized patients. Significant differential effects of contingent and non-contingent reinforcement on behavioral adjustment were not found.

In summary, the above studies indicate that (a) the MACC Behavioral Adjustment Scale has been found to be a reliable and valid instrument in measuring behavioral adjustment of patients in hospital settings, and (b) it appears to be a fairly objective and useful scale in a variety of settings and with a variety of individuals.

Research Related to the Present Study

Psychological literature indicates that there have been several attempts in the past to compare and contrast different psychotherapeutic approaches. Research which seems particularly relevant to the present study is reviewed below.
Comparisons of therapeutic approaches are often referred to as "comparative studies in psychotherapy." In many such studies, one therapy approach is compared with another approach to determine their differential effects on different dependent variables.

Therapeutic approaches in which the therapist attempts to facilitate client insight (cognitive understanding of personal problems [Coons, 1955, 1957, 1967]) have often been compared with non-insight oriented therapies such as behavior therapy. Coons (1955, 1957) seems to have been one of the pioneer investigators in these kinds of comparative studies. In his doctoral dissertation (1955), which was later published (1957), Coons compared the psychopathology of three groups: (a) group therapy, in which development of insight was not encouraged but interaction between group members was strongly encouraged versus, (b) group therapy which focused on the development of patient insights, and (c) a no therapy control group. The dependent variables were (a) psychopathology as measured by the Rorschach test, and (b) intelligence as measured by the Wechsler-Bellevue Scale. Improvement in therapy was based on negative changes in psychopathology and positive changes on I.Q. measure. Group interaction, rather than insight, was found to be more effective in bringing about therapeutic improvement for the clients.

Several other authors have also questioned the usefulness of insight in helping clients in therapy. Wolpe (1958) and Ulrich (1963) suggested that not only is insight development not necessary in therapy, but that traditional therapies, in fact, operate on the
basis of learning theories. Bandura (Note 5) explained that insight-oriented therapies are basically a form of social learning in which differential reinforcements are offered, counter-conditioning occurs, and through therapist or other patient modeling, attitudes, values and social behavior of clients are changed. Bandura therefore concluded that insight-oriented therapists are in fact practicing behavioristic psychotherapy without really being aware of it. Cohn (1969) questioned the dichotomy of psychoanalytic versus other group therapy approaches and formulated the premise that the results of these methods are often identical with each other. He suggested that psychoanalytic group therapy often leads to the release of emotional and physiological tensions indirectly, while other methods of group therapy produce the same results either directly or indirectly.

Two other investigations by Lomont, Gilner, Spector and Skinner (1969) and Abramowitz and Jackson (1974) have supported the notion that insight is not a necessary ingredient in therapy. Lomont et al. (1969) compared the differential effects of assertion therapy versus insight-oriented therapy on psychopathology of hospitalized patients. The MMPI was used as the measuring instrument, and the results of the study showed that group members who received assertion therapy showed a decrease on the depression (D) and psychasthenic (Pt) scales of the MMPI. Insight-oriented group members, on the other hand, showed no significant changes on the MMPI scales.

Abramowitz and Jackson (1974) compared four group strategies: (a) "there and then" interpretations, which are intended to relate
present behavior, attitudes, and feelings to their supposed origin (often used in the psychoanalytic framework); (b) "here and now" interpretations, in which the therapist attempts to emphasize and indicate empathy, congruence and positive regard for the client's insight into deeper levels of feelings (emphasized in client centered, non-directive therapies); (c) a combination of these two types of interpretations; and (d) no attempt to provide interpretations or facilitate insight. Abramowitz and Jackson investigated (a) the effects of these four approaches on clients' ability to deal with the environment (coping mechanism), (b) the subjects' ability to reach their goals during the college years, and (c) patient feelings (or measures) of self esteem, guilt and shame. The authors reported that the combined interpretations group (Group 3) proved to be most helpful and effective, followed by the "no insight" method (Group 4), the "there and then" interpretation group (Group 1) and the "here and now" interpretation group (Group 2).

Abramowitz and Jackson questioned the notion that insight-oriented group therapy helps clients and concluded that therapists' interpretations, regardless of temporal focus are not the most effective group treatment. These authors also questioned the widely held assumption that the analytically oriented approach is the most effective group therapy approach.

Contrary to the findings of Abramowitz and Jackson, other investigators have suggested superiority and advantages of the insight-oriented therapy over the non-insight therapy. Ends and Page (1957)
compared client centered group therapy, psychoanalytic group therapy, and therapy based on learning theories and their effects on improvement of chronic alcoholics. The results of Ends and Page's study suggested that: (a) client centered therapy produced positive self acceptance and also prevented remissions better than the other two methods, (b) psychoanalytic group therapy also changed self acceptance positively, although patients' ideals were not reached, and (c) therapy based on learning theory methods showed no significant results, as was also the case with a control group.

Meichenbaum, Gilmore and Fedorovicius (1971) showed that insight-oriented techniques in group therapy were more effective in reducing speech anxiety for college students with diffused social anxiety. Non-insight oriented group therapy turned out to be more effective, however, in clear-cut cases of public speaking anxiety.

The results of several research efforts by Paul (1966, 1967), Paul and Shannon (1966), and Hartlage (1970), in which insight-oriented therapies were compared to non-insight oriented therapies, have been questioned by Roback (1970). Roback (1970) argued that these comparative research results should not be generalized due to the following shortcomings: (a) the investigators have not clearly defined the meaning of insight, (b) possible reinforcement contingencies in insight-oriented therapies were not studied, (c) insight was not measured by any measuring instruments, and (d) no attempts were made in these studies to validate the notion that therapists encouraged development of insight.
Roback (1974), in a review of literature, concluded that research articles reported all seem to have methodological limitations because insight-oriented therapy operations have not been explicit. However, Roback (1974) also implied that one can tentatively conclude, even on the basis of imperfect research, that insight oriented therapies seem to be superior to non-insight oriented therapies in bringing about therapeutic progress in terms of reported measures of clients' adjustment or behavior changes.

Roback (1974) further encouraged the development of an empirical definition and an empirical measurement of insight. Roback emphasized Strupp and Bergin's (1969) position, suggesting that more attention should be given to the effects of therapeutic procedures on particular patients with particular symptoms. Cassel (1969) also suggested that an effective counselor should be aware of the differences between various approaches and should be able to match his own approach to particular client needs.

Systematic desensitization has been compared with other methods in a few studies. Di Loreto (1970) compared the relative effectiveness of systematic desensitization, rational emotive, and client-centered group therapy in the reduction of interpersonal anxiety of clients who were classified either as introverts or extroverts. Systematic desensitization was found to be equally effective in reducing the anxiety of the patients in the study. Client-centered therapy was more effective than rational emotive therapy in reducing the anxiety of extroverts. Anxiety of introverts, however, was
reduced to a greater degree by the rational emotive rather than the client-centered approach.

Moleski and Tosi (1976) compared the effectiveness of rational emotive therapy versus systematic desensitization for treatment of stuttering. The IPAT Anxiety Scale (Cattel & Scheier, 1961), The Thematic Apperception Test (Johnson, Darley, & Spreisterbach, 1963), and the Oral Reading Passage (Fairbanks, 1963) were used as measuring instruments for the study. The results of the study showed that rational emotive therapy was more effective than systematic desensitization in reducing anxiety, negative attitudes towards stuttering, as well as stuttering behavior itself. Systematic desensitization, however, was more effective in reducing speech disfluency. The above investigators concluded that a cognitive-behavioral approach was superior to a purely behavioral approach.

Some investigators have omitted behavior therapy from other comparative studies and have compared only the different approaches within the insight-oriented therapies. For example, Calhoun (1971) compared the differential effects of four therapy styles, namely those of psychoanalytic, dynamic relationship, interpersonal, and existential therapies on interpersonal factors as measured by the Interpersonal Checklist. All of these methods were found to be equally effective in bringing about positive changes in the ideal self scale of the Interpersonal Checklist.

Feinsilver and Gunderson (1972) compared and contrasted five different methods of treatment with schizophrenics (direct analysis, client centered
therapy, ego supportive therapy, analytically oriented therapy and a combination of direct analysis and ego analysis). None of these modalities suggested an advantage over "drug only" therapy in the treatment of chronic schizophrenics in psychiatric hospitals.

In a theoretical article by Frazier and Laura (1972), reality therapy was studied and compared to psychodynamic therapy. Frazier and Laura suggested that reality therapy is advantageous because more emphasis is put on the present than on the past. Ethical and moral values are often emphasized and responsibility is encouraged. However, a disadvantage of reality therapy over the client-centered approach was also reported by Frazier and Laura. They noted that in reality therapy, value judgments are made from outside the client's frame of reference, while in client-centered therapy the locus of value judgment is within the client's internal frame of reference (viewpoint).

Two other methods of group therapy, different from the above mentioned approaches, were studied by Chestnut and Gilbreth (1969). Group structured versus leader structured group therapy and their respective effects on the achievement level of underachieving college students were the variables in the study. Although overall differences were not found between the two groups, a difference was found when underachievers were classified into those who were judged as being dependent versus those who were independent. Dependent underachievers improved more significantly when they received leader structured group therapy.
In summary, comparative studies in group therapy do not provide a clear picture of which methods are advantageous over others. Although several authors have questioned the assumption that the development of insight is the basic ingredient for improvement in therapy, further investigation of this issue is needed before any valid conclusions are made. As Roback (1974) and Strupp and Bergin (1969) have suggested, a more valid conclusion seems to be the need to find an appropriate approach for a particular population of clients who have particular difficulties.
CHAPTER III

Method

Subjects

Thirty chronic, adult subjects (15 male, 15 females) were selected from available patients at the Wyoming State Hospital. Matching procedures on age and sex variables were carried out and the subjects were then randomly assigned to three subgroups. All subjects were within the normal range of intelligence, and mentally retarded individuals were not included among the sample. The average age of the subjects was 36.6 years, with a range of 18 to 60 years. These subjects were not racially different from one another and their socioeconomic status seemed to include both lower and middle class levels.

Each subgroup included five males and five females, who were matched on age with males and females in the other subgroups (two treatment and one control group). Matching on age was carried out on the basis of three year intervals in age differences.

All subjects signed an agreement to participate in the study, but were kept naive regarding the purpose and nature of the study. Prior to participation in the study all subjects were asked to sign a form (complete form is found in Appendix A) that read in part: "I voluntarily consent to be a participant in a research project. I understand that no harm will come to me and that the entire therapy sessions will be conducted by qualified personnel. I have also been informed of the procedures that have been taken to ensure my integrity,"
welfare and confidentiality." After the present investigator described the measures being taken to insure the confidentiality, welfare and integrity of the subjects, the above forms were signed by all of the subjects and a nursing staff witnessed the patients' signatures. The above consent form is a standard form used at Wyoming State Hospital for research purposes.

Subject Mortality

Seven subjects dropped out of the experiment during the project. These subjects included four males and three females who either transferred to other hospitals, left the hospital against medical advice, or were discharged. Two of the dropped subjects were from the control group, two from treatment group number one (directive group) and three were from treatment group two (non-directive group).

Materials

The treatment groups met in a room with a one-way mirror and microphones in front of each of the group members, who were sitting around a circular table. Microphones led to a tape recorder in the observation room. All sessions were taped on reel to reel, 4-track tapes. Subjects did not see where the tape recorder was located, but they agreed to the recording from the outset and were aware that their voices were being recorded on audio tapes. The same room with one-way mirror was used for both treatment groups. The control group met on the baseball diamond at the hospital.

All subjects took the Rokeach Value Survey a day before the formal beginning of the experiment. The Rokeach Value Survey form D
(RVS) was used for pretesting and post-testing. The Rokeach Value Survey measures 36 values (18 instrumental and 18 terminal values). Directions are standard and are written on the top of each group of values. Subjects are asked to peel off a gummed label imprinted with each value and to place each separate value in appropriate spaces on the RVS according to the rankings from 1 to 18 that each subject assigned to their values. A complete description of the RVS is given in the Review of Literature section of this study.

The MACC Behavioral Adjustment Scale was used to measure the behavior of the subjects on the hospital ward. The MACC Behavioral Adjustment Scale was rated by ward attendants, who assigned a rating of one to five for each behavior measured. Subjects were not aware that they were being rated. For a thorough description of the MACC Behavioral Adjustment Scale, please refer to the Review of Literature Section.

An IBM 360/67 computer Fortran program was used for analyzing the results of values. A Burroughs 6700 computer with Stat Pac program was the computer used for processing the behavioral adjustment data.

Two therapists were selected from the group leaders at Wyoming State Hospital. The selection was based on the recommendation of the hospital's chief psychologist. The two selected leaders (graduate trainees in clinical psychology) had an equal amount of experience in group therapy (3 years) and both agreed to participate in the study without knowing the exact nature and purposes of the study.
The group leaders were rated on Porter's (1950) directive and non-directive categories and were assigned to the treatment groups according to their degree of directiveness or non-directiveness. Group leaders were told that they would be expected to take a directive or non-directive role in leading their groups, and a chapter from Porter's (1950) book (Therapeutic Counseling) dealing with categories established on differences between directiveness and non-directiveness was assigned to both therapists to read. Both group leaders seemed to be quite knowledgeable about the differences between directiveness and non-directiveness. The control group was led by a ward attendant interested in recreational activities.

Two independent raters rated the recorded responses of the group leaders on their degree of directiveness, or non-directiveness, based on Porter's (1950) categories.

Porter's categories are defined as follows:

**Lead-taking Categories.** (Those which seem to determine the direction of the interviews; which indicate what the client should be talking about.)

**Structuring.** Remarks which define the counseling situation. Remarks indicating the purposes the interview may be expected to accomplish, or the responsibilities of both individuals, i.e., telling "What we can do here." Also includes remarks setting the time and limits of the interview, but not those relating to the end of the interview. Would include "You can have just an hour," but wouldn't include "I see we've come to the end of the hour."

**Forcing client to choose and develop topic.** Includes all efforts of the counselor to place responsibility for the direction of the interview upon the client. For example: "What shall we talk about today?" or "Well, how do you feel about it?"
Directive question; specific types of questions. Asking an outright question which requires the giving of a factual answer. It does not include interrogative statements which are merely designed to redefine, clarify, or describe a feeling. It would include "What do you think of that?" "How old are you?" "Do they resent the fact that you are not aggressively going out after jobs?" It would not include "And you aren't too happy about it?" or "It's rather unpleasant for you, is that right?", particularly when such questions follow somewhat similar statements.

Non-directive leads and questions. Statements which encourage the client to state the problem further. This excludes leads that would greatly limit the client in what he could bring out about the problem or his feelings regarding it. It would include "Tell me more about it" or "Would you like to tell me how you feel about it?" or "How are you today?" (asked in a general sense). In general this type of lead is one that encourages a statement without limiting the nature of the response except in a very general way, as in "Tell me more about it."

Non-Directive Response-To-Feeling Categories. (Those which seem to attempt to restate a feeling that the client has expressed, but not to interpret nor offer advice, criticism, or suggestions.)

Simple acceptance. "Yes," "M-hmm," "I see," "That's right" (If not answering questions or similar responses. Must not imply approval or criticism.)

Restatement of content or problem. A simple repeating of what the client has said without any efforts to organize, clarify, or interpret it, or any effort to show that the counselor is appreciating the feeling of the client's statement by understanding it. The wording need not be identical with that of the client.

Clarification or recognition of feeling. A statement by the counselor which puts the client's feeling or affective tone in somewhat clearer or more recognizable form. "It makes you feel very much annoyed," "You love your mother but you resent her telling you what to do," "I think sometimes you wish you'd never been born."

Semi-Directive Response-To-Feeling Category. (Those responses which are interpretive in character.)

Interpretation. Responses in which the counselor points out patterns and relationships in the material presented. This category is always used when causation is implied or indicated. "You do this because . . ." If the counselor
attempts, even vaguely to say "why" the client does or feels something, it is considered interpretation. "Per­haps you are revealing feelings of inferiority." "When people feel frustrated they often act the way you do." "There's your problem."

Directive "Counseling" Categories. (Categories of responses which imply a relationship in which the counselor attempts to change the immediate ideas of the client, or to influence his attitude toward them.)

- **Approval and encouragement.** "That's fine." "You've covered a lot of ground today." "You bet." Any statement which lends emotional support or approval to the client's insecurity.

- **Giving information or explanation.** Answers to any questions about the nature of psychology, or any other informational material; anything which is recognized as a generally established fact; any personal information about the counselor.

- **Proposing client activity.** Any statements which imply that the client should take any sort of action.

- **Persuasion.** Attempts to convince the client that he should accept the counselor's point of view. "Don't you think it would be better that way, now?"

- **Disapproval and criticism.** "You need to get hold of yourself." (pp. 180-182)

The two raters were given 3 hours of training about their assignment prior to start of the study. Both raters seemed to be psychologically sophisticated. The raters were kept uninformed regarding the purpose and nature of the study and also they were unaware of which treatment group they were rating.

Administration of Tests

All subjects were administered the Rokeach Value Survey one day before the beginning of the study and a day after the last formal meeting of their respective groups. The MACC Behavioral Adjustment
Scale was filled out by ward attendants concurrently with the time that subjects were taking the Rokeach Value Survey.

Instructions for the Rokeach Value Survey were written on the form D of the RVS and were as follows:

On the next page are 18 values listed in alphabetical order. Your task is to arrange them in order of their importance to YOU, as guiding principles in YOUR life. Each value is printed on a gummed label which can be easily peeled off and pasted in the boxes on the left-hand side of the page. Study the list carefully and pick out the one value which is the most important for you. Peel it off and paste it in Box 1 on the left. Then pick out the value which is second most important for you. Peel it off and paste it in Box 2. Then do the same for each of the remaining values. The value which is least important goes in Box 18. Work slowly and think carefully. If you change your mind, feel free to change your answers. The labels peel off easily and can be moved from place to place. The end result should truly show how you really feel.

On the second page (where 18 instrumental values are listed) the following standard instruction was written: "Below is another list of 18 values. Arrange them in order of importance the same as before."

The above instructions are standard and are a part of the Rokeach Value Survey. No further instructions were given so as not to jeopardize standard procedures of the testing.

The following instructions were given to ward attendants who were completing the MACC Behavioral Adjustment Scale on patients participating in the study.

Rating Guide:

1. In rating, circle on each scale the number of that entry most characteristic or typical of the patient for the last week. Of course no patient is entirely uniform or consistent in the behavior or symptoms that he exhibits. His behavior will vary from one situation to the next, and from day to day.
In rating, it is necessary to indicate, out of the range of behavior exhibited, that which is most characteristic of the patient. Minor deviations or change may be ignored.

2. If more than one description appears to be applicable, circle that entry most nearly correct.

3. Rate only patients you have personally observed.

4. Guard against rating on the basis of a single overall impression of the patient. To avoid this, consider each rating item individually for the particular person.

5. Do not spend much time on any one scale. If you do not feel able to reach a decision quickly, go on to the next scale and come back to it later. Experience has shown that the initial judgment is more likely to be correct than the judgment following lengthy and conflicted thinking.

6. Do not hesitate to give extreme ratings if they are warranted. Judges naturally tend to rate toward the middle of the scale and are often too timid about rating an individual as very high or low.

Time, Length and Duration of Group Meetings

The two treatment groups and the control group met concurrently for 12 sessions over a period of 12 weeks. The length of each session was 2 hours, with a 10-minute break after 55 minutes. The research data were collected from June to August of 1975.

Physical Environments

As indicated previously, the treatment groups met in a room with a one-way mirror and the control group met on the baseball diamond and participated in recreational activities (sports). The rooms for treatment groups were well designed, air-conditioned, and the lighting was adequate. Subjects were seated on wooden chairs, facing each other by a round table which had a microphone in front of each subject.
Description of Treatments

Treatment group number one was led by a therapist who took a directive role. Treatment group II was led by another therapist who took a non-directive role. The control group participated in recreational activities and had a leader who was interested in sports and recreational activities, but did not admit to having particular interest or expertise in group psychotherapy.

Design

A pretest-posttest control group design (Campbell & Stanley, 1973) was utilized for the study. Pretests were used however, as covariates in the analysis of covariance (as suggested by Campbell & Stanley, 1973) to counteract pretest differences and to increase "the power of significance." Matching as well as random assignment of subjects to groups, and random assignment of therapists to treatment groups were, however, considered to be adequate to counteract initial differences. The utilization of the pretest-posttest control group design was therefore an added safety measure in terms of guarding against biasing effects.

A conscious attempt was made to guard against any other biasing effects. Campbell and Stanley (1973) suggest that the pretest-posttest control group design guards against the following sources of invalidity: history, maturation, testing, instrumentation, regression, selection, mortality, and also the interactional effect of selection and maturation. The experimenter's effect was further avoided by not having the present investigator participate as a group leader. Keeing subjects
naive regarding the purpose and nature of the research was another attempt to protect against contaminating effects.

Several types of comparisons were made in the present study, both between and within the experimental and control groups. Initially, differences in values and behavioral changes of each treatment group versus the control group were analyzed. Then, both of the treatment groups combined were compared with the control group, to test whether treatments as a whole had any effects on values and behavior adjustment of group members. Finally, movement of individual subjects within each group was studied.

In clinical investigations related to group therapy, much of the information on individual movement is often ignored or overlooked (or balanced out statistically) when only mean differences between groups are reported. In other words, it is possible that an equal amount of upward and downward change by different individuals will yield statistical results which might obscure individual movement among group members. Most clinicians are therefore interested in looking at individual changes as well as group mean changes. Analysis of the present study data, therefore, considers individual as well as group data and looks at each subject in terms of such variables as diagnosis, length of hospitalization, and other demographic information.
CHAPTER IV

Results

Analysis of data on comparison of the two treatment groups and the control group yielded the results described in this chapter. The treatment groups consisted of group I (in which the leader took a directive leadership role); group II (in which the leader was non-directive) and group III, the control group. The control group met concurrently with the experimental group but participated in recreational activities instead of therapy. The two treatment modalities and the no-treatment control group were the independent variables and the values and behavioral adjustment were the dependent variables under study. The results section includes a report on values, value changes and behavioral adjustment.

Value Preferences and Pretest-Posttest
Comparisons of Values

It is interesting to first note the overall values of the entire sample. A close look at the terminal values of the sample indicates that the value, happiness (rank 1), was the most important terminal value of all the subjects combined. Table 1 presents a rank order listing of the terminal values according to their degree of importance to the subjects. It will be noted that social recognition was the least important terminal value (rank 18) for the subjects.
Table 1

Rank Order of Preferred Terminal Values for the Combined Study Sample

<table>
<thead>
<tr>
<th>Terminal Values</th>
<th>Median</th>
<th>Rank Order of Preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Happiness</td>
<td>4.83</td>
<td>1</td>
</tr>
<tr>
<td>Family Security</td>
<td>5.00</td>
<td>2</td>
</tr>
<tr>
<td>Freedom</td>
<td>5.50</td>
<td>3</td>
</tr>
<tr>
<td>Wisdom</td>
<td>6.50</td>
<td>4</td>
</tr>
<tr>
<td>Self Respect</td>
<td>7.50</td>
<td>5</td>
</tr>
<tr>
<td>True Friendship</td>
<td>8.50</td>
<td>6</td>
</tr>
<tr>
<td>Mature Love</td>
<td>8.50</td>
<td>7</td>
</tr>
<tr>
<td>A Comfortable Life</td>
<td>8.50</td>
<td>8</td>
</tr>
<tr>
<td>A World at Peace</td>
<td>9.50</td>
<td>9</td>
</tr>
<tr>
<td>An Exciting Life</td>
<td>9.50</td>
<td>10</td>
</tr>
<tr>
<td>Inner Harmony</td>
<td>10.17</td>
<td>11</td>
</tr>
<tr>
<td>Equality</td>
<td>10.83</td>
<td>12</td>
</tr>
<tr>
<td>A World of Beauty</td>
<td>11.50</td>
<td>13</td>
</tr>
<tr>
<td>Pleasure</td>
<td>11.75</td>
<td>14</td>
</tr>
<tr>
<td>National Security</td>
<td>12.00</td>
<td>15</td>
</tr>
<tr>
<td>A Sense of Accomplishment</td>
<td>12.00</td>
<td>16</td>
</tr>
<tr>
<td>Salvation</td>
<td>14.00</td>
<td>17</td>
</tr>
<tr>
<td>Social Recognition</td>
<td>14.83</td>
<td>18</td>
</tr>
</tbody>
</table>
Table 2 presents the order of importance of the *instrumental* values for the entire sample. Honesty was the most highly esteemed instrumental value (rank 1), and obedient was rated the least important instrumental value (rank 18).

A pretest comparison of value rankings between the two treatment groups and the control group did not show any significant differences among the three groups. It can therefore be suggested that for all practical purposes, the three groups were not statistically different in terms of their preferred values at the outset of the study. Similarly, a pretest comparison of the values of the combined treatment groups versus the control group did not reveal significant differences between preferred values of experimental and control groups.

In order to examine the effects of the treatment on values of these subjects, two different posttest comparisons between the treatment and control groups were made. One comparison looked at the posttest value rankings of the combined treatment groups versus the control group. The other analysis considered the posttest value rankings of the treatment groups separately and compared the posttest differences among all three groups, i.e., treatment groups I and II and the control group. The Median Test (Siegel, 1956) was used as a statistical test of significance for all analyses of value differences.

None of the *terminal* values were significantly different among the three groups in any of the posttest analyses. However, as shown in Table 3, one instrumental value, capable, did change somewhat, both for the combined treatment groups and also for the control group. In the combined treatment groups the median rank of this value (capable)
<table>
<thead>
<tr>
<th>Instrumental Values</th>
<th>Median</th>
<th>Rank Order of Preference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honest</td>
<td>5.50</td>
<td>1</td>
</tr>
<tr>
<td>Loving</td>
<td>6.50</td>
<td>2</td>
</tr>
<tr>
<td>Responsible</td>
<td>6.83</td>
<td>3</td>
</tr>
<tr>
<td>Broadminded</td>
<td>7.00</td>
<td>4</td>
</tr>
<tr>
<td>Clean</td>
<td>7.10</td>
<td>5</td>
</tr>
<tr>
<td>Helpful</td>
<td>8.00</td>
<td>6</td>
</tr>
<tr>
<td>Courageous</td>
<td>8.00</td>
<td>7</td>
</tr>
<tr>
<td>Ambitious</td>
<td>8.50</td>
<td>8</td>
</tr>
<tr>
<td>Self Controlled</td>
<td>9.50</td>
<td>9</td>
</tr>
<tr>
<td>Capable</td>
<td>9.50</td>
<td>10</td>
</tr>
<tr>
<td>Cheerful</td>
<td>9.83</td>
<td>11</td>
</tr>
<tr>
<td>Independent</td>
<td>10.00</td>
<td>12.5</td>
</tr>
<tr>
<td>Forgiving</td>
<td>10.00</td>
<td>12.5</td>
</tr>
<tr>
<td>Polite</td>
<td>11.00</td>
<td>14</td>
</tr>
<tr>
<td>Logical</td>
<td>11.33</td>
<td>15</td>
</tr>
<tr>
<td>Imaginative</td>
<td>13.00</td>
<td>16</td>
</tr>
<tr>
<td>Intellectual</td>
<td>13.50</td>
<td>17</td>
</tr>
<tr>
<td>Obedient</td>
<td>13.75</td>
<td>18</td>
</tr>
</tbody>
</table>
Table 3

Comparison of Changes in Values of the Combined Treatment Groups (I and II) vs. the Control Group (III)

<table>
<thead>
<tr>
<th>Value</th>
<th>Treatment Groups Pretest Median Rank</th>
<th>Treatment Groups Posttest Median Rank</th>
<th>Control Group Pretest Median Rank</th>
<th>Control Group Posttest Median Rank</th>
<th>Chi Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capable</td>
<td>8.0</td>
<td>7</td>
<td>8.7</td>
<td>8</td>
<td>13.0</td>
</tr>
</tbody>
</table>

* $p < .05$

dropped from a pretest median rank of 7 to a posttest median rank of 8, implying a slightly lower rating of importance for this value on the posttest ratings by the two treatment groups combined. The change within each group is obscured, however, by this analysis combining the two therapy groups. Further analysis of the pre-posttest changes within each group separately is presented below.

The change between pretest and posttest median rankings of the value, capable, within the control group (Table 3) was in the opposite direction from the rankings of the combined treatment groups. The control subjects ranked the value, capable, higher in importance on the posttest, changing its rank from a pretest median rank of 18 to a posttest median rank of 14. Two observations can be made from this analysis: (a) since the actual change in posttest rankings over pretest rankings of this value was greater for the control group than for the combined treatment groups, one cannot conclude that treatment in Groups I and II influenced the change within those two groups, and (b) although the control group showed a greater net change in median
rankings from pretest to posttest than was observed for the combined treatment groups, it is not known what factors influenced these changes in posttest rankings, beyond chance probabilities.

The chi square of 4.16 reported in Table 3 (significant at <.05) was computed on the posttest difference in median rankings of this one value (capable) between the combined treatment groups versus the control group. Although the posttest ranking of the control group showed a greater net change upward over their own pretest ranking than was true for the treatment groups, the posttest difference between the treatment groups and the control group indicates that the treatment groups still ranked this value significantly higher in median rank (relative importance) than the control group.

Another comparison, using the same Median Test analysis, investigated pretest differences and also posttest differences among each of the two separate treatment groups and the control group. No pretest differences were noted in the respective rankings of the three groups for any of the terminal or instrumental values. On the posttest analysis, however, significant differences were noted between the three groups for two of the 18 instrumental values. The differences occurred for the values, ambitious and capable.

Several pretest-posttest comparisons within each group, as well as posttest differences between the three groups can be discussed from the data in Table 4. These results allow the following inferences: (a) Group I rated the value, ambitious, slightly higher after treatment (pretest median value of 4.0 and a posttest median value of 2.5); (b) no difference between pre- and posttest median rankings of
Table 4

Comparison of Changes in Pretest-Posttest Value Rankings Within Each Group,
And Analysis of Posttest Differences Between Groups

<table>
<thead>
<tr>
<th>Instrumental Values</th>
<th>Treatment Group I</th>
<th>Treatment Group II</th>
<th>Control Group</th>
<th>Chi&lt;sup&gt;a&lt;/sup&gt; Square</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Median Rank</td>
<td>Median Rank</td>
<td>Median Rank</td>
<td>Median Rank</td>
</tr>
<tr>
<td>Ambitious</td>
<td>4.0 1</td>
<td>2.5 1</td>
<td>10.0 11</td>
<td>11.0 12</td>
</tr>
<tr>
<td>Capable</td>
<td>6.0 5</td>
<td>9.0 8</td>
<td>8.0 8</td>
<td>7.0 6</td>
</tr>
</tbody>
</table>

<sup>a</sup>The Median Test and Chi Square analysis were computed on the posttest differences among the three groups. Discussion of pretest-posttest changes noted in this table within each group is presented only for descriptive rather than statistical inference. Only the posttest rankings are pertinent, here, to these resultant Chi Squares.

* <.05
** <.01
the value, capable, was even greater for Group I, alone, than was noted in Table 3 for the two treatment groups combined. And as was the case in the former comparison, the value, capable, was given a lower rank of importance by Group I on their posttest ranking. In comparing the data in Tables 3 and 4 it is apparent that Group I rather than Group II accounted for the decline in the median rank of this particular value; (c) Group II changes in the values, ambitious and capable, were just the reverse of Group I changes, i.e., for Group II the value, ambitious, decreased in ranked importance (posttest over pretest) and the value, capable, increased in ranked importance; (d) in the control group, the value, ambitious, showed no change between pre- and posttest rankings, but the value, capable, was ranked higher by the control group on the posttest ranking, with the median rank for this value changing from pretest median rank of 18 to a posttest median rank of 14; and (e) although the amount of posttest change (over pretest) for the value, capable, showed a slightly greater actual change in rank within the control group than was true for either of the treatment groups, the median rankings shown in Table 4 indicate that both treatment groups placed this value at a higher ranked importance, both before and after treatment, than was the case with the control subjects (posttest median rankings of 8, 6, and 14 for treatment groups I and II and for the control group, respectively).

The Median Test analysis of the posttest differences among the three groups produced Chi squares of 8.54 for the value, ambitious, and 6.25 for the value, capable. Thus, the posttest differences between the three groups in their median rankings of these two values
were significant at <.01 for the value, ambitious, and at <.05 for the value, capable.

It should be noted, however, that although statistical posttest differences were noted between the three groups in their median rankings of the two values discussed, the fact that the control group showed as much movement between pretest and posttest rankings as did each of the treatment groups, one cannot conclude that the observed posttest differences between the groups, or the higher ranking of these two values by the treatment groups (over the control group) was due to the group therapy provided Groups I and II. In fact, since one could expect five values out of a hundred to change by chance factor alone (at the .05 level of probability), and since the Rokeach Value Survey involves only 36 values, it is quite likely that chance probability would account for pretest-posttest changes in rankings on at least one or two of the 36 values. Thus, the limited number and amount of change in values found in the present study may well be considered rather negligible, and the posttest differences between the treatment and control groups could be accounted for largely by chance probability.

Rokeach (1973) and Feather (1970, 1971, 1972) have not considered values to be normally distributed among any given population. To the contrary, they have argued that human values follow a skewed curve, and Rokeach therefore suggested the extension of the Median Test (Siegal, 1956) as an appropriate statistical tool for assessing changes in values between groups of subjects.

Since the extension of the Median Test does not seem to be a commonly used statistical test, an explanation of the way it was utilized will be given here. According to this statistical procedure
for the present study, medians for all values for each group were calculated. The obtained medians were then ranked from 1 to 18 according to their magnitude. The extension of the Median Test, which includes a Chi square procedure, was then used to test for the significance of differences between the medians for each of the 36 values (18 instrumental and 18 terminal).

Analysis of the results of values comparisons for the present study was carried out by a computer program at Sociological Data Processing Center, Washington State University. The computer program was called "Program Valutest" and was designed by Rippee and Greenstein (Note 6). The Program Valutest was a Fortran Computer program and the computer utilized was an IBM 360/67.

Value system stability. Reliability of the value system of the control group was measured by using the Rank Order Correlation Coefficient (rho). The values of the members of the control group were found to be fairly stable. Test-retest reliability of .73 was found for terminal values and .70 for instrumental values.

Pretest-Posttest Comparisons of Behavioral Adjustment

Changes in behavioral adjustment of patients (as measured by the MACC Behavioral Adjustment Scale) were tested by the Analysis of Covariance procedure. The pretest scores were used as covariates and the posttest scores were compared to assess possible changes on behavioral adjustment. A computer program for analysis of covariance at Utah State University was used for the present study. The program is called Stat Pac and has been developed by Hurst (Note 7). The computer used was a Burroughs 6700 computer at Utah State University.
The analysis of covariance showed that there were no significant differences on pretest comparisons between treatment group I, treatment group II or combined treatment groups versus the pretest of the control group. Posttest comparisons, however, based on the analysis of covariance produced significant results (see Tables 5, 6 and 7).

Table 5
Summary of Analysis of Covariance Results for Changes in Behavior Adjustment of Group I vs. Group III

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Pretest Mean</th>
<th>Posttest Mean</th>
<th>Posttest Adjusted Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>1</td>
<td>487.31</td>
<td>10.77**</td>
<td>36.1</td>
<td>45.3</td>
<td>45.0</td>
</tr>
<tr>
<td>Error</td>
<td></td>
<td>45.23</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p < .01

Table 6
Summary of Analysis of Covariance Results for Changes in Behavior Adjustment of Group II vs. Group III

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Pretest Mean</th>
<th>Posttest Mean</th>
<th>Posttest Adjusted Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>1</td>
<td>419.32</td>
<td>18.95**</td>
<td>30.7</td>
<td>42.1</td>
<td>43.1</td>
</tr>
<tr>
<td>Error</td>
<td></td>
<td>22.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p < .01
Table 7

Summary of Analysis of Covariance Results for Changes in Behavior Adjustment of Combined Treatment Groups vs. Control Group

<table>
<thead>
<tr>
<th>Source</th>
<th>DF</th>
<th>MS</th>
<th>F</th>
<th>Pretest Mean</th>
<th>Posttest Mean</th>
<th>Posttest Adjusted Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td>1</td>
<td>595.19</td>
<td>15.08**</td>
<td>33.4</td>
<td>43.9</td>
<td>44.0</td>
</tr>
<tr>
<td>Error</td>
<td>19</td>
<td>39.46</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p < .01

As shown in Table 5, the statistical comparisons between pre- and posttest measures of the behavioral adjustment of subjects in group I as compared to the control group was significant beyond the .01 level (F = 10.77), in favor of treatment group I. Table 6 reveals that the behavioral adjustment of subjects in treatment group II as compared to the control group also improved significantly over control subjects (F = 18.95), with significance at < .01.

Since the pretests were not significantly different, the posttests can be statistically compared. As noted in Tables 5, 6 and 7, treatment group I obtained the highest adjusted mean scores on the posttest measure of behavioral improvement (\( \bar{x} = 45.0 \)). The mean score for the two treatment groups combined (Table 7) was next highest (\( \bar{x} = 44.0 \)), and for treatment group II the posttest mean score was 43.1 (Table 6). The control group did not evidence changes in the posttest mean value of behavioral adjustment (pretest \( \bar{x} = 33.4 \);
PLEASE NOTE:

Page 107 is lacking in number only. Text follows. Filmed as received.

UNIVERSITY MICROFILMS INTERNATIONAL
Thus, it was clearly demonstrated that both treatment groups showed significant improvement in behavioral adjustment during the period of treatment, while the control subjects showed no change in the measure of behavioral adjustment. Also, these findings suggest that directive therapy (treatment group I) produced greater improvement in behavior ratings of subjects than did non-directive therapy (treatment group II).

**Stability of behavioral adjustment.** Test-retest reliability of behavioral adjustment of subjects in the control group over a 12-week period using product moment correlation coefficient produced a correlation of $r = .96$.

**Analysis of the Group Leaders' Responses**

The responses of the group leaders who assumed a directive or non-directive style of group leadership were rated by two advanced students in clinical psychology. The raters received 3 hours of training from the investigator of the present study. Neither one of the raters were aware of the purpose of the study. The raters were kept ignorant of the leadership style they were asked to rate, i.e., the directive or non-directive group. The raters judged the responses of the group leaders independently of each other.

An inter-judge reliability measure was obtained by using the Pearson correlation coefficient as a statistical tool. The correlation between the two judges' ratings based on 903 directive and 711 non-directive responses on 8 directive, 5 non-directive and 1
semi-directive counselor response categories as suggested by Porter (1950) was $r = .84$.

The responses of the group leaders were further analyzed according to Porter's categories to determine whether the group leaders were able to stay in their assumed leadership style. As Table 8 indicates, the group leader assigned the directive style of group leadership was judged as staying in that mode of response 79% of the time. In other words, 79% of his total number of responses were judged to be directive in nature. Only 10% of his responses were judged to be non-directive, and 11% were rated as semi-directive comments.

The group leader who assumed the non-directive leadership style was rated as non-directive in 82% of his responses, as directive in 16% of his responses, and as semi-directive in 2% of the total responses made. Table 8 provides further information regarding a breakdown of directive, non-directive and semi-directive response categories into specific types of responses.

**Inter-judge reliability of the MACC behavioral adjustment scale.**

For each subject, two ward attendants were asked to complete the MACC behavioral adjustment scale. Since patients were drawn from five different wards, 10 attendants were involved in the ratings. The product moment correlation coefficient of the ratings by the 10 ward attendants produced the following correlations:

Ward 1. Raters 1, 2: $r = .69$.
Ward 2. Raters 3, 4: $r = .86$. 
Table 8

Group Leaders' Responses According to Porter's (1950) Categories

<table>
<thead>
<tr>
<th>Response Categories and Specific Types of Responses</th>
<th>Directive Group Leader</th>
<th>Non-directive Group Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percent of Total</td>
<td>Percent of Total</td>
</tr>
<tr>
<td><strong>Directive Responses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Lead taking</td>
<td>104</td>
<td>11</td>
</tr>
<tr>
<td>2) Structuring</td>
<td>107</td>
<td>12</td>
</tr>
<tr>
<td>3) Forcing topic</td>
<td>93</td>
<td>10</td>
</tr>
<tr>
<td>4) Directive questions</td>
<td>205</td>
<td>23</td>
</tr>
<tr>
<td>5) Approval and encouragement</td>
<td>67</td>
<td>7</td>
</tr>
<tr>
<td>6) Proposing activities</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td>7) Persuasion</td>
<td>59</td>
<td>6</td>
</tr>
<tr>
<td>8) Disapproval and criticism</td>
<td>51</td>
<td>6</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>715</td>
<td>79%</td>
</tr>
<tr>
<td><strong>Non-directive Responses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Non-directive leads</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>2) Non-directive response to feeling</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>3) Simple acceptance</td>
<td>55</td>
<td>6</td>
</tr>
<tr>
<td>4) Restatement of content of problem</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>5) Clarification or recognition of feelings</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>89</td>
<td>10%</td>
</tr>
<tr>
<td><strong>Semi-directive Response</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1) Interpretation</td>
<td>99</td>
<td>10</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td>99</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Grand Totals</strong></td>
<td>903</td>
<td>100%</td>
</tr>
</tbody>
</table>
Analysis of Individual Subject Characteristics and Movement:

Descriptive Comparisons by Subgroups of Subjects

As described in the methodology section of the present study, in order to assess the directions and degree of individual changes made by subjects within each group (which can be obscured by group mean comparisons) an attempt was made to analyze movement or changes in values and behavior of each individual subject. These analyses were made to look at important clinical information about each person who participated in the study. It should be noted that the supplementary analyses are presented only as descriptive rather than as statistical comparisons. Factors such as each subject's diagnosis and number of hospitalizations were also analyzed in order to find possible relationships between available information on the patients (subjects) who participated in the study. Table 9 summarizes this type of information on each subject in the study. The diagnostic classification assigned each subject was obtained from the subject's hospital record and is listed only in terms of the major diagnostic categories outlined in the Diagnostic and Statistical Manual of the American Psychiatric Association (1968 edition).
Table 9
Summary of Changes in Value and Behavior of Each Individual Subject, and Comparison of Individual Subjects by Age, Sex, Psychiatric Diagnosis, Number of Hospitalizations and Assigned Group in the Study

<table>
<thead>
<tr>
<th>Subject</th>
<th>Age</th>
<th>Sex</th>
<th>Changes in Value Rankings</th>
<th>Changes in Behavioral Adjustment</th>
<th>Psychiatric Diagnosis</th>
<th>No. of Hospitalizations</th>
<th>Assigned Group (Treatment/Control)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Up</td>
<td>Down</td>
<td>Same</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>61</td>
<td>M</td>
<td>17</td>
<td>15</td>
<td>4</td>
<td>0</td>
<td>Psychotic</td>
</tr>
<tr>
<td>2</td>
<td>36</td>
<td>F</td>
<td>17</td>
<td>16</td>
<td>3</td>
<td>+2 points</td>
<td>Psychotic</td>
</tr>
<tr>
<td>3</td>
<td>37</td>
<td>F</td>
<td>16</td>
<td>16</td>
<td>4</td>
<td>+8 points</td>
<td>Psychotic</td>
</tr>
<tr>
<td>4</td>
<td>50</td>
<td>F</td>
<td>14</td>
<td>20</td>
<td>2</td>
<td>+2 points</td>
<td>Psychotic</td>
</tr>
<tr>
<td>5</td>
<td>60</td>
<td>M</td>
<td>12</td>
<td>16</td>
<td>8</td>
<td>4 points</td>
<td>Psychotic</td>
</tr>
<tr>
<td>6</td>
<td>31</td>
<td>M</td>
<td>12</td>
<td>19</td>
<td>5</td>
<td>+5 points</td>
<td>Personality disorder</td>
</tr>
<tr>
<td>7</td>
<td>27</td>
<td>F</td>
<td>18</td>
<td>14</td>
<td>4</td>
<td>3 points</td>
<td>Neurotic</td>
</tr>
<tr>
<td>8</td>
<td>22</td>
<td>F</td>
<td>17</td>
<td>15</td>
<td>4</td>
<td>1 point</td>
<td>Neurotic</td>
</tr>
<tr>
<td>9</td>
<td>23</td>
<td>M</td>
<td>12</td>
<td>17</td>
<td>7</td>
<td>+15 points</td>
<td>Personality disorder</td>
</tr>
<tr>
<td>10</td>
<td>29</td>
<td>M</td>
<td>14</td>
<td>21</td>
<td>1</td>
<td>3 points</td>
<td>Personality disorder</td>
</tr>
<tr>
<td>11</td>
<td>46</td>
<td>F</td>
<td>15</td>
<td>19</td>
<td>2</td>
<td>2 points</td>
<td>Personality disorder</td>
</tr>
<tr>
<td>12</td>
<td>18</td>
<td>M</td>
<td>20</td>
<td>13</td>
<td>3</td>
<td>0</td>
<td>Personality disorder</td>
</tr>
<tr>
<td>13</td>
<td>22</td>
<td>F</td>
<td>16</td>
<td>16</td>
<td>4</td>
<td>+15 points</td>
<td>Psychotic</td>
</tr>
<tr>
<td>14</td>
<td>32</td>
<td>M</td>
<td>11</td>
<td>5</td>
<td>20</td>
<td>2 points</td>
<td>Psychotic</td>
</tr>
<tr>
<td>15</td>
<td>54</td>
<td>F</td>
<td>17</td>
<td>18</td>
<td>1</td>
<td>4 points</td>
<td>Psychotic</td>
</tr>
<tr>
<td>16</td>
<td>29</td>
<td>F</td>
<td>13</td>
<td>15</td>
<td>8</td>
<td>3 points</td>
<td>Organic brain syndrome</td>
</tr>
<tr>
<td>17</td>
<td>20</td>
<td>F</td>
<td>15</td>
<td>17</td>
<td>4</td>
<td>2 points</td>
<td>Organic brain syndrome</td>
</tr>
<tr>
<td>18</td>
<td>48</td>
<td>F</td>
<td>16</td>
<td>11</td>
<td>9</td>
<td>4 points</td>
<td>Psychotic</td>
</tr>
<tr>
<td>19</td>
<td>23</td>
<td>F</td>
<td>14</td>
<td>8</td>
<td>14</td>
<td>3 points</td>
<td>Psychotic</td>
</tr>
<tr>
<td>20</td>
<td>41</td>
<td>F</td>
<td>17</td>
<td>19</td>
<td>1</td>
<td>1 point</td>
<td>Psychotic</td>
</tr>
<tr>
<td>21</td>
<td>44</td>
<td>M</td>
<td>16</td>
<td>17</td>
<td>3</td>
<td>0</td>
<td>Psychotic</td>
</tr>
<tr>
<td>22</td>
<td>58</td>
<td>M</td>
<td>14</td>
<td>10</td>
<td>12</td>
<td>+1 point</td>
<td>Psychotic</td>
</tr>
<tr>
<td>23</td>
<td>31</td>
<td>M</td>
<td>13</td>
<td>19</td>
<td>4</td>
<td>0</td>
<td>Psychotic</td>
</tr>
</tbody>
</table>
Table 9  
(Continued)

\[\text{a} \quad \text{For changes in values, the number shown in each column indicates the number of values that moved up, down or remained the same for each subject's rank-ordering of his/her values hierarchy. The figures shown represent posttest rankings over pretest rankings.}\]

\[\text{b} \quad \text{For Behavioral Adjustment, } \dagger = \text{improvement}; \ddagger = \text{decline}; 0 = \text{stability or lack of change. The number of points a person improved or declined was determined by ward attendant ratings of the subject on the MAAC Behavioral Adjustment Scale. The direction and amount of change reported here represents posttest ratings as compared with pretest ratings.}\]
Comparisons of Individual Changes

By Psychiatric Diagnosis and Number of Hospitalizations

Subject data in Table 9 indicates that 14 subjects (60%) of the study sample were diagnosed as psychotic; five subjects were diagnosed as personality disorders (22%); two were classified as neurotic (9%); and two were diagnosed as organic brain syndrome (9%). The study sample, therefore, included subjects from four of the major psychiatric classifications of mental illness, with the majority of subjects diagnosed as psychotic. None were classified as mentally retarded.

Analysis of individual movements and/or changes evidenced by subjects in each diagnostic classification indicated that changes in values occurred for subjects regardless of their diagnostic classification. As noted in Table 10, changes in the values of individual subjects were very similar regardless of diagnosis. In other words, when the total number of individual changes in value rankings were converted to a mean number of changes for each group of subjects by diagnostic category, it was found that the subjects of the different diagnostic classifications showed very similar behavior in terms of the number of values they re-ordered (changed rank order) from pretest to posttest rankings of their preferred values, i.e., the number of values which were changed to a more important rank, a less important rank or which did not change in rank from pretest to posttest rankings. It should be noted that in the above comparison the
Table 10
Comparison of Value Changes of Subjects
By Diagnostic Classification

<table>
<thead>
<tr>
<th>Diagnostic Classification</th>
<th>Total Number and Direction of Individual Value Changes</th>
<th>Mean Number of Value Changes in Each Diagnostic Category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Up</td>
<td>Down</td>
</tr>
<tr>
<td>Psychotic</td>
<td>14</td>
<td>210</td>
</tr>
<tr>
<td>Personality disorder</td>
<td>5</td>
<td>73</td>
</tr>
<tr>
<td>Neurotic</td>
<td>2</td>
<td>35</td>
</tr>
<tr>
<td>Organic brain syndrome</td>
<td>2</td>
<td>28</td>
</tr>
</tbody>
</table>

*aNumber of responses (up, down, same) divided by N subjects in each classification.

The focus was on quantitative changes in each subject's hierarchy of values rather than on qualitative changes. For example, the mean number of values that became more important for subjects classified as psychotic, personality disorder, neurotic, and organic brain syndrome were 15, 14.6, 17.5 and 14, respectively (Table 10). Further, the mean number of values which were given a lower posttest ranking was also quite similar among the four diagnostic categories of subjects. Although no statistical test of differences was applied, neurotic subjects showed the highest mean change in the number of values which moved up in importance after treatment, while those classified as personality disorders showed the highest mean change in the number of values which became less important.
Analysis of individual subject changes in pretest-posttest ratings of behavioral adjustment was also made (Table 11). This analysis showed that in posttest ratings of behavioral adjustment, 11 subjects improved to some degree, 8 subjects showed a decline in behavioral adjustment, and 4 subjects showed no change between pre- and post-test ratings of their behavioral adjustment.

Table 11 also indicates that subjects who belonged to the control group were about equally distributed between the subgroups of subjects who improved, got worse, or did not change in posttest behavioral ratings. Three control group subjects improved in posttest behavior ratings, three got worse posttest ratings, and two showed no change in posttest behavior ratings. The three subjects who improved had a mean improvement rating of 8 points on the MACC Adjustment Scale, while the three who had lower posttest ratings showed a mean decline of 6 points. While this difference in posttest ratings among control group subjects was not tested statistically, the actual mean differences, as well as the equal number who improved and who got worse in posttest behavioral ratings reflects an expected distribution by chance factor alone.

Changes in behavioral adjustment of subjects classified by each of the four diagnostic categories were also studied. It will be noted in Table 12 that the behavioral adjustment ratings of seven psychotic subjects improved by a total of 36 points on the MACC Behavioral Adjustment Scale, which accounted for 84% of the behavioral improvement shown by the "improved" subjects. On the other hand, the posttest
Table 11

Analysis of Pretest and Posttest Ratings of Behavioral Adjustment for Each Individual Subject

<table>
<thead>
<tr>
<th>Subject Number</th>
<th>Amount and Direction of Change</th>
<th>Assigned Group (Treatment/Control)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved Behavioral Adjustment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>8 points †</td>
<td>Directive</td>
</tr>
<tr>
<td>4</td>
<td>2 points †</td>
<td>Directive</td>
</tr>
<tr>
<td>6</td>
<td>5 points †</td>
<td>Directive</td>
</tr>
<tr>
<td>8</td>
<td>1 point †</td>
<td>Directive</td>
</tr>
<tr>
<td>10</td>
<td>3 points †</td>
<td>Non-directive</td>
</tr>
<tr>
<td>13</td>
<td>15 points †</td>
<td>Non-directive</td>
</tr>
<tr>
<td>14</td>
<td>2 points †</td>
<td>Non-directive</td>
</tr>
<tr>
<td>15</td>
<td>4 points †</td>
<td>Non-directive</td>
</tr>
<tr>
<td>16</td>
<td>3 points †</td>
<td>Control</td>
</tr>
<tr>
<td>18</td>
<td>3 points †</td>
<td>Control</td>
</tr>
<tr>
<td>20</td>
<td>1 point †</td>
<td>Control</td>
</tr>
<tr>
<td>Decline in Behavioral Adjustment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2 points †</td>
<td>Directive</td>
</tr>
<tr>
<td>5</td>
<td>4 points †</td>
<td>Directive</td>
</tr>
<tr>
<td>7</td>
<td>3 points †</td>
<td>Directive</td>
</tr>
<tr>
<td>9</td>
<td>15 points †</td>
<td>Non-directive</td>
</tr>
<tr>
<td>11</td>
<td>2 points †</td>
<td>Non-directive</td>
</tr>
<tr>
<td>17</td>
<td>2 points †</td>
<td>Control</td>
</tr>
<tr>
<td>19</td>
<td>3 points †</td>
<td>Control</td>
</tr>
<tr>
<td>22</td>
<td>1 point †</td>
<td>Control</td>
</tr>
<tr>
<td>No Change in Behavioral Adjustment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>Directive</td>
</tr>
<tr>
<td>12</td>
<td>0</td>
<td>Non-directive</td>
</tr>
<tr>
<td>21</td>
<td>0</td>
<td>Control</td>
</tr>
<tr>
<td>23</td>
<td>0</td>
<td>Control</td>
</tr>
<tr>
<td>Diagnostic Classification</td>
<td>Behavior Ratings Improved</td>
<td>Behavior Ratings Declined</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td></td>
<td>Σ points change</td>
<td>% to sample whose ratings improved</td>
</tr>
<tr>
<td>Psychotic</td>
<td>7</td>
<td>+36</td>
</tr>
<tr>
<td>Personality disorders</td>
<td>2</td>
<td>+3</td>
</tr>
<tr>
<td>Neurotic</td>
<td>1</td>
<td>+1</td>
</tr>
<tr>
<td>Organic brain syndrome</td>
<td>1</td>
<td>+3</td>
</tr>
<tr>
<td>Totals</td>
<td>11</td>
<td>+43</td>
</tr>
</tbody>
</table>
behavioral adjustment of four psychotics was rated lower, accounting for 31% of behavioral decline for the sample that went down in ratings. The behavioral adjustment ratings of three psychotic subjects stayed constant, which represented 75% of the lack of behavioral change among the "no change" sample (Table 12). Thus, the posttest behavioral ratings of seven psychotics improved, while the remaining seven psychotic patients either received poorer posttest behavior ratings or showed no change between pre- and posttest ratings.

Two subjects diagnosed as personality disorder showed a combined 3 points improvement in posttest behavioral ratings (7% of the "improved" sample), while two others in this diagnostic category showed a decline of 17 points in posttest ratings (53% of the "declined" sample) and one subject diagnosed as a personality disorder showed no change between pre- and posttest behavioral ratings, accounting for 25% of the subjects who did not change (Table 12).

Of the two subjects classified as neurotic, one subject improved only one point in posttest ratings (3% of the improved sample) and the other showed a 3-point decline in posttest ratings, which represented 9% of the total decline in posttest behavioral ratings (Table 12).

A similar finding was obtained for the subjects diagnosed as organic brain syndrome (Table 12). Only two subjects were classified as organic brain syndrome; and, of these two, one showed a 3-point improvement in posttest behavioral ratings (7% of the improved ratings).
and the other showed a 2-point decline in posttest behavior ratings (6% of the ratings which showed a decline in posttest measures).

A further study of individual subjects' movement (posttest change over pretest measures) was made in terms of the number of times each subject had been hospitalized in a psychiatric setting (including the present hospitalization) at the time of the study, i.e., once, twice, or three or more times. This information is presented in Table 13, which shows that nine subjects had been hospitalized only once (the present hospitalization), six subjects had been hospitalized twice, and eight subjects had been hospitalized three or more times.

Table 13 also reveals additional information of interest in studying the individual subjects. As shown in Table 12, psychotics accounted for 60% of the total number of hospitalizations for all subjects, with the greatest percentage of psychotics having been hospitalized three or more times (43%) and the remaining percentage of this diagnostic category being equally distributed between one and two hospitalizations, i.e., 28.5% each in the first and second hospitalization categories, respectively. Of the subjects who had been hospitalized three or more times, 75% were in the psychotic classification.

Of the subjects diagnosed as personality disorders, 40% had been hospitalized once and 40% twice. Only one subject in this subgroup, representing 20% of this diagnostic group, had been hospitalized three or more times. When compared with the total sample
Table 13
Comparison of the Number of Hospitalizations of Subjects By Diagnostic Classification

<table>
<thead>
<tr>
<th>Psychiatric Diagnosis of Subjects</th>
<th>N</th>
<th>Sub-</th>
<th>NDiag-</th>
<th>Total Sample N = 23</th>
<th>% Within</th>
<th>% of</th>
<th>Two</th>
<th>N</th>
<th>Sub-</th>
<th>NDiag-</th>
<th>Total Sample N = 23</th>
<th>% Within</th>
<th>% of</th>
<th>Three or More</th>
<th>N</th>
<th>Sub-</th>
<th>NDiag-</th>
<th>Total Sample N = 23</th>
<th>% Within</th>
<th>% of</th>
<th>Per Diag-</th>
<th>Total N</th>
<th>% of Diag-</th>
<th>Group to Total Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychotic</td>
<td>4</td>
<td>4</td>
<td>28.5%</td>
<td>17%</td>
<td>4</td>
<td>4</td>
<td>28.5%</td>
<td>4</td>
<td>6</td>
<td>43%</td>
<td>26%</td>
<td>14</td>
<td>60%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personality disorder</td>
<td>2</td>
<td>2</td>
<td>40%</td>
<td>9%</td>
<td>2</td>
<td>2</td>
<td>40%</td>
<td>2</td>
<td>1</td>
<td>20%</td>
<td>4%</td>
<td>5</td>
<td>22%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neurotic</td>
<td>2</td>
<td>2</td>
<td>100%</td>
<td>9%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic brain syndrome</td>
<td>1</td>
<td>1</td>
<td>50%</td>
<td>4.5%</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>50%</td>
<td>4.5%</td>
<td>2</td>
<td>9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Totals</td>
<td>9</td>
<td>9</td>
<td>39%</td>
<td>6</td>
<td>26%</td>
<td>8</td>
<td>35%</td>
<td>23</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


of subjects, the personality disorders accounted for 22% of the total number of hospitalizations.

The two neurotic subjects (100% of this diagnostic category) had only been in the hospital once, with none having been hospitalized more than once. This diagnostic group constituted only 9% of the total sample of subjects and of the combined number of hospitalizations for the total sample.

Of the two subjects classified as organic brain syndrome, one had been in the hospital only once (the current hospitalization) and the other had been hospitalized three or more times. Here again, as with the limited number of neurotics in the study sample, the two subjects with organic brain syndrome accounted for only 9% of the study sample and the combined number of hospitalizations for the total sample.

In summary of the data in Table 13, psychotics accounted for 60% of the combined number of hospitalizations for the total sample; those with personality disorders represented 22% of the total number of hospitalizations; neurotics for 9% and those with organic brain syndrome 9%.

Table 14 reports the mean number of hospitalizations for subjects in each of the four diagnostic categories, which further confirms some of the implications discussed above for Table 13. As noted in Table 14, the total N and mean number of hospitalizations for the study sample was greatest for psychotic subjects (\( \bar{x} = 2.4 \)). While the N was limited to two subjects with organic brain syndrome, this classification did have the second highest mean number of hospitalizations.
Table 14
Mean Number of Hospitalizations of Subjects
By Diagnostic Classification

<table>
<thead>
<tr>
<th>Diagnostic Classification</th>
<th>N Subjects</th>
<th>Total No. of Hospitalizations for Each Diagnostic Classification</th>
<th>Mean No. of Hospitalizations for Each Diagnostic Subgroup</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychotic</td>
<td>14</td>
<td>33</td>
<td>2.4</td>
</tr>
<tr>
<td>Personality disorders</td>
<td>5</td>
<td>9</td>
<td>1.8</td>
</tr>
<tr>
<td>Neuroses</td>
<td>2</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Organic brain syndrome</td>
<td>2</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

for the sample ($x = 2$), with the mean for those with personality disorder only slightly less ($x = 1.8$). And, as was pointed out in Table 13, the actual, as well as mean number of hospitalizations for the two neurotic subjects in the sample was 1.

The final analysis of individual movement for each subject involved an examination of the relationship between behavior change and previous history of hospitalizations. Table 15 reports the results of pretest-posttest comparisons of behavioral ratings of each subject according to the number of hospitalizations of the subjects.

Six of the nine subjects with one hospitalization were rated down in post-treatment behavior and three showed improved behavior. Of the six whose post-treatment ratings declined, two subjects, who were diagnosed as personality disorders, accounted for 17 of the -25
Table 15

Analysis of Behavioral Adjustment Changes of Subjects By Number of Subjects' Hospitalizations

<table>
<thead>
<tr>
<th>No. of Hospitalizations</th>
<th>Posttest Rating Improved</th>
<th>Posttest Rating Declined</th>
<th>No Change Between Pre-Posttest Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N Subjects</td>
<td>Total Points Change&lt;sup&gt;a&lt;/sup&gt;</td>
<td>N Subjects</td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>+9 (X=4.5)</td>
<td>6</td>
</tr>
<tr>
<td>2</td>
<td>5</td>
<td>+23 (X=4.6)</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>+16 (X=4.0)</td>
<td>2</td>
</tr>
<tr>
<td>Totals</td>
<td>11</td>
<td>+48 (X=4.4&lt;sup&gt;+&lt;/sup&gt;)</td>
<td>8</td>
</tr>
</tbody>
</table>

<sup>a</sup>Posttest over pretest.

Two subjects in the "one hospitalization" group showed a combined total of 9 points improvement in behavior adjustment for this subgroup, and one subject with one hospitalization did not show any changes in behavior adjustment (Table 15).

In further reference to Table 15, of the subjects who had been in the hospital twice, five showed post-treatment ratings of improved behavior and one showed no change in post-treatment behavior ratings. It can also be noted that the mean amount of improvement for each
subgroup by number of hospitalizations was essentially the same for "improved" subjects regardless of the number of hospitalizations. In other words, subjects with only one hospitalization showed a mean improvement of 4.5 points on the MACC Behavioral Adjustment Scale; subjects with two hospitalizations showed a mean improvement of 4.6 points and those with three or more hospitalizations showed a mean improvement of 4.0 points.

Behavioral improvement was obviously more specific to some individuals than to any one particular group, i.e., some individuals in each subgroup showed improvement in posttest behavioral ratings, some received lower posttest ratings and some made no change. The mean change for subgroups according to their respective number of hospitalizations was essentially the same for all three subgroups regardless of the number of hospitalizations. Thus, one might conclude that improvement or decline in behavioral adjustment seems to be due more to individual potential and/or treatment than to the number of hospitalizations.
CHAPTER V

Discussion

The major objectives of the present study were to (a) examine the values of chronic psychiatric hospital patients, (b) investigate possible changes in values and behavioral adjustment of patients participating in group therapy, and (c) test whether two different therapy approaches (directive and non-directive therapy) have differential effects on the values and behavioral adjustment of chronic patients in a state hospital.

Analysis of Values Changes

An examination of value preferences of the entire sample revealed that the values, happiness, family security, freedom, wisdom, and self-respect (in that order), were the most important terminal values to the patients. On the other hand, the values, social recognition, salvation, a sense of accomplishment, national security, and pleasure were given very low rankings by the study subjects. A close look at these values seem to point out a few significant issues; for example, happiness, family security, freedom, and self-respect seem to be much more related to personal and self-esteem needs than may be the case with the values that were not considered to be so important. Social recognition, equality, national security, and salvation appear to be more interpersonally and socially oriented.

It must be kept in mind that the subjects in this study had
chronic mental and emotional handicaps. They were patients in a state hospital and, thus by implication, had probably not been coping adequately outside the hospital and in their communities. Intrapersonal concerns rather than interpersonal and social preoccupations might therefore be expected to be of major concern to these particular subjects.

The majority of patients participating in this study were chronic schizophrenics. Several investigators (Butcher, 1969; Gilbertstadt & Duker, 1965), as well as the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association, 1968) attribute introversion and preoccupation with personal needs and desires as the main characteristics of schizophrenic populations. For example, the APA Manual (1968) describes schizophrenic reactions as follows:

is characterized chiefly by a slow and insidious reduction of external attachments and interests and by apathy and indifference leading to impoverishment of interpersonal relations, mental deterioration and adjustment on a lower level of functioning. (p. 33)

It is therefore understandable that these patients' values correspond to their thinking and behavior.

The same argument could also apply to the instrumental value preferences of the subjects participating in the present study. The values, obedient, intellectual, imaginative, and logical were not important to the study subjects. However, values such as honest, loving, and clean were highly esteemed.

Although correlational or factor analytic procedures have not been carried out in this study to examine relationships between
instrumental and terminal values, an overall look at the value preferences of the subjects participating in the present study seems to suggest tentative relationships between instrumental and terminal values. For example, the terminal value, "happiness," and the instrumental value, "honest" were both ranked as the most important values by the patients. The least important terminal value indicated by the subjects was "social recognition," and the least important instrumental value was "obedient." A correlational or factor analytic study of the instrumental and terminal values might well point out interesting relationships between the two types of values.

To determine the effects of group therapy, if any, on changes in value preferences of the study subjects, patients participating in two different therapy groups were compared against a non-therapy control group. In the first comparison both of the therapy groups were combined to determine the effects of group therapy in general. Comparison of the treatment groups versus the control group revealed that the value, "capable," was ranked slightly lower after therapy by the treatment groups but that it was rated higher by the control group.

Although the noted change in the value "capable" between the treatment and control groups was significant at <.05 level, a simple probability estimate suggests that even at the .05 level, changes in five values out of 100 values can be expected due to chance alone. When this probability estimate is applied to the measure used in the present study, i.e., the Rokeach Value Survey, since there are 36 terminal and instrumental values represented in the Survey, at
least two values could be expected to change by the probability of chance factor alone. For all practical purposes, therefore, the change in value system of the combined treatment groups versus the control group was considered negligible.

The same argument also applies to the comparisons made with each treatment group separately. The value "ambitious" was accorded less importance, while "capable" became more important for the group members who were participating in the non-directive group. The reverse was true in the directive therapy group, however. In the latter group, "ambitious" was given a higher median rank after therapy, while "capable" was ranked lower. Subjects in the control group ranked the value, capable, higher in importance on the posttest ranking than they had done on the pretest ranking. Here again, however, since only two values changed significantly for the treatment groups (one value being rated higher after treatment and one slightly lower) and with only one value changing for the control group, it is still quite likely that the limited number of observed value changes were due more to chance probability than to the treatment or control group procedures.

Although the results of previous research on the effects of psychotherapy (group and individual) on values of clients/patients have been generally inconclusive, it was hypothesized in the present research not only that significant value changes would occur, but also that a differential value change would result for the directive and non-directive groups. These speculations were educated guesses based on some previous research which seemed to outweigh other
research data suggesting otherwise. For example, Lowe (1969), Frankl (1966), May and Ilardi (1973), Squatriglia (1970), Bensley (1970, and Bagdassaroff and Chambers (1970) have all reported research in which value changes have taken place. On the other hand, Haase (1968), Banning (1965) and Tyler (1950) have reported studies in which value changes did not take place.

Some investigators such as May and Ilardi (1973) indicated that their review of the literature regarding value changes due to therapy revealed to them that whenever the Allport-Vernon-Lindzey Value Survey has been utilized, value changes have occurred. May and Ilardi suggested that the reasons for this phenomenon (occurrence of value changes with the Allport-Vernon-Lindzey Value Survey) were due to the fact that this instrument utilizes a forced-choice technique, which causes slight changes on one scale to magnify changes in other scales of the Survey.

As far as the present researcher was able to determine, the Rokeach Value Survey utilized in the present study has not been used before to study the effects of group therapy on values. To complete the Rokeach Value Survey one must rank order the Survey's 36 values (in order of preference), but the Rokeach Survey does not involve the same degree of forced-choice as do some other types of instruments. Thus, if the May and Ilardi's (1973) explanation mentioned above is true, a possible reason for the lack of significant changes in values within the experimental groups of the present study might be due to the types of values assessed and/or the nature of the Rokeach Value Survey as compared with other types of values instruments.
Another possible explanation for the lack of value changes in the present study is suggested by one of Rokeach's (1973) suppositions about value changes. Rokeach (1973) suggested that values change only when a state of dissatisfaction is present in the individual. Rokeach also believed that individuals often seek therapy because they are feeling a sense of self-dissatisfaction.

A person in such a state may desperately want to change but will not perceive what it is that needs changing. A person seeking therapy is, in effect, saying to the therapist that he is in some state of self-dissatisfaction arising from some contradiction implicating his conception of himself but finds himself unable to put his finger on the source of the contradiction... Different therapists respond to this request for help in different ways depending on the therapeutic approach they favor. Whatever the differences in approach, they all have the common objective of locating the source of self-dissatisfaction as clearly as possible and then removing it... Cognitive and behavioral changes can best be brought about if a person is able to locate the strategically located values that are inconsistent with self-conceptions. Once he is able to do so, the affective state of self-dissatisfaction will become highly specific rather than general or diffuse, and it should provide a motive for changing cognition and behavior. (p. 227)

In the present study, there was no definitive evidence that a state of self-dissatisfaction was present for any or all of the subjects. Patients who were selected as participants in the study did not request group therapy. Once selected as a study sample, the subjects were randomly assigned to the treatment and control groups. In his own research on value changes, Rokeach (1973) artificially and purposefully brought about a state of self-dissatisfaction within his subjects by pointing out the discrepancy between his subjects' values and the values of society. He also pointed out discrepancies between the subjects' values and their behavior. Such
was not the case in the present study however. Analysis of the interaction of group leader and the group members in the present study did not reveal conscious attempts to bring about self-dissatisfaction of subjects on the basis of individual vs. social value system discrepancy and/or value-behavior discrepancy within individual subjects. The results of the present study may therefore lend support to Rokeach's theories in terms of necessary requirements for change in values.

Analysis of Behavioral Changes

The analysis of the results of the behavioral measure (The MACC Behavioral Adjustment Scale) revealed that the rated behavioral adjustment of subjects in the directive group, non-directive group and the combined treatments groups improved significantly over control group subjects. These findings are a direct support of Chaffee and Linder's (1969) suggestions that values changes and behavior adjustment changes do not have a direct relationship to each other. Chaffee and Linder indicated that when behavior of individuals changes, it does not necessarily mean that changes in values of those individuals would also be expected to occur.

Further analysis of the changes in behavioral adjustment of the subjects who participated in the directive therapy group, as compared with those in the non-directive group and the control group, showed that post-therapy behavior ratings of subjects in group I (directive therapy) improved significantly more than subjects in the control group and also somewhat more than subjects in the
non-directive therapy group. Results of the two treatment groups combined also showed significant improvement in rated behavioral adjustment of the subjects in group therapy over control group subjects. In other words, the post-therapy behavior (as rated by ward attendants) showed the greatest amount of improvement for subjects of the directive therapy group, with somewhat less, but still significant improvement also for subjects in the non-directive therapy group. These results, however, are not sufficient evidence to propose that directive group therapy is superior to non-directive group therapy. The results can only be generalized to populations similar to patients at Wyoming State Hospital and to group leadership styles similar to that provided by the group leaders in the present study. Additionally, generalization of the study findings should take into account the specific nature of the dependent variables of behavioral adjustment as measured by the MACC Behavioral Adjustment Scale and of values as measured by the Rokeach Value Survey.

A very important issue has been raised by Patterson (1973), who has published widely on the subject of counseling and psychotherapy. After reviewing all models and methods of psychotherapy, Patterson commented that

The recognition of the basic commonalities among all approaches to counseling or psychotherapy is important. But that differences exist must not be ignored, and it would appear that some attempt to develop a model or theoretical structure that would accommodate these differences should be made. (p. 538)

Patterson (1973) then supported a position taken by Krumholtz (1966) in which matching of therapist and patient characteristics
was encouraged. Krumholtz (1966) stated, "What we need to know is which procedures and techniques, when used accomplish which kinds of behavior change, are most effective with what kinds of clients, when applied by what kind of counselors" (p. 23). Paul (1967) and Strupp and Bergin (1969) have also taken a similar stand, suggesting that emphasis should be put on finding out the types of therapy that are more apt to produce specific kinds of effects on dependent variables for different kinds of patients.

In the present study, directive therapy by a particular group leader with a particular population of patients showed some commonalities with the process and outcomes of the non-directive group. There were also some observable differences between these two leadership styles and therapy outcomes. While both leadership styles had approximately the same amount of influence on value changes of the group members, the directive method produced slightly more improvement in behavioral adjustment for the patients. At the same time, however, both treatment groups, i.e., both directive and non-directive group leadership styles, were effective in helping group members make a better adjustment to the hospital (as rated by ward attendants using the MACC Behavioral Adjustment Scale). It may be that for the particular patients under study, behavior adjustment is accorded greater emphasis and worth than are individual values or personality. If such is the case, the current trend toward increased focus on personal behavior and behavior management of long-term and chronic patients in most mental hospitals is well justified.
In considering other possible factors which might have accounted for the findings of the present study, two additional variables come to mind. The first variable is length and duration of therapy. Garfield (1971) and Abramowitz (1974) have both suggested that the national average (mean) number of hours for group therapy is less than 24 hours (with typical sessions usually 1-2 hours in length). Experimental and control group members for the present study met a total of 24 hours each, and therefore the length of group treatments for this study slightly exceeded the national average.

The second variable involves the question of the most optimum or adequate number of members for therapy groups. Loeser (1957), Ohlsen (1970), and Psathas (1960) suggested that the ideal number of group members is between four to eight individuals. Ten group members were selected for each group in the present study because of an expected mortality (drop out) rate of two or three subjects per group. As expected, only eight and seven subjects completed the study in treatment groups I and II, respectively, and eight subjects remained throughout in the control group. Thus, the number of subjects in each group corresponded to the ideal number for group treatment suggested by Loeser (1957), Ohlsen (1970), and Psathas (1960).

Analysis of the Two Types of Leadership Style (Directive and Non-directive)

The fairly high inter-judge reliability (r = .84) obtained in rating the two group leaders in the study indicated that the responses
made by leaders of different therapy groups can be studied and quite objectively measured. The classification of group leaders' responses suggested by Porter (1950) and used for the present study seems to be quite useful. It has previously been used by many investigators. For example, Snyder (1943) studied the responses of four psychotherapists, and by using Porter's categories, analyzed each of the respective counselor's comments. Snyder concluded that in non-directive therapy, directive responses such as persuasion, disapproval, criticism, and also approval are used 10% of the time during the course of treatment.

In the present study the group leader who assumed a non-directive style of leadership made directive responses 16% of the time and non-directive responses 82% during the course of treatment. Although the percentage of directive responses by the non-directive group leader for the present study is 6% higher than the therapists in Snyder's study, above, this figure is not so high as to warrant special attention.

For all practical reasons, it can be safely said that the non-directive group leader stayed in his assigned leadership style the majority of the time (82%), and engaged in directive-type responses only 16% of the time (6% for the "directive question" category and 9% for the remaining seven categories.

The group leader who assumed the directive leadership style, engaged in directive responses 79% of the time, and non-directive responses during 10% of the total interactions. The directive leader made semi-directive comments 11% of the time while the non-directive leader engaged in semi-directive responses only 2% of the
total time. Since Snyder (1943) concluded that non-directive therapists hardly ever engage in semi-directive responses such as interpretation, the analysis of leader responses in the present investigation lends support for Snyder's conclusion. The present study is also supportive of Patterson's (1973) and Porter's (1950) statements that the leadership style of therapists falls on a continuum of directiveness and non-directiveness. In other words, Patterson, Porter, and Snyder have reported that therapists do not always adhere strictly to one style of leadership but often vary their responses along a continuum of directiveness and non-directiveness. It should be kept in mind, however, that therapist fluctuations between directiveness and non-directiveness produce empirical difficulties in experimental attempts to study the therapy process (including the relative effectiveness of the group procedures evaluated in the present study). The confounding effect of the group leaders' engagement in responses that were not exclusively appropriate to their assigned leadership role category was present to some extent, even though the percentage of inappropriate response types was proportionately very low. Nevertheless, the extent to which this variable affected the study results is not known. It does, however, support the conclusion discussed earlier, that the present study does not support one therapy mode to be superior to the other.
Discussion of Individual and Subgroup Comparisons

Since group comparisons and statistical analyses of group means often obscure important information about individual subjects, an attempt was made to study the direction and amount of change in values and behavior of each subject in terms of their respective clinical diagnosis and number of times they had been hospitalized. It was felt that this secondary analysis, primarily of a descriptive nature, could provide added (albeit subjective) information of some clinical value. The secondary analyses are therefore discussed primarily in terms of clinical rather than statistical inferences.

As reported in the Results section, 14 of the subjects in the study were diagnosed as psychotic (60%), 5 (22%) had personality disorders, 2 (9%) were classified as neurotic, and 2 (9%) as having organic brain syndrome. This distribution of diagnostic classifications for the present study seems fairly representative of expected state hospital populations. According to Coleman (1975) the majority of subjects hospitalized in psychiatric hospitals are diagnosed as psychotic, with the least number of patients diagnosed as neurotic. Coleman's view of mental illness places psychotics and neurotics at opposite poles of a psychopathology continuum. Thus, one would expect a much higher proportion of psychotic than neurotic patients in a state hospital setting, as was the case with the present study sample. The small number of organic brain damaged subjects in the present study (N = 2) might also be expected in typical psychiatric
settings, since many patients of this diagnosis are not necessarily psychotic or otherwise unmanageable, and are often cared for in other types of institutions and/or outside a hospital setting. Persons with personality disorders (N = 5 in the present study) may or may not require hospitalization, depending primarily on their type of behavior disorder, self control and/or manageability, and prognosis for treatment outcomes if hospitalized.

Analysis of individual changes in value rankings by each subject in each of the diagnostic categories showed that the amount and direction of individual value changes were very similar across the different diagnostic classifications. In general, some subjects in each clinical classification changed some values to a higher rank, some to a lower rank and some remained constant. Both the amount of change (number of steps a value moved in the rank order hierarchy) and the total number of values which changed rank order, either upward or downward, were quite similar for subjects regardless of the subjects' respective clinical diagnosis. It was noted, however, although not tested statistically, that neurotic subjects showed the highest mean change in the number of values which moved upward in ranked importance after treatment, while those classified as having personality disorders showed the highest mean change in the number of values which moved downward in importance. Since this change measured only quantitative movement, with no attempt to assess the qualitative aspects of one value over another, any clinical explanation for this observation would be quite tenuous. Further, the small number of neurotic subjects in the study (N = 2) limits
any substantive clinical inference. Thus, in general, the limited amount of observed changes in values for all diagnostic categories was attributed essentially to chance probability, even though it is noted that the subjects with neurotic and personality disorder diagnoses did vacillate somewhat more than other subjects between pre- and posttest value choices.

Although more subjects improved (N = 11) in posttest ratings of behavioral adjustment than those who got worse (N = 8) or who did not change (N = 4), these changes were not equally distributed among the four diagnostic categories, nor between the treatment and control groups. Subjects in the control group were about equally distributed between those who improved (N = 3), those who got worse (N = 3) and those who did not change (N = 2). However, within the treatment groups, notable differences were apparent between the subjects of the different diagnostic categories. For example, psychotic subjects accounted for most of the net gain (84%) of subjects rated as "improved" after treatment and also for the highest percentage of those rated as having made "no change" (75%). Of the subjects who showed a post-treatment decline in behavioral ratings, those diagnosed as personality disorders accounted for 53% of the lower post-treatment ratings, psychotics for 31%, neurotics for 10%, and those with organic brain syndrome 6%.

Interpretation of the above percentages, however, must also take into account the fact that these figures represent the arithmetic sums of net gain, net decline or lack of change for subjects in each diagnostic category and thus are proportionate also to the number of
subjects in each category. Therefore, since a majority of subjects in the study were psychotic \((N = 14)\) the sum of their combined total points for behavioral ratings can be expected to reflect a higher percentage in relation to the total sample than would be the case for the diagnostic categories having fewer subjects, e.g., personality disorders, \(N = 5\); neurotics, \(N = 2\); organic brain syndrome, \(N = 2\).

Further interpretation of the behavioral changes by diagnostic category (as reflected in Table 12, p. 118) allows for other possible implications. The data in Table 12 indicates that the mean improvement shown by psychotics who improved in behavioral ratings was 5.1 points per subject (+36 total points change + 7 subjects), while the mean decline in ratings for psychotics who got worse was only half as much, i.e., -2.5 points. Thus, not only did a majority of psychotics show improvement, but the seven who did improve made greater net gains per subject than the net decline in behavior shown by the four subjects who apparently got worse in post-treatment behavior.

The seven psychotics who improved also equal the combined number who got worse \((N = 4)\) plus those who did not change \((N = 3)\).

A different picture emerges for subjects diagnosed as personality disorders. Although the number in this category was smaller \((N = 5)\), the overall ratings for this group showed a much higher net decline and lack of change in post-treatment ratings than it did for ratings of improved behavior. Of the five subjects in this diagnostic category, two were rated as having improved in post-treatment behavior, two were given poorer ratings, and one was rated as showing no change. However, the two subjects who received lower post-treatment ratings
went down a total of 17 points on the MACC Behavioral Adjustment Scale, or a mean of 8.5 points per subject. On the other hand, the two subjects who improved in post-treatment ratings showed only three points improvement combined, or a mean of 1.5 points each. Obviously, the two who got worse were rated as having deteriorated in behavior to a much greater degree than the amount of positive change shown by the two subjects whose ratings improved. And, as noted above, subjects diagnosed as personality disorders accounted for more than half (53%) of all the decline in post-treatment behavioral ratings across the four diagnostic categories. The personality disorder subjects also accounted for 25% of the subjects who made no change in behavioral ratings, with psychotics accounting for the remaining 75% of "no change" subjects.

Since the character traits of subjects diagnosed as personality disorders often involve maladaptive behavior and/or interpersonal conflicts and behavioral difficulties (Coleman, 1975; American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders, 1968), it is not surprising that subjects thus diagnosed in the present study showed greater decline than improvement in their behavioral adjustment in the hospital. This finding seems consistent with clinical expectations and general prognoses in treating diagnosed personality (character) disorders as compared with the treatment of neurotics and, in many cases, acute psychotics.

In looking at the subjects of the present study according to their respective number of hospitalizations, it is clear from the data in Table 13 that psychotics accounted for the greatest total
number of hospitalizations, as might be expected, with those diagnosed as "personality disorders" second in frequency or incidence of hospitalization. Although the present study sample was very limited in the number of neurotics (2) and those with organic brain syndrome (2), the information about these latter four subjects suggests that some individuals with organic brain damage may be expected to require more hospitalizations (subsequent to first admissions) than would be expected for neurotics. However, generalization of this notion would obviously require further study with a much larger, representative sample of these particular diagnostic types.

Looking at the data in Table 13 another way, i.e., comparing percentages of each diagnostic group within each of the frequency of hospitalization categories, the following information is noted: (a) neurotics accounted for the highest percentage of subjects with only one hospitalization, and none of the neurotics in the study had been hospitalized more than once; (b) subjects diagnosed with personality disorders were second in percentage of first hospitalization, with an equal percentage also showing two hospitalizations. In both instances the percentage of personality disorder subjects with one and two hospitalizations exceeded the percentage of psychotic subjects with only one and two hospitalizations, since a higher percentage of psychotics had had three or more hospitalizations; and (c) subjects with organic brain syndrome accounted for a higher percentage of first hospitalizations and also for three or more hospitalizations than was true for any of the other diagnostic groups except the two neurotic subjects, both of whom had been hospitalized only once.
(the current hospitalization). This particular interpretation of the percentage data, however, with regard to the organic brain damaged subjects is somewhat misleading because of the small N.

The data in Table 13 do suggest, however, that (a) psychotic patients can likely be expected to have a greater number of hospitalizations over a given period of time, as may be true also for patients with organic brain syndrome (but probably in fewer numbers); (b) subjects evidencing some types of personality disorders can also be expected to have more than one hospitalization, and (c) fewer neurotics require hospitalization, particularly in a state mental hospital, and that in comparison with a given population of other types of severe or chronic psychiatric disorders neurotic subjects are probably less prone toward repeated hospitalizations in state hospitals.

Implications of the Present Study

This study has implications for both theory and practice of group therapy. The notion that directive and non-directive psychotherapy might have differential effect on values and behavior of clients was not supported by the present study. Purported or supposed differential effects of the two approaches has been a controversial issue for many years. Given that the findings of the present study are valid, support is provided for a recent statement by Lazarus (1974) in which the therapists' overemphasis on one method of therapy was criticized. Lazarus suggested that "most methods of therapy help some of the people some of the time" (p. 59). Tyler (1968) also has stated that dichotomies of directiveness and non-directiveness only
add to already present ambiguities in the field of psychotherapy. The present study has shown to some extent that a therapist's degree of directiveness or non-directiveness in therapy is somewhat arbitrary and relative and that, in practice, both approaches in group therapy can produce positive outcomes and appear to have similar effects on values and behavior changes of hospitalized patients.

Another issue often raised is the extent to which a patient in therapy adopts, or moves in the direction of the therapist's values. The present study did not deal with this question, but the lack of value changes made by the subjects in this study would suggest a negative conclusion on this issue. More specific testing of this question is needed for a more definitive answer.

A final point from the present study lends support to Rokeach's (1973) statement that values are quite stable. The lack of change in values of control group subjects, the negligible changes observed in the experimental groups, and the reliability estimate of \( r = .70 \) obtained for the control group all seem to support Rokeach's notion about the stability of values.

**Delimitations of the Present Study**

A few delimitations were present in the present study, the most basic of which was the size of the sample. The ideal size of the sample versus the practical number of subjects available was the main consideration in determining the number of subjects needed for the present study. Several authorities on group therapy have suggested that an ideal number of subjects for group therapy is between four and
eight persons (Loeser, 1957; Ohlsen, 1970; Psathas, 1960). In order to obtain the two experimental groups and one control group for the present study, with subjects randomly drawn from patients at Wyoming State Hospital and matched on the variables of age and sex, the universe population would have almost had to be unlimited. Selecting the 30 subjects needed for the present study seemed to be the most difficult task of the present investigation.

In order to counteract the sampling limitations encountered in the present study and also to maintain the number of group members between seven and eight, either a larger state hospital or several small state hospitals would provide a better population for selection of subjects. Ideally, six or nine groups of subjects would allow for comparisons between two or three simultaneous groups of the same nature (directive, non-directive, and control).

A second delimitation of the present study was the fact that all subjects were inpatients in a state mental hospital. Although this type of sample did provide some degree of homogeneity in terms of the hospital setting, generalizations of the study results should be made only to populations similar to the sample used in the present study. The type of interaction (process) in group therapy, the content and quality of group discussions, and the role and ultimate effectiveness of the therapist are factors which are affected by the nature and chronicity of group members' problems and their consequent ability to comprehend, communicate and interact in the therapy situation. Thus, the subjects in the present study were not representative of less chronic, outpatient therapy groups.
Subject mortality was a factor in the present study. Altogether, seven subjects dropped out of the study. Although some subjects had to leave the study because of factors beyond group members' control (e.g., transfer to another hospital), one cannot help wondering whether or not unconscious factors might also have been involved in other patients' decisions to leave the group therapy.

As mentioned in Chapters I and II, when reference is made to the directiveness and non-directiveness of group therapists, in reality, group therapists do not typically function exclusively in one mode of response, either directive or non-directive. This was also the case in the present study. Although both group therapists in the study were generally able to maintain their assigned directive or non-directive roles, some exceptions did occur. Direct observations, and ratings of both therapists' responses from recordings of their group sessions revealed that, at times, non-directive therapist responses were made in the directive group, and directive responses were made in the non-directive group. Thus, while the preponderance of therapist responses were appropriate to their respectively assigned roles, the dichotomy was not absolute, and generalizations regarding these two types of leadership styles should therefore be tentative.

Another limitation inherent in this study was the length and duration of group treatments. The study covered 12 therapy sessions, and it was felt that this number of sessions and period of treatment was by no means sufficient for the type of subjects involved. Considering the severity and chronicity of most of the subjects' emotional problems and/or mental status, the outcomes of the study seem
quite positive. Nevertheless, generalization of the results to other group therapy populations and settings should allow for the delimitations noted above.

Recommendations for Further Research

1. The present study used only one instrument to determine the subjects' values, and one for measuring behavioral adjustment of the subjects. In order to avoid and/or to test for the possibility that the results obtained were due to the specific instruments used, several instruments should be used in future studies of this type.

2. A larger sample matched on more variables (such as diagnosis, length of hospitalization, socio-economic status, race, etc.) would provide sample data of a more universal nature. Also, two or more therapy groups for each of the leadership styles to be compared would enable smaller, more ideal sized groups, and having each group leader conducting two or more groups would seem to provide more reliable data regarding the different leadership styles being investigated.

3. Each of the groups in the present study met 12 sessions, but in retrospect, this is felt to be too short a time to obtain definitive, measurable results, particularly with chronic, hospitalized patients. Such subjects may require longer-term treatment in order for them to adequately reevaluate their values and/or change their behavior. Longer treatment duration may help researchers find better answers to the issues of effects of group therapy on values and behavioral adjustment.

4. Subjects who participated in the present investigation generally
had chronic problems; and since it is possible that subjects with acute or transitory problems may behave differently in group therapy, comparisons of acute versus chronic patients might therefore provide more complete answers regarding possible benefits of group therapy with different hospital populations and of the role of values and behavioral adjustment of therapy participants.

5. The fact that the control group members were pretested for the present study but were then singled out to participate in a non-therapy group activity could somehow have affected their subsequent behavior and value rankings. Although it seems difficult to completely control for possible placebo effects of pretesting, consideration might well be given to a research design where all patients are routinely tested and subsequently allowed to participate in group activity so as to optimally reduce any possible biasing effects.

6. Since the present study was not able to effect measurable value changes (particularly in group comparisons of rankings) future investigations should consider direction and degree of changes toward a specific value orientation, e.g., toward the therapists' or other group members' values, or by use of some other measure of values than the instrument used in the present study.

7. It seems possible that although value changes were not found in the present study, clients learned and recognized what they valued through group therapy. Patients' recognition of their values can be examined perhaps by a simple questionnaire administered at the end of group therapy treatment or by other more sophisticated methods. It seems worthwhile, however, to investigate other means for studying the problem of client values.
8. While most clinicians may be interested in evaluating/or changing personal values and behavior of patients who seek and require therapy, hospitalized patients are not always the best candidates for therapy. Many such patients lack motivation for involvement in therapy—some because of general resistance and/or hostility, especially in cases of involuntary commitment, and others because of the severity of their emotional state and/or mental status, both of which might include general apathy, withdrawal, loss of contact with reality and a consequent lack of awareness of their problems and need for change, etc. In some cases, patients also request hospitalization voluntarily as an escape from their environment and its pressures for them to cope more effectively than they feel able to do. Patients of this type see hospitalization as a relief from their outside pressures and may therefore resist hospital pressures for them to change (get better) through therapy because of the security they may feel in the sheltered environment of the hospital. Thus, research involving state hospital populations should consider appropriate means for studying individual cases as well as various types of patient groups. Analyses which consider individual as well as group movement, and which test for possible relationships and interactions among different patient variables (e.g., age, sex, diagnosis, number and length of hospitalizations, reasons for hospitalizations, motivation and/or prognosis for change, etc.) can provide useful information for therapists and for determining appropriate treatment strategies or methods, not only in individual cases, but for differing subgroups of patient populations.
References


Arbiser, S. [Schemes of group psychotherapy] Acta Psiquitrca
Psicologica de America Latina, 1973, 19, 372-377. (Psychological
Abstracts, 1974, 52, No. 1493).

Ausubel, D. P. Personality disorder is disease. American Psychologist,

Axline, V. M. Non directive play therapy. Boston: Houghton Mifflin


Bitzen, L. Confrontation action therapy with religious and moral values. Journal of Pastoral Care, 1961, 23, 26-35.


Cassel, R. The counselor repertoire on approaches to counseling and their suggested uses. *Psychology*, 1969, 6(4), 55-64.


Culmer, P. A. Staff patient goal congruence and changes in three measures of improvement during milieu therapy. (Doctoral dissertation, University of Texas, 1971), *Dissertation Abstracts International*, 1971, 32, 6638B. (University Microfilms No. 72-14, 222).


Dreikurs, R. Early experiments with group psychotherapy. American Journal of Psychotherapy, 1959, 13, 882-891. (b)


Ellsworth, R. The MACC behavioral adjustment scale: an objective approach to the evaluation of behavioral adjustment of psychiatric patients. Western Psychological Services, 1957.


Ellsworth, R., Foster, L., Childers, B., & Kroeker, D. Hospital and community adjustment as perceived by psychiatric patients, their families and staff. Journal of Consulting and Clinical Psychology, 1968, 32, 5.


Fiedler, F. E. Factor analyses of psychoanalytic, non-directive and Adlerian therapeutic relationships. *Journal of Consulting Psychology*, 1950, 15, 32-38. (a)

Fiedler, F. E. A comparison of therapeutic relationships in psychoanalytic, non-directive and Adlerian therapy. *Journal of Consulting Psychology*, 1950, 14, 436-445. (b)


Holtzman, M. S. The significance of the value system of patients and therapists for outcome of psychotherapy. (Doctoral dissertation, University of Utah, 1961), Dissertation Abstracts, 1962, 22(11), 4073. (University Microfilms No. 62-2080, 121).


Kirchner, E. Values and value changes during and after graduate study. Journal of Clinical Psychology, 1970, 26(2), 252-256.


Lowe, M. Psychotherapy "and new morality" as source of personal values. *Journal of Religion and Health*, 1969, 8, 268-281. (a)

Lowe, M. Value orientations in counseling and psychotherapy; the meaning of mental health. San Francisco: Chandler Publishing Co., 1969. (b)


Martin, H. G. The use of token reinforcement to facilitate a therapeutic style of verbal interaction in groups of psychiatric patients. (Doctoral dissertation, Utah State University, 1974), Dissertation Abstracts International, 1975, 36, 449B. (University Microfilms No. 75-14, 456).


Moreno, J. L. *Die Goltheit als komedian*. Vienna: Auzengruber Verlag, 1911.


Parloff, M. B., Iflund, B., & Goldstein, N. Communication of "therapy values" between therapist and schizophrenic patients. *Journal of Nervous and Mental Diseases*, 1960, 130, 193-199.


Pratt, J. H. The "home sanitarium" treatment of consumption. *Boston Medical and Surgical Journal,* 1906, 154, 210-216.


Rogers, C. R. *Counseling and psychotherapy.* Boston: Houghton Mifflin Company, 1942. (a)

Rogers, C. R. *Counseling and psychotherapy: newer concepts in practice.* Boston: Houghton Mifflin, 1942. (b)


Snyder, W. V. Group report of a program of research in psychotherapy. Pennsylvania: Pennsylvania State University, 1953.


Wender, L. The dynamics of group psychotherapy and its application. Journal of Nervous and Mental Diseases, 1936, 84, 54-60.


Reference Notes


Appendix A

Rokeach Value Survey
VALUE SURVEY

BIRTH DATE ________________________ SEX: MALE _______ FEMALE _______

CITY and STATE OF BIRTH ____________________________________________

NAME (FILL IN ONLY IF REQUESTED) ____________________________________

INSTRUCTIONS

On the next page are 18 values listed in alphabetical order. Your task is to arrange
them in order of their importance to YOU, as guiding principles in YOUR life. Each
value is printed on a gummed label which can be easily peeled off and pasted in the
boxes on the left-hand side of the page.

Study the list carefully and pick out the one value which is the most important for
you. Peel it off and paste it in Box 1 on the left.

Then pick out the value which is second most important for you. Peel it off and
paste it in Box 2. Then do the same for each of the remaining values. The value which
is least important goes in Box 18.

Work slowly and think carefully. If you change your mind, feel free to change your
answers. The labels peel off easily and can be moved from place to place. The end re-
result should truly show how you really feel.
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
</table>
| 1 | A COMFORTABLE LIFE  
(a prosperous life) |
| 2 | AN EXCITING LIFE  
(a stimulating, active life) |
| 3 | A SENSE OF ACCOMPLISHMENT  
(lasting contribution) |
| 4 | A WORLD AT PEACE  
(free of war and conflict) |
| 5 | A WORLD OF BEAUTY  
(beauty of nature and the arts) |
| 6 | EQUALITY (brotherhood,  
equal opportunity for all) |
| 7 | FAMILY SECURITY  
(taking care of loved ones) |
| 8 | FREEDOM  
(independence, free choice) |
| 9 | HAPPINESS  
(contentedness) |
| 10 | INNER HARMONY  
(freedom from inner conflict) |
| 11 | MATURE LOVE  
(sexual and spiritual intimacy) |
| 12 | NATIONAL SECURITY  
(protection from attack) |
| 13 | PLEASURE  
(an enjoyable, leisurely life) |
| 14 | SALVATION  
(saved, eternal life) |
| 15 | SELF-RESPECT  
(self-esteem) |
| 16 | SOCIAL RECOGNITION  
(respect, admiration) |
| 17 | TRUE FRIENDSHIP  
(close companionship) |
| 18 | WISDOM  
(a mature understanding of life) |

WHEN YOU HAVE FINISHED, GO TO THE NEXT PAGE.
Below is another list of 18 values. Arrange them in order of importance, the same as before.

|   | AMBITIOUS          | BROADMINDED        | CAPABLE            | CHEERFUL           | CLEAN               | COURAGEOUS         | FORGIVING          | HELPFUL            | HONEST              | IMAGINATIVE        | INDEPENDENT        | INTELLECTUAL       | LOGICAL            | LOVING             | OBEDIENT           | POLITE              | RESPONSIBLE        | SELF-CONTROLLED    |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|
|1  |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|2  |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|3  |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|4  |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|5  |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|6  |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|7  |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|8  |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|9  |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|10 |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|11 |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|12 |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|13 |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|14 |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|15 |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|16 |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|17 |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
|18 |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |                    |
Appendix B

The MACC Behavioral Adjustment Scale
MACC BEHAVIORAL ADJUSTMENT SCALE (1)*

Rating Guide:

1. In rating, circle on each scale the number of that entry most characteristic or typical of the patient for the last week.

Of course no patient is entirely uniform or consistent in the behavior or symptoms that he exhibits. His behavior will vary from one situation to the next, and from day to day. In rating, it is necessary to indicate, out of the range of behavior exhibited, that which is most characteristic of the patient. Minor deviations or change may be ignored.

2. If more than one description appears to be applicable, encircle that entry most nearly correct.

3. Rate only patients you have personally observed.

4. Guard against rating on the basis of a single overall impression of the patient. To avoid this, consider each rating item individually for the particular person.

5. Do not spend much time on any one scale. If you do not feel able to reach a decision quickly, go to the next scale and come back to it later. Experience has shown that the initial judgement is more likely to be correct than the judgement following lengthy and conflicted thinking.

6. Do not hesitate to give extreme ratings if they are warranted. Judges naturally tend to rate toward the middle of the scale and are often too timid about rating an individual as very high or low.

NOTE: It is extremely important to make practice ratings on a few patients and discuss these with someone skilled in using this rating scale. It often helps to rate the same patients on two different occasions and compare your own ratings. This helps to point out those scales which need further discussion and practice.

<table>
<thead>
<tr>
<th>Patient's Name</th>
<th>Activity</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ward:</td>
<td>Rater's Name:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MOTILITY</th>
<th>AFFECT</th>
<th>COOPERATION</th>
<th>COMMUNICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2.</td>
<td>3.</td>
<td>4.</td>
</tr>
<tr>
<td>5.</td>
<td>6.</td>
<td>7.</td>
<td>8.</td>
</tr>
<tr>
<td>9.</td>
<td>10.</td>
<td>11.</td>
<td>12.</td>
</tr>
</tbody>
</table>

TOTAL ADJUSTMENT (Sum of Affect, Cooperation, and Communication)
1. How fast does he move, does he pace restlessly, seem agitated and tense in his movement?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rarely overactive, usually relaxed.</td>
<td>Occasionally excessively over-active.</td>
<td>Rather frequent periods of over-activity.</td>
<td>Over-active most of the time.</td>
<td>Over-active, agitated almost always.</td>
</tr>
</tbody>
</table>

2. Is he agreeable and pleasant, never seems to be irritable or grouchy?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usually very grouchy.</td>
<td>Most often irritable.</td>
<td>Sometimes pleasant.</td>
<td>Quite frequently agreeable and pleasant.</td>
<td>Always pleasant</td>
</tr>
</tbody>
</table>

3. Does he generally cooperate, "go along" with things asked of him?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost never cooperates.</td>
<td>Balks very frequently.</td>
<td>Resists rather often.</td>
<td>Goes along with requests most of the time.</td>
<td>Always does what is asked.</td>
</tr>
</tbody>
</table>

4. Does he take part in sensible "back and forth" conversation, listening as well as talking to you, not just short answers to your questions, but a "give and take" conversation?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never back and forth conversation.</td>
<td>Occasionally.</td>
<td>Fairly often &quot;give and take&quot; conversation.</td>
<td>Usually good &quot;back and forth&quot; talk.</td>
<td>Almost always listens and talks realistically</td>
</tr>
</tbody>
</table>

5. Is the patient loud, boisterous or quiet and reserved?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost always quiet and reserved.</td>
<td>Usually quiet.</td>
<td>Loud and boisterous rather often.</td>
<td>Usually loud and boisterous.</td>
<td>Almost always</td>
</tr>
</tbody>
</table>

6. Is he sullen, moody, hard to "get along" with?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very moody and hard to &quot;get along&quot; with.</td>
<td>Most often sullen.</td>
<td>Sometimes moody and sullen.</td>
<td>Rarely moody and sullen.</td>
<td>Very easy to &quot;get along&quot; with.</td>
</tr>
</tbody>
</table>

7. Does he seem "hard to handle," resistive?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very &quot;hard to handle.&quot;</td>
<td>Most often resistive.</td>
<td>Sometimes &quot;hard to handle.&quot;</td>
<td>Rarely resistive.</td>
<td>Never resistive or &quot;hard to handle.&quot;</td>
</tr>
</tbody>
</table>

8. If asked a question, does he respond in such a way that he is understood, using words that make sense to you? (Not whether he is right or wrong in what he says.)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mute or talks &quot;jibberish.&quot;</td>
<td>Answers make little sense.</td>
<td>Response often sensible.</td>
<td>Usually sensible.</td>
<td>Almost always sensible.</td>
</tr>
</tbody>
</table>
9. Is the patient active, restless, always "on the go," or is he listless and apathetic?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Almost always</td>
<td>Usually listless, apathetic.</td>
<td>Active rather often.</td>
<td>Usually &quot;on the go.&quot;</td>
<td>Almost always restless and &quot;on the go.&quot;</td>
</tr>
</tbody>
</table>

10. Is he bitter and complaining, often peeved at the world?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

11. In the things that are expected of him to do, does he go ahead and do them on his own without having to be told how and when to do it, or must he be directed and encouraged to do them?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>No initiative.</td>
<td>Occasionally acts &quot;on his own.&quot;</td>
<td>Fairly often goes ahead &quot;on his own.&quot;</td>
<td>Usually shows initiative.</td>
<td>Almost always goes &quot;ahead on his own.&quot;</td>
</tr>
</tbody>
</table>

12. Does he seem accessible, easy to "get through" to, able to understand you when you talk to him?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Like talking to a &quot;brick wall.&quot;</td>
<td>Occasionally &quot;get through.&quot;</td>
<td>Accessible part of the time.</td>
<td>Usually accessible.</td>
<td>Easy to &quot;get through&quot; to.</td>
</tr>
</tbody>
</table>

13. In tasks assigned to him, can he "stay with" the task without frequent redirection, without becoming preoccupied and lost?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

14. Does he quickly grasp and understand what is told to him, without having to explain things three or four times, not just passively listening, or paying no attention, but grasping easily what you want?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never really comprehends.</td>
<td>Understands some after long explanation.</td>
<td>Gets most of it with 1 or 2 long explanations.</td>
<td>Usually picks it up fairly easily.</td>
<td>Grasps right away what is told to him.</td>
</tr>
</tbody>
</table>
Appendix C

Consent Form
I voluntarily consent to being a participant in research project _____.
I understand that no harm will come to me, and that the entire therapy
sessions will be conducted by qualified personnel.

I have also been informed of the procedures that have been taken to
ensure my integrity, welfare, and confidentiality.

____________________________________
Participant

____________________________________
Witness

____________________________________
Date
VITA
Rahmatola Simnegar
Candidate for the Degree of
Doctor of Philosophy

Dissertation: The Effects of Group Therapy on Values and Behavioral
Adjustment of Chronic Hospitalized Patients

Major Field: Psychology

Biographical Information:

Personal Data: Born at Shiraz, Iran, April 23, 1947, son of
Esghel and Saltanat Simnegar; married Jean Anne Harris,
August 8, 1975; two children, Christopher and Susan.

Education: Attended elementary school in Shiraz, Iran; graduated
from Shahpoor High School in 1965; received English language
proficiency certificate from Michigan State University in
1965; received the Bachelor of Arts Degree from San Fran­
cisco State University in 1970; completed requirements for
the Master of Arts Degree in Psychology at Central Michigan
University in 1973.

Professional Experience: 1971, counselor, Camp Oakland, Oxford,
Michigan; 1972-1973, practicum experience at Mount Pleasant
State Home and Training Center, Mt. Pleasant, Michigan;
1972-1973, teaching assistant at Central Michigan University;
1973-1974, teaching assistant at Utah State University;
1974-1975, research assistant and supervisor of psycho­
metrics laboratory at Utah State University; 1975-1976,
Pine Rest Christian Hospital, Grand Rapids, Michigan;
1976-present, assistant professor of psychology, Hanover
College, Hanover, Indiana.

Research: Acculturation and a Cross Cultural Study of Values,
paper presented at Rocky Mountain Psychological Association,
Salt Lake City, May, 1975 (with Richard B. Powers); Values
of Vietnam Era Veterans, paper presented at Rocky Mountain
Psychological Association, Salt Lake City, May, 1975 (with
Anthony C. Traweek and Larry Jarvis); An MMPI Comparison of
USAF Groups Identified as Drug Users, Psychological Reports,
1975, 37, 1339-1345 (with Larry G. Jarvis and Anthony C.
Traweek).