A COMPARISON OF THE EFFECTS OF A GROWTH GROUP AND
A BEHAVIOR CHANGE GROUP ON THE INNER-
DIRECTEDNESS OF COLLEGE STUDENTS

by

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Larry R. McCullough
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ABSTRACT

A Comparison of the Effects of a Growth Group and a Behavior Change Group on the Inner-Directedness of College Students

by

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Utah State University, 1974

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The primary purpose of this study was to compare the relative effectiveness of two group counseling methods, a self-directed behavior change group and an experiential growth group, for increasing inner-directedness as measured by Shostrom's Personal Orientation Inventory, in college students who were differentiated, on the basis of a pre-treatment measure of inner-directedness, into internals and externals. A second goal was to compare the overall outcome of each method with a no-treatment control group.

Pretest-posttest gain scores on the 'I' scale of the Personal Orientation Inventory were obtained for a sample of 72 college students. The data collected were used to test five specific hypotheses which were developed from theoretical considerations.

For internal subjects, the order of effectiveness of the treatment conditions was as follows (from most to least): Experiential growth group, self-
directed behavior group, and a no-treatment control group. In comparison, the two treatment methods produced statistically similar results. This finding indicates that internals may become more inner-directed as a result of exposure to a variety of group-counseling approaches.

For external subjects, the order of effectiveness of the treatment conditions was as follows (from most to least): Self-directed behavior group, experiential growth group, and no-treatment control group. In comparison, the two treatment methods produced significantly different results. This finding indicates that externals are more responsive to a cognitive-oriented, structured approach, than to an affective-oriented, less structured, member-centered approach.

Group gain score means on a measure of inner-directedness were significantly higher for treated subjects than for control subjects. This finding suggests that group counseling is an effective method for increasing inner-direction in college students.
CHAPTER I
INTRODUCTION

The role and function of college and university counseling centers is currently undergoing a potentially significant transition. Historically, counseling centers served a small segment of the campus population who were experiencing crises or moderate to severe psychological distress. They functioned primarily to remediate, rehabilitate and adjust, principally through the use of one-to-one counseling and occasional therapy groups. In this isolated and reactive role, they exerted little influence or impact on the majority of the members of the academic community (Clark, 1966; Foulds and Guinan, 1969; Magoon, 1968).

The past few years have witnessed the impact of several forces upon the traditional model of counseling centers. One of the most significant forces has been the human potential movement. The willingness of members of this movement to experiment in heretofore peripheral areas, has resulted in a vast resource bank of imaginative and provocative experiential procedures and techniques, most of which are designed to be utilized for prevention, development, and personal growth as well as remedial purposes (Weinstein, 1971).

A second factor which has significantly affected the role and function of counseling centers is the rapidly growing body of knowledge concerning mental health. This data appears in sharp contrast to data obtained in the past which
focused on mental illness and pathology. This knowledge has provided coun-
selors with new responses to old questions such as what constitutes the good 
life, what may man ideally become, what factors interfere with the total 
expression of humanness, and how and in what direction change may be 
brought about (Maslow, 1971). As a result, we know much more about what 
human beings can be than we do about the process of becoming. This has pro-
duced what has been termed an "aspiration gap ... (which occurs when) what 
we are as individuals and groups falls short of what we now consider normal. 
We feel sent for and can't get there." (Harris, 1972)

A significant third force, sometimes cited by social critics, is the 
complexity and alienation of modern-day living. Glasgow (1973) has pointed 
out that social institutions strongly shape human beings. Vandenburg (1963) 
is even willing to assert that all of man's problems are a result of changes in 
culture, and that neurosis should more appropriately be called "socioses".

Numerous other writers (Halleck, 1971; May, 1972; Nagai, 1972; 
Smith, 1973) have stated that our society is unhealthy. They point to contem-
porary social problems such as inflation, crime, value experimentation and 
alteration, the ineptitude of political and social organizations, the emphasis 
on profit rather than service, the tragic waste of human potential, rapid 
technological progress, the alienation of man from himself and others, and a 
myriad of other factors as being causal agents for the increase of pathological 
symptomatology. These factors may eventually lead to suicidal doom in a 
society that serves to frustrate man's needs and inhibit the constructive
emergence and actualization of individual human potentialities.

The combined effect of these three forces is that counseling centers are facing new and difficult challenges. They must understand and integrate the newly developed models and techniques and evaluate their impact on people. They must synthesize their findings into new and more effective methods of facilitating growth, development, prevention, and remediation for the increasing number of people who wish to make use of their services. As Ivey and Alschuler (1973, p. 591) have stated: "The sheer magnitude of psychosocial problems demands that we revolutionize traditional forms of helping in ways that will increase our effectiveness."

The response to these challenges has been quantitatively substantial. Some centers are developing the growth center stance (Foulds and Guinan, 1969). They are offering a multitude of programs under topics such as problem-solving, conflict resolution, psychological education, self-esteem, life-planning, sex education, death seminars, sensory awareness, body movement, relaxation, marriage, and etc.

Counselors are expanding their roles, and getting out of their offices and into the campus community attempting to affect larger groups of people through systems consultation, institutional change, curriculum change, peer-counseling training, and teacher training (Glasser, 1965; Halleck, 1971; Ivey, 1971; Weinstein, 1971). It appears that counselors are attempting to more effectively meet the challenges of service, education, training, and research by shifting their emphasis from individual counseling to group counseling.
**Group Counseling**

Group experiences are rapidly becoming popular counseling center functions since they help meet the demands of time, numbers of people, and reality more effectively than individual counseling (Anderson et al., 1969). To increase the focus on the preventive and developmental aspects of growth, these groups are often directed towards a learning rather than a therapeutic framework. They may be structured or unstructured in regards to time, experiential exercises, and focus. The expansiveness of group work seems to be limited only by the restricted creativity and imagination of its practitioners, and this is where some problems have developed.

Qualitatively, the response has left much to be desired. The intensely rapid proliferation of group models and techniques has left little energy or time for evaluation. Many zealous group leaders have seductively and obliquely predicted outcomes that were seldom approachable let alone reachable. The encounter group movement of the 1960's is a good example of the almost overwhelming proliferation of essentially untested approaches which relied on faith and intuition rather than empirical knowledge.

Recently, mental health workers have begun the tedious process of evaluating the usefulness of growth approaches and attempting to integrate this data into valid models (Schutz, 1973). The current literature contains an increasing number of articles attempting to measure a variety of outcome variables due to the effects of group training. Encounter group experiences have
been shown to increase interpersonal competence (Arbes and Hubbell, 1973; Archer and Kagan, 1973); job effectiveness (Miles, 1965); locus of control (Diamond and Shapiro, 1973; Foulds, 1972; Gillis and Jessor, 1970); sensitivity to verbal behavior (Bunker, 1965); and self-actualization (Guinan and Foulds, 1970; Reddy, 1972).

Unfortunately, much of the research has been poorly organized and controlled. As a result, empirical evidence is of modest value (Campbell and Stanley, 1968; Kiesler, 1966; Paul, 1967). Despite the research stimulated by Eysenck's (1961) critical appraisal of the value of counseling, investigators are still having difficulty demonstrating that group counseling can result in stable and positive change.

One explanation for this is the difficulty of conducting group research which strictly follows good experimental design. As a result, many studies suffer from such problems as sampling inadequacies, experimenter and group leader interaction, unsuitable instrumentation, lack of control groups (Marks, Conry, Foster, 1973), poorly defined treatment conditions (Bednar, 1970), failure to compare different treatment conditions (Kiesler, 1966; Paul, 1967), and failure to examine treatment by levels (Rogers et al., 1967). It follows, then, that to improve the quality of research with group techniques some specific changes might be made.

First of all, research subjects should be randomly assigned to treatment conditions and control groups from the same population pool. This would reduce pre treatment variability, make comparisons with controls less
equivocal, provide a clear focus for assessment of outcome, and increase the precision of treatment comparisons (Kiesler, 1966; Lindquist, 1956, Paul, 1967).

Secondly, comparing a single treatment group to a control group seems to be of less value than comparing a variety of treatment approaches. The use of a multivariate comparative model allows for the comparison of the outcomes of different techniques with the same dependent variable. It can provide information about the relative contribution of each treatment technique, and some conclusions as to which method works best with which type of client. As will be discussed later, subjects who differ on the dependent variable used in this study have also been found to differ on a number of qualities which may be indicative of a preference for different treatments.

Thirdly, it has been suggested that initial level of functioning may be a good predictor of the ability to profit from a group method (Rogers, 1967). A particular approach would obviously not have the same effect on everyone, but there are no known studies which deal with the relationship of treatment outcome to different levels of the dependent variable. It is assumed by most group leaders that their population pools consist of relatively "normal" people. This is a hazardous assumption. Since counseling centers see a wide variety of people, it may be helpful to know if certain kinds of experiences are more profitable for people at specified levels of functioning (Campbell and Dunnette, 1968).
Finally, an outcome measure should be selected which is limited enough to be understandable, but broad enough to allow for further study (Strupp and Bergin, 1969).

It is this author's belief that the dimension of internality-externality is significant enough to warrant further interest and investigation. Internality may be defined as the development of an internal frame of reference, a set of consciously chosen and experientially derived values and beliefs which are referred to for the determination, direction, and control of behavior. This concept of self-support stands in contrast to an external frame of reference, or the tendency to defer and submit to the values and beliefs of others for the determination, direction, and control of behavior.

Internality is a central concept in many theories of personality and psychopathology. Rogers' (1961) concept of experiential freedom, Maslow's (1971) concepts of autonomy and homonomy, Rotter's (1954) social learning theory, White's (1959) concept of competence, Adler's (Ansbacher and Ansbacher, 1956) concept of striving for superiority, Fromm's (1941) process of individuation, and Reisman's (1950) concept of inner-directedness all related to this phenomenon of internality. It has been seen as a major determining factor in the development of a self-concept (Cooley, 1902; Epstein, 1973; Shostrom, 1972). Correlations have been established between this single, continuous, bipolar construct and a variety of behaviors, affective states and cognitive activities.
Internality has been viewed by many practitioners as an important therapeutic goal. Singer (1965) has suggested that internality is a major goal of all therapeutic efforts.

Furthermore, internals and externals have been found to differ on a number of significant characteristics which may indicate the preferability of differential treatment approaches. These characteristics when considered together, imply that internals may profit from an interpersonal group model which focuses on minimally structured, verbal, affective, experiential, intimate and personal group interaction. The experiential growth group is suggested to fit this model.

Externals may prefer a more intrapersonal, structured, impersonal, cognitive group counseling model which makes use of their suggestibility, dependence, and conformity. A self-directed behavior group is suggested to fit this model (see Chapter II). The importance of research comparing these two models is demonstrated by the fact that cogent arguments may be presented in direct opposition to these predictions (Mahrer and Pearson, 1972).

The decision to utilize these two group counseling approaches was based on several considerations. First of all, they are models that are currently in use by the author. As Oetting and Hawkes (1974) pointed out, the continual evaluation of programs and approaches is an important aspect of professional responsibility.

Second, the construct of internality appears to be a highly relevant concept for human behavior in view of the increasing complexity of society, and the current trend to talk about pathology in terms of alienation, helplessness,
depression, dependency and conformity. Research which adds to knowledge about changing this variable may be relevant from an applied point of view.

Third, variations of these two models have dealt with this construct and practitioners have claimed to have altered it successfully. Yet, there are very few comparative treatment studies reported in the literature.

Furthermore, there is a possibility that these two approaches may be differentially effective with the dependent variable of internality. Information relevant to differential effectiveness may aid in evaluating the usefulness of either approach for this variable.

Finally, the characteristics of internals and externals may contribute to their preference for one model over another, thus producing different outcomes at various levels of the dependent variable. This knowledge may contribute to the assignment of clients to the most effective approach for their level of functioning. To the author's knowledge, this type of assessment has not been made. Mahrer and Pearson (1972) have argued for the necessity of selecting an appropriate treatment approach based on careful consideration of the needs of the client and how these needs might best be met.

**Statement of the Problem**

In the past few years a considerable body of knowledge has appeared regarding such constructs as autonomy, proaction, locus of control, and
individuation (Fromm, 1941; Maslow, 1968, 1971; Rogers, 1961; Rotter, 1954; Shostrom, 1972).

The evolving theory generally contends that a positive relationship exists between these constructs and mental health. Moreover, these constructs appear to be related to the concept of internality. An internal frame of reference is a major concept in counseling and a goal of many psychotherapeutic efforts. While some group studies have attempted to measure how this construct may be successfully altered, most of these studies have suffered from limiting inadequacies.

This study will attempt to answer the following general questions:
(1) Are the Self-Directed Behavior group and the Experiential Growth group effective means of helping individuals develop an internal frame of reference;
(2) Are these two approaches comparably equivalent in terms of outcome; and
(3) Is the outcome effectiveness of these models influenced by the initial level of participants mental health.

Specifically, this study will attempt to answer the following questions:

1. On a measure of internality, are there significant pretest-posttest gain score differences between each of the treatment conditions. (Are differences due to treatment.) It is predicted that the treatment groups will produce statistically similar value changes. It is further predicted that both group methods will produce greater change than the control group.

2. On a measure of internality, are there significant pretest-posttest gain score differences as a result of the interaction of treatment method and
initial level of internality. It is possible that initial level of internality may interact with the treatment process to enhance or inhibit the development of internality. Therefore, it is expected that internals will evidence greater value change through exposure to the growth group than they will through exposure to the behavior change group. Externals will show greater change from exposure to a behavior change group than from exposure to a growth group.

Importance of the Study

From the viewpoint of the practicing counselor, group counseling is an area of investigation in which more research with methods and techniques is greatly needed. The counselor's effectiveness in the service of his client will depend, to some extent, upon his understanding of the role that various models play in changing behavior.

Of particular value to the counselor is a knowledge of the impact of group approaches on the mental health of participants, and the effect of these models on clients who are at different levels of mental health prior to participation in a group experience. A knowledge of the interaction between treatments and levels of mental health may aid the counselor in determining the suitability of a candidate for a specific type of group experience. It may yield information which will help the counselor to assess the participant's readiness to profit from therapeutic experiences. This assumption is based on the possibility that prospective group members, who are initially low in measured mental health
may find the interpersonal experience stressful enough that positive growth may be blocked rather than facilitated.

The value of this study may result from the fact that no previous study on internality has simultaneously involved the following:

1. A comparative treatment design.
2. The random assignment of matched subjects from the same subject pool to treatments and control groups.
3. An analysis of the interaction of treatments and levels.
4. More than 14 subjects in each experimental and control condition.

The present study was designed to implement each of these features.

Limitations of the Study

Any interpretation of the results of this study should include an awareness of the following limitations:

1. The selection of the sample was limited to students at Idaho State University. Care should be taken in drawing conclusions about students at other universities.

2. The students used in this study were all volunteers who expressed a desire to participate in a group experience. Since group volunteers are assumed to be more susceptible to group treatment than non-volunteers, care should be taken in generalizing the results of this study to larger populations which may include non-volunteers.
3. The comparison group activities which filled the time period during which the experimental groups received exposure to treatment are unspecified and therefore, an undesirable ambiguity is added to the interpretation of the contribution of the two treatment groups.

4. It was not possible to treat all students in the same simultaneous session, therefore, the unique events of any session are potential sources of extraneous differences which rival gain differences due to treatment.

5. Experimenter differences are not a source of variance because only one experimenter was used. This use of only one group leader does not permit the generalizability of results to other experimenters.

6. The POI was used as a pretest. Since this test measures value judgments and contains some unusual content, it is possible that a participant's susceptibility to treatment conditions was altered by exposure to the pretest. Therefore, care should be taken in generalizing results to populations not warmed up by the pretest. In addition, the experience of participating in a group may cause individuals to attempt to answer the posttest according to their recall of pretest responses.

7. The possibility exists that the subjects were aware that they were participating in an experiment. Although no statement was made to this effect, the pretesting itself in addition to the randomization and assignment to treatments and controls can be expected to stimulate curiosity.

8. Other possible sources of variance which could interact with treatment effect include spontaneous remission, and accumulation of error in tests.
CHAPTER II
REVIEW OF LITERATURE

Theoretical Foundations

Internal-external frame of reference

The extent to which an individual's behavior is a function of his own determination, direction and control has been a central concern of philosophers and psychologists for decades. In contemporary times, this issue seems to be even more critical, particularly as behavioral engineers become more effective at controlling, altering, and determining man's values, ideas, and behavior (Rokeach, 1971).

The humanists believe that the individual plays an active part in directing and fulfilling his potentialities. They place man at the center of his universe with the capacity for responsibly shaping the conditions of his existence. As man acquires an awareness of his reality, he is capable of choice, based on internal cues, which will enhance intrapsychic control and expression as well as competence and receptiveness in dealing with the interpersonal and institutional forces that contribute to his world. Their primary focus is on self-direction and purposeful control of one's behavior and environment (Ellis, 1962; Maslow, 1968; Rogers, 1961; Shostrom, 1972).
Skinner (1971) is convinced that there is no such things as an autonomous man. He argues the position that freedom and control are merely illusions and the inventions of man in his attempt to explain his experience. Behavior is a matter of stimulus-response contingencies, and the control and manipulation of behavior is a function of environmental reinforcement schedules and the influence of the individual is minimal. Until man surrenders his false notions about his own capacity for internal and independent action, he cannot hope to create the conditions necessary for his own survival.

It has been suggested that Skinner's argument begs the question (Lefcourt, 1973; Steinor, 1973). The existence or non-existence of a felt sense of freedom, control, and self-reliance in effecting and determining the events of his life has serious implications for man's behavior. As Lefcourt (1973, p. 424) has stated:

The sense of control, the illusion that one can exercise personal choice, has a definite and a positive role in sustaining life. The illusion of freedom is not to be easily dismissed without anticipating undesirable consequences. To submit to however wise a master planner is to surrender an illusion that may be the bedrock on which life flourishes.

The ultimate goal of almost all group counseling effort is to induce positive intrapsychic and interpersonal change. The direction of change is often towards an increase in the individual's ability and willingness to determine, direct, and control his own behavior, and a decrease in the extent to which he will defer to the values and manipulations of others. This development of an internal frame of reference is often considered an important aspect of mental health, and is highly related to other constructs such as individuation, proactive behavior,
autonomy, and experiential freedom (Rogers, 1961).

Rotter (1971), May (1972), and Frank (1973) have suggested that college students have come to feel increasingly powerless to determine, control, and direct their lives according to their own dictates. The development of a sense of experiential freedom based on an internal frame of reference may facilitate the reversal of this trend.

The impact of client variables on treatment outcome is gaining increasing attention in the research literature. The question has been raised as to what kinds of clients profit most from different group methods (Guinan and Foulds, 1970). Since university counseling centers typically see somewhat different students, the study of this question is important for the planning and development of programs to meet the needs of students.

The data to be reviewed will indicate some of the behaviors that are typically associated with the notion of an internal frame of reference. Indicators of internality are proactive behavior, resistance to influence, and an absence of clinical symptomatology. Indicators of externality are reactive and passive behavior, conformity, and the presence of pathology. These indicators will be used to suggest the desirability of differential treatment methods.

**Self-other differentiation**

Basic to the development of an internal frame of reference is the differentiation of the internal and subjective world of the self from forces external to
the self. According to Witkin and his colleagues (Witkin et al, 1962, p. 10):

With respect to relations with the surrounding field, a high level of differentiation implies clear separation of what is identified as external to the self. The self is experienced as having definite limits or boundaries. Segregation of the self helps make possible greater determination of functioning from within, as opposed to a more or less enforced reliance on external nurturance and support for maintenance typical of the relatively undifferentiated state.

The capacity to experience and tolerate one's status as a separate self, somewhat independent of others, is central to most conceptualizations of mental health (Fromm, 1941; Maslow, 1968; Seeman, 1973). Such differentiation makes it possible for humans to strive for the development of a personal center (Singer, 1965); to make the shift from environmental to self-support (Perls, 1969); to develop a sense of experiential freedom (Rogers, 1961); to organize and conceptualize personally relevant information (Epstein, 1973) and, paradoxically, to experience closeness and relatedness to others with some freedom from obligation, threat, and fear (Laing, 1967; Maslow, 1968; Seeman, 1959). It is a beginning step in the development of a self-concept.

Epstein (1973) has suggested that the self-concept is actually a self-theory, a conceptual system of organized beliefs about one's self, the world, and the interaction of these two areas of experience. Since the self-concept is a cognitive theory, it can be evaluated according to the constructs by which all theories can be evaluated (i.e., extensive, parsimonious, valid, internally consistent, testable, and useful). Therefore, a healthy self-theory would be broad, flexible, open to new data, organized and integrated, self-correcting, valid,
realistic, and functional. Ideally, the possessor of a healthy self-theory would gather and organize data from a wide variety of experiences, and utilize this data in determining values and behavior. He would be able to process and assimilate new and contradictory information at his own rate, act optimally in stressful situations without becoming disorganized, and make discriminating personal changes when desirable. This self, with its consciously chosen values, should be highly functional as a reference point for examining alternatives, and determining, directing, and controlling behavior. The individual would be self-governed, self-accepting, autonomous, intimate, and synergistic (Epstein, 1973).

An individual with limited experiential exposure could develop a narrow self-theory that would be more rigid and restrictive, less able to create and examine alternatives and process new and conflicting data, more disorganized, under stress, more resistant to change, unstable, repressive, defensive, and minimally functional. Since his values would be less carefully and personally selected, he may be more likely to disregard himself and rely on other people for the determination, direction, and control of his behavior. He may experience powerlessness, dependency, and feelings of being manipulated and controlled by his environment. His relationships with others would be more manipulative, less intimate and accepting, and low in synergy (Epstein, 1973; Maslow, 1968; Shostrom, 1972).

This description of the healthy versus the less-healthy self-system closely resembles Rogers (1961) definition of the fully-functioning person as one who lives existentially, trusts himself, is open to experience, has a sense of experiential
freedom, and is creative. There is also close resemblance to Maslow's (1968) idea of the healthy person as transcendant, synergistic, and homonomous.

Discussion, to this point, has focused on the self-concept as a theory, a set of beliefs and values about one's experience. The notion that ideas, beliefs, and values can direct behavior and influence the interpretation of events which results in emotion has been proposed by many writers (Arnold, 1960; Ellis, 1962; Epstein, 1973; Lazarus, 1966; Shostrom, 1972). If a person believes he is powerless and interprets an event as threatening, he may feel fear and anxiety, and respond by withdrawal or compliance. If he believes that what happens depends on him, and he interprets an experience as frustrating, he may feel hopeful, and respond by appropriately and interdependently asserting himself.

Epstein (1973) has stated that the self-theory develops out of experience, and particularly from interactions with others. Rogers (1961) supported this notion, and further stated that people allow into their self-system only those ideas over which they believe they can exercise control. Cooley (1902) has stated that the self can only be identified through subjective feelings produced by the belief that one can control the events in his life. Therefore, the experience of mastery leads to beliefs in one's potency which, in turn, can facilitate personal identity. A sense of free will and personal control over life is basic to healthy functioning according to Rogers (1961). This kind of experiential freedom develops as one creates a healthy self-system based on an internal frame of reference. As Knight (1964, p. 262) has stated:
Free will is a subjective feeling, which is better called a sense of inner freedom, and which depends on harmony and integration of the personality. It is experienced by those psychologically healthy persons who willingly choose a course of action according to inner standards.

In summary, it may be said that a good, expansive, stable self-theory will contain the personally held belief that one is an active, independent person who can do things, and who can effectively choose, direct, control, and assume responsibility for what he does, what happens to him, and how he will respond to these events. Consistent with this belief, behavior will be proactive, autonomous, and fulfilling. He will have a sense of experiential freedom and feelings of potency, joy, competency, and relatedness. He will utilize his inner-self as a frame of reference, and therefore, for the purposes of this study, a person who approximates these characteristics will be termed an "internal".

On the other hand, "externals" are individuals who have a narrow and restrictive self-theory which contains the beliefs that one is a passive creature to whom things are done, that satisfaction in life is unrelated to one's behavior, and therefore people are victims of fate, chance, or powerful others. Behavior will be reactive, passive, dependent, and externally determined. Such people are likely to experience feelings of being manipulated, alienated, depressed powerless, and inferior (Ansbacher et al., 1965; Epstein, 1973; Glasser, 1965; May, 1972; Rogers, 1961; Rotter, 1966; Seeman, 1959; Singer, 1965; Tiffany, 1967).
Review of Studies

Empirical investigation of the foregoing theoretical conceptualizations should demonstrate that internals, in contrast to externals, are: (1) more cognitively active in seeking and processing personally relevant information and therefore, more initiatory and proactive; (2) more autonomous, inner-directed, independent, and resistant to influence and manipulation by others, and (3) more healthy with fewer symptoms of psychological distress.

Initiatory and proactive behavior

It has been suggested that a healthy person is self-expansive and would involve himself in a variety of experiences from which he would openly gain access to information about himself and his world. This information would then be integrated into his belief system which could be utilized as a frame of reference for examining alternatives and initiating and directing behavior.

These expectations are supported by several studies which indicate that internals are more cognitively alert and curious about their situations than are externals. They are willing to gather personally relevant information that will aid in understanding their experience, particularly if this information will be useful in determining the probability of success in future situations (Davis and Phares, 1967; Seeman, 1963; Williams and Stack, 1972). Internals are more effective in processing data into insight, and may therefore have a greater potential for effectiveness in their social environments (Phares, 1968; Tolar and Reznikoff, 1967). They are more task-oriented (Lefcourt, Lewis, and Silverman,
1968), and they are willing to use initiative and effort in confronting their difficulties, finding solutions, and remedying personality problems (Crowne and Liverant, 1963; James et al., 1965; Joe, 1971; Phares, 1965; Phares, et al., 1968; Seeman, 1963).

These findings lend some support to the notion that an internal frame of reference is characterized by initiatory and proactive, rather than passive and reactive behavior.

More substantial support for the relationship of proactive behavior and internality can be implied by studies of academic achievement. Coleman's enormous study (Coleman et al., 1966) of students in grades 3, 6, 9, and 12 in 4000 public schools demonstrates that internals are more likely to be academically successful than are externals. These findings are consistent with the results of a study performed by LeMay and Damm (1968) which found that underachievers were more often external.

Coleman's study was particularly interesting in that minority group members with internal beliefs were more successful than similar people who were more external. In view of the fact that members of lower socioeconomic groups (Liebow, 1967), and members of racial minorities such as Blacks, Chicanos, and Native-Americans have consistently been shown to be external (Battle and Rotter, 1963; Lefcourt and Ladwig, 1965, 1966), it might be expected that high system blame and social activism may be a result of belief systems which perpetuate ideas of powerlessness and inability to influence realistic external controls. However realistic these beliefs might be (Gurin et al., 1969),
the results of several studies do not support this expectation. Blacks who are effectively involved in social change through social activism have been shown to have more internal belief systems than blacks who are more passive and less involved (Caplan, 1970; Forward and Williams, 1970). Butterfield (1964) found that external blacks were more likely to demonstrate intrapunitive responses to frustration, while internal blacks were more likely to constructively and actively respond to frustration.

Apparently, the experience of powerlessness can occasionally be motivationally positive rather than destructive, and for some people, resistance to external domination may be an important beginning towards becoming more internal.

Tiffany and Tiffany (1973) have analyzed activism, and present the idea that social unrest from external belief systems is different from social unrest stemming from a sense of self-direction. The difference is that external people react impulsively and ineffectively to environmental control, while internals react to similar stress with responsible thinking, decision-making, and goal planning efforts which are more effective means of altering destructive environmental forces (Gore and Rotter, 1963; Maslow, 1971; Strickland, 1965).

The results of these studies confirm the idea that internals are more planful, initiatory and proactive, more willing to seek and process information, more likely to alter themselves and their environment, and more insightful. Externals would appear to be more impulsive, passive, reactive, intrapunitive, and less insightful.
Autonomy and resistance to influence

From a theoretical and logical point of view, the tendency towards active cognitive functioning would result in the development of deliberately and experien­tially chosen value-belief-self systems which would be trusted and utilized as sources of data for the independent determination of behavior and emotion. Conversely, restricted self-systems would be less trusted and utilized, necessitating environmental dependency, conformity, and emotional blocking. Therefore, internality would appear to be related to the ability to resist influence and manipulation from external sources.

Myers (1964), in a study of personality differences between industrial workers who were motivated and involved with their work versus workers who were dissatisfied and primarily concerned with factors more external to their work, found that internality was a major differentiating variable. Motivated employees were characterized as "... more often inner-directed, self-sufficient persons whose belief systems are deliberately chosen and developed and are less subject to influence by the environment." (Myers, 1964, p. 76) Dissatisfied employees were more likely to be external, with unstable value systems that changed to fit the environment. Blauner (1966) and Herzberg (1959) supported Myers' discovery and further stated that independence is the most important contributing factor to job satisfaction. These studies have further suggested that satisfaction or dissatisfaction are more a function of the personality of the worker than they are a function of the intensity of environmental
pressure. Internals are less destructively affected by influence than are externals.

Maslow's (1968) studies indicate that healthy people value their freedom and tend to be self-governed rather than socially determined. As a result of his autonomous nature, the healthy man will not only be more fulfilled, but will consciously resist any attempt to interfere with his freedom.

To test this idea, Kelmat and Theiss (1971) devised a study of the resistance of high, moderate, and low self-actualized students to a verbal conditioning paradigm. They hypothesized that by reinforcing affective self-disclosures they could condition students to respond with more of these kinds of statements. The results of this study indicate that low and moderate self-actualizers were very responsive to the reflection of feelings as a reinforcement, while high self-actualizers were not significantly affected. This supports Maslow's idea, and also suggests that the technique of reflection may not be effective for internals since they are less likely to alter themselves to meet environmental demands. The authors suggested that internals may respond to therapists more when they model, than when they reinforce.

A multitude of studies have been performed which are similar to the above study, both in design and results. These studies consistently support the notion that internals in contrast to externals are resistant to external influence. Several of these studies, however, report some interesting additional information. Strickland (1970) used a verbal reinforcement technique, and found that internals who were aware of her conditioning paradigm were more
resistant to reinforcement than internals who were not aware of what she was doing. Getter (1966) using a similar technique, produced similar results except that he noted that internals are more likely to produce the desired responses during extinction trials. This finding suggests that internals may be oppositional and do the reverse of what was wanted.

Biondo and MacDonald (1970) hypothesized that very subtle influence methods might be more effective than overt influence attempts for internals. Their finding was that internals are resistant to even very subtle influence, while externals respond to either approach. Even in Asch-type social conformity studies, internals were much less yielding than externals (Crosson and Schwendiman, 1972), and much more confident in their own judgments when independent decisions were required (Crowne and Liverant, 1963).

These studies attest to the suggestibility, dependency and conformity of externals, and a study by Ritchie and Phares (1969) demonstrated that they are even more so if the source of influence is a high-status individual. Again, internals were not particularly susceptible to the arguments of important people.

The emerging picture of internals is that they are rebellious and enjoy flaunting their independence. While there may be some truth to that notion, a study by James, Woodruff, and Werner (1965), reported that internals were more likely to quit smoking when presented with information about the harmful effects of cigarette use. Lefcourt, et al. (1968) found that internals are more susceptible to influence when others beliefs concur with their own. It appears that internals do respond to reasoned arguments, particularly if they are in
agreement with their own beliefs, while externals are more willing to be dependent and conforming even if they must sacrifice personal beliefs.

Further support for the relationship of internality and autonomy can be demonstrated by creativity studies. There are many theoreticians who would support the notion that highly creative people represent the healthiest segments of our society (Maddi, 1968; Maslow, 1971). A variety of studies concerned with creativity (MacKinnon, 1962, 1965; Roe, 1953) attest to the unconventional nature of these people. They typically dislike social superficialities, and much prefer to make decisions based on their own internal criteria. They are not necessarily abrasive, nor bereft of social interest, but they are non-conforming, unpredictable, independent, resistant to manipulation, and less socially skilled.

Clinical implications

It has been stated that the self-theory develops primarily from experiential interaction of the individual with the social environment. Healthy functioning may therefore depend upon whether the environment is growth-promoting or growth-inhibiting. Maslow (1971) and Rogers (1961) have stated their belief that man inherently possesses the capacities and potentialities necessary for optimal growth and development. The role of the environment is to allow and foster this growth, and pathology will occur as this inherent growth is blocked or diminished, resulting in a narrow, restricted self-theory.
In contrast to social critics who believe that society is insane, the social optimists (Halleck, 1971; Maslow, 1971; Rogers, 1961) believe that America is groping, albeit blindly, towards a new view of what and how man can be. The end result will be healthier values that will nurture individual differences, openness, affective expressiveness, spontaneity, flexibility, and comfortableness with change, as opposed to containment, conformity, rigidity, and compliance with unquestioned authority.

In the past, life was anchored in familiarity, consistency, and the permanence of values, relationships, and places. Trust was placed in the stability of the social environment. In the future, the ability to flow with rapid change may be required for quality living. People will have to put their trust in themselves, in their own organism, in their own capacity for self-support, self-direction, growth, and creative interaction in a fluid world. Such self-determination may be a critical process for survival in the future and the crucial difference between those who actively live life and those who merely suffer life (May, 1972; Smith, 1973).

There is a substantial body of literature to support the relationship between externality and clinical phenomena. For example, internals in contrast to externals suffer significantly less debilitating anxiety (Butterfield, 1964; Feather, 1967; Platt and Eisenman, 1968; Watson, 1967); they are more self-actualized (Shostrom, 1964); they express fewer neurotic complaints, increased stability, and higher self-esteem (Cromwell et al., 1961; Fitch, 1970; Johnson, et al., 1968; Knapp, 1965; Warehime and Foulds, 1971); they are less
suspicious and more trusting (Clouser and Hjelle, 1970; Klemp, 1969; Miller and Minton, 1969); they are less likely to attempt suicide and to be involved in accidents (Williams and Nickels, 1969); they are less likely to be alcoholics or felons (Fisher, 1968; Zaccaria and Weir, 1967); and they are more likely to be self-directed and active (Tiffany, 1967).

Shostrom and Knapp (1966) performed a study to measure the relationship between a measure of self-actualization (POI) and a measure of pathology (MMPI). They found that internality was highly and negatively correlated with depression, psychasthenia, and social introversion.

Hersch and Scheibe (1967), in a study using the CPI and ACL, have reported that internals were more likely to describe themselves as active, achieving, assertive, powerful, independent, effective, and industrious. Externals were more likely to describe themselves in opposite fashion.

This general clinical picture of the external as one who experiences increased symptomatology bears close resemblance to the immature person that Perls (1948) describes. He believes that the neurotic has difficulty conceiving of himself as self-supportive and responsible for his behavior. Instead of looking within himself for direction, he disowns and dependently seeks environmental support. The result is anxiety, emotional restrictiveness, other-directed behavior, and impaired interpersonal relationships characterized by conformity and fear.
One assumption of this study is that when an individual experiences excessive influence from forces over which he believes he has no control, he will develop externality, and experience feelings of powerlessness, depression, anxiety, alienation, and manipulation. His behavior will be passive, impulsive, self-defeating, conforming, and compliant. This assumption is supported by writers such as Frank (1973), Hurst and Ivey (1971), Glasser (1965), May (1972), Maslow (1971), and Shostrom (1972).

Environmental forces have less destructive impact if the individual maintains some sense of personal control and direction over stress (Glass et al., 1969, 1971; Tiffany, 1967). In general, the results of these studies indicate that if subjects knew they could control aversive stimuli, they would be less disruptively affected regardless of whether or not they chose to exercise their control.

A study by Staub and his colleagues (Staub et al., 1971) supported the findings of Glass, and further suggested that subjects who were allowed to administer shock to themselves and to select the intensity of the shock could endure higher levels and more intense shock than could subjects to whom shock was administered by others. It appears that the disruptive quality of stress decreases when subjects are able to control that stress, and this finding suggests that therapeutic efforts should be primarily directed towards increasing internality, and secondarily directed towards environmental change (Tiffany, 1967).

Studies with infrahumans, which focus on the concept of learned helplessness, adds some tentative and anthropomorphic support to the above ideas.
Several experimenters (Seligman, 1973; Seligman and Maier, 1967; Seligman, Maier, and Geer, 1968) have been able to produce maladaptive passivity in dogs by exposing them to traumatic and inescapable shock. Apparently, the dogs learned that termination of the shock was independent of any responses they could make, and their response to this lack of control was helplessness.

Richter's (1957) discovery of the sudden death phenomena, in his experiments with the swimming endurance of wild rats, led him to postulate that a sense of hopelessness was induced when the rats could find no escape. The response to this loss of hope was sudden death.

These experiments indicate that if animals learn that they cannot control impinging environmental forces they become helpless. On the other hand, if they experience some success in resisting control, they do not become helpless. Using this premise, Seligman (1973) has drawn analogies between learned helplessness in animals and hopelessness (Mowrer and Vick, 1943), and depression (Beck, 1967) in humans. Individual susceptibility to depression, powerlessness, and externality may well be a function of the success or failure of an individual's previous experience with resisting external forces and his attempts to influence the events of his life. The implication for therapeutic effort is that the experience of successfully determining and altering undesirable behavior may change individual value systems in favor of internality.

In summary, it is apparent that internals and externals demonstrate differential psychological characteristics. Internals appear to be alert, curious, proactive, initiatory, open to experience, insightful, independent, self-governed
and resistant to influence. They appear to have an internalized set of values which they utilize to determine, direct, and control behavior. Externals, on the other hand, appear to be reactive, passive, impulsive, self-defeating, suggestible, dependent, conforming, anxious, and suspicious. Their value systems are narrow, restrictive, and fashioned primarily by other people so that the determination, direction, and control of behavior is the responsibility of others.

Group counseling and changes towards internality

The means of inducing change towards a more internal frame of reference has been a subject of some theoretical debate. Empirical evaluation of group studies suggests that exposure to group counseling facilitates personal growth towards increased internality.

Guinan and Foulds (1970) evaluated changes in internality as a result of a marathon group experience. Their sample consisted of ten "normal" college students who met together for thirty hours over a weekend. In comparison to a matched control group, experimental subjects demonstrated significant change in internality in a positive direction. Certain methodological inadequacies make the results of this study highly questionable.

Diamond and Shapiro (1973) evaluated the effects of an encounter group experience on internality. Their design involved eight two-hour weekly sessions and one ten-hour marathon with thirty-one volunteer graduate students matched with a control group. They found significant positive change in internality.
Similar results have been reported by Foulds (1971).

These studies demonstrate that internality can be increased as a result of exposure to group experiences. While this kind of information is important, it is preliminary and incomplete. Therefore, research has evidenced increased attention to method variables that may influence the outcomes of treatment.

Walton (1973) compared three group methods, a structured, experiential personal growth group, a didactic lecture-seminar group who were occasionally exposed to personal growth experiences, and a didactic-lecture seminar class which was taught self-actualization principles but received no group experience. The first two treatment approaches produced significantly increased internality, while the exclusively didactic approach produced no change in internality. The authors suggested that experiential methods may be more effective in producing change than an exclusively cognitive approach.

The effectiveness of an action oriented, experiential approach is supported by White (1974).

In a study concerned with the treatment of individuals who were experiencing difficulty with interpersonal interaction, Dua (1970) compared a behavioral, action-oriented approach with an educational, cognitive approach. The behavioral approach was concerned with planning and implementing specific behaviors designed to improve interpersonal functioning. The educational approach was designed to change attitudes towards significant others. Results indicated that both approaches positively altered internality in comparison to a control group, but the action-oriented approach was significantly more
effective than the re-educative approach.

The studies discussed so far have differentially focused on affective, behavioral, and cognitive methods, and regardless of focus, outcome measures indicated positive changes in internality. These changes did not seem to be related to the amount of intrasession structure and leader intervention. Increased internality did, however, seem to be related to action and experiencing. This tentative discovery suggests that some combination of affective and/or ideational discussion and action at the behavioral level may enhance the possibility of therapeutic change.

While the effect of continual intrasession structure is unclear, the value of initial and early structure appears to be significant even though the guiding theoretical basis for group work has generally been a humanistic one which focuses on self-disclosure, interpersonal feedback, insight and affective expression in a safe group atmosphere relatively free of structure. This view suggests that the leader's role should be non-directive, and that the group experience should be unstructured, supportive, cohesive, interpersonal, and primarily affective. Advocates of this position believe that leader imposed direction and structure interferes with individual self-exploration and expression necessary for personal growth (Rogers, 1970).

On the other hand, there are practitioners who support the view that failure of the leader to provide structure and direction, particularly in the early stages of the group, may result in ambiguity and the subsequent arousal of unproductive anxiety which may interfere with, rather than facilitate client
improvement (Bednar, Melnick, and Kaul, 1974).

The results of several studies indicate that pretherapy training which consists of specific structured experiences designed to clarify process goals and role expectations results in quicker therapeutic involvement, increased satisfaction, and more positive client growth. The pretraining methods have included group discussion, video-and audio-tapes, and individual interviews (Truax et al., 1968; Yalom, 1967). Generally, it would appear that preparing clients for a group experience may lessen anxiety and defensiveness, and enhance therapeutic involvement (Bednar, Melnick, and Kaul, 1974).

Most of the studies reported in the literature have compared either an affective behavioral approach with a no-treatment control, or a variety of cognitive-behavioral approaches with a no-treatment control. Yet, there are no known studies which compare an affective-behavioral approach with a cognitive-behavioral approach and a control group, in the development of internality. Such a comparison would be a worthwhile investigation, and is part of the purpose of this study. The use of a comparative treatment approach provides for the analysis of different method-client interactions which may provide data relevant to the effect of a particularly approach with a particular type of client (Kiesler, 1966; Paul, 1967).

In addition to attempting to discover treatment variables that effect outcome, increased attention has been given to client variables. Guinan and Foulds (1970) have suggested that an appropriate research goal would be to determine what kinds of clients profit most from group experiences. This suggestion leads
to an additional question about what kinds of clients profit most from what kinds of group experiences.

In light of the review presented thus far, it may be presumed that an internal versus an external frame of reference may be an important moderator of group counseling outcomes. Most studies concerning growth groups have considered subjects to be relatively "normal". This normality was assumed according to two criteria. Foulds (1971) decided that an absence of severe pathology and motivation for growth and change was equivalent to normalcy. Walton (1973) compared experimental and control group mean pretest scores with mean scores of a normal normative sample. These studies, however, do not report the scores of individuals, so that no knowledge is available concerning the range of scores and reader evaluation of the normality of subjects is impossible to assess. It is equally impossible to assess the impact of treatment approaches upon various levels of pretest performance.

The diagnostic importance of the personality characteristics of internals and externals lies in their ability to directly suggest differential group approaches. On the basis of data heretofore presented, one might anticipate that those who profit most from growth groups are people who have positive self-concepts, are somewhat autonomous, flexible, proactive, spontaneous, and who suffer less from anxiety.

On the other hand, one might expect that those who profit least from growth groups would have poor self-concepts, and be somewhat dependent, rigid,
passive, controlled, and anxious. A different form of treatment may be more effective for these people.

There are no known studies to support this clinical inference for the value of differential treatment methods for internals as opposed to externals. There is empirical reason to believe, however, that pretest performance may be a significant moderator variable.

In a study performed by Culbert, Clark, and Bobele (1968) which used Shostrom's POI as the dependent variable and two sensitivity groups as independent variables, the authors found that a treatment group with high pretest self-actualization scores did not demonstrate significant pretest-posttest gain score differences. However, a treatment group with moderate pretest scores did demonstrate significant gain score differences. The authors explained this phenomena by stating that the failure of high scorers to show change following treatment was due to the fact that they were quite healthy prior to treatment and, therefore, would have no gain to make.

The illogical assumption that healthy people do not grow healthier could more rationally be replaced by a regression explanation due to the artifacts of testing. However, either of these explanations are tenuous in view of the fact that some studies demonstrate that high scorers do change in positive directions.

White (1974) performed a study comparing the effects of laboratory training on self-actualization. Some of his high scoring subjects did gain significantly while others did not. In analyzing his results, White found that high scoring subjects that gained were in a group where subjects had high pretest hetero-
geneity. His assumption was that groups composed of subjects with low pretest variability produced less gain than groups with high pretest variability. Interindividual support and the advantages of modeling were two explanations for increased growth in heterogenous groups.

Reddy (1972) reports similar results in a study of member compatibility in sensitivity groups. He found that group incompatibility, defined as high pretest variability, produced greater gain in internality than did group compatibility which was defined as similar individual pretest scores. The author postulated that internality as an outcome can be enhanced through similarity which provide support and dissimilarity which produces motivation for growth. The results of these studies are supported by Byrd (1967).

Summary and treatment implications

It is apparent that internals and externals differ on a number of characteristics that suggest the possibility that different forms of treatment may be desirable.

Internals may be described as somewhat mature people who are seeking to move into stages of growth such as interdependence, emotional expressiveness, perceptual expansiveness and self-exploration. Consequently, they may prefer a form of treatment that is minimally structured, more personal and intimate, and which primarily focuses on ideational discovery, affective expression, self-disclosure, relationship variables, and a growth model of personality. In view
of this, an experiential growth group may be the most appropriate form of intervention.

In contrast, externals may be described as somewhat immature people who are seeking to move into preliminary stages of growth such as independence, competency, and a self-concept elaboration. Consequently, they may prefer a form of treatment that is topic-centered, structured, systematic, less personal and intimate, and which focuses on exploring alternative behavioral solutions to specific conflicts, personal change, individuation, increasing use of strengths to achieve self-determined objectives, and which maximizes the possibility of successfully determining and altering undesirable behavior. It was suggested that structure, dependability, and planning may decrease anxiety and facilitate success at goal achievement. This, in turn, may lead to increased internality. Therefore, a self-directed behavior change group may be the preferred form of intervention.

In view of recent group literature, it appears that client improvement may be enhanced if differential treatment methods share some common variables. These variables are: (1) the inclusion of experiential, action-oriented tasks, (2) pretraining to clarify process goals and role expectations, and (3) randomly assigned subjects with high pretest variability.

In comparison with other research, the design of this study would appear to be novel in at least three respects: (1) it allows for an examination of the interactions of treatments and levels, (2) it allows for multivariate treatment
comparison using substantially different models, and (3) treatment and control
groups will contain equal numbers of subjects matched and randomly assigned
from the same subject pool.
CHAPTER III

METHOD

A formal list of the hypotheses of the study is presented in this chapter. The instrument used in the study is described and a demographic description of the sample is presented. Finally, the procedures for implementing the treatment programs, collecting the data, and analyzing the results is explained.

**Hypotheses to be Tested**

The purpose of this study is to compare the effectiveness of two treatment conditions in helping college students become more self-reliant and supportive, and less dependent on the environment for support and direction. It is predicted that the more effective treatment procedure for the development of an internal frame of reference would lead subjects to evaluate themselves as more inner-directed in post-treatment testing. Specifically, the following three hypotheses were designed to assess this prediction.

**Hypothesis 1**

There will be no significant gain score difference, on a measure of inner-directedness, between subjects exposed to treatment condition 1 (a
Self-Directed Behavior change group), and subjects exposed to treatment condition 2 (an Experiential Growth group).

Hypothesis 2

There will be a significant gain score difference, on a measure of undirectedness, between subjects exposed to treatment condition 1 (a Self-Directed Behavior change group) and subjects exposed to treatment condition 3 (a no-treatment control group).

Hypothesis 3

There will be a significant gain score difference, on a measure of undirectedness, between subjects exposed to treatment condition 2 (an Experiential Growth group) and subjects exposed to treatment condition 3 (a non-treatment control group).

The first hypothesis appears to be stated in the null form. It is, in fact, a prediction of what is expected to happen and therefore, is not a null hypothesis.

The second prediction of this study concerned the relationship between subjects pre-treatment level of inner-directedness and the treatment conditions. It was predicted that subjects who obtain low scores on a pre-treatment measure of inner-directedness will show higher pretest-posttest gain scores from exposure to the Self-Directed Behavior group treatment condition than from the Experiential Growth group treatment condition. Subjects who obtain high pre-
treatment scores will show higher pretest-posttest gain scores from exposure to the Experiential Growth group than from the Self-Directed Behavior group. Specifically, the following two hypotheses were designed to assess this prediction.

**Hypothesis 4**

With regard to high-scoring subjects (Internals), the order of effectiveness of these three treatment conditions in increasing inner-directedness will be (from most to least effective): Experiential Growth group, Self-Directed Behavior group, and no-treatment control group.

**Hypothesis 5**

With regard to low-scoring subjects (Externals), the order of effectiveness of these three treatment conditions in increasing inner-directedness will be (from most to least effective): Self-Directed Behavior group, Experiential Growth group, and no-treatment control group.

**The Sample**

The subjects for this study were 72 regularly enrolled, full-time academic students at Idaho State University. The sample consisted of 38 males and 34 females, with an age range which varied from 18 to 38 years, with a mean age of 23 years. The distribution of the subjects by class level was as follows:
18 freshmen, 17 sophomores, 8 juniors, 14 seniors, and 15 graduate students. Six of the students were divorced, 16 were married, and 50 were single.

The average academic ability of the sample as assessed by the American College Testing program, based upon Idaho State University norms, was a mean composite score of 18.5 which is at the 40 percentile. This does not differ significantly from the university mean composite score of 19.6 which is at the 45 percentile.

Sex differences of the sample with respect to age, class, marital status, and ability were very small and insignificant. On the basis of comparing the above data with overall university means it was determined that this sample does not significantly differ from the general student population, and therefore these variables should not account for the results obtained.

The subjects were all volunteers who had contacted the University Counseling Center and indicated their desire to participate in the ongoing group workshops that are held each semester. They were given the date and time of a general pre-group orientation meeting and were asked to attend that meeting only if they were willing to commit themselves to eight two-hour group meetings.

Eight-two students attended the pre-group orientation meeting, and from this initial pool 72 subjects were randomly selected for inclusion in the study.

An analysis of demographic data according to treatment conditions and treatment groups is summarized in Table 1.
Table 1. Comparison of demographic data of subjects according to treatment conditions and treatment groups

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<tr>
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<td>3</td>
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<td>G</td>
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<td>3</td>
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<td>3</td>
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</tr>
<tr>
<td>Marital status</td>
<td></td>
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<td>S</td>
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<td>2</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>D</td>
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<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
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<td>ACT composite means</td>
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<td>18.3</td>
<td>17.1</td>
<td>18.3</td>
<td>18.7</td>
<td>17.8</td>
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</tbody>
</table>

Instrument Used in the Study

Purpose, administration and scoring

The Personal Orientation Inventory (POI), a measure of mental health as defined by self-actualization theory (Shostrom, 1964, 1968), was used in this study as a measure of change or personal growth.
The POI measures values, attitudes, and behavior judgments. It is a normative inventory which consists of 150 forced-choice items which are stated both positively and negatively. In responding to the inventory, a subject is required to read both statements and select the statement that best describes his own opinion of himself. Responses are scored on two basic scales: Time Competence and Inner-Directed. There are ten minor subscales: Self-Actualizing Values, Existentiality, Feeling Reactivity, Spontaneity, Self-Regard, Self-Acceptance, Nature of Man, Synergy, Acceptance of Aggression, and Capacity for Intimate Contact.

The items which comprise these scales were selected and developed by practicing clinicians who, over a five year period of time, made observations of the value judgment problems presented by disturbed patients who were receiving psychotherapy. The instrument is scored twice: The first time gives scores for the major scales and the second time provides scores for the subscales. There is a great deal of item overlap on the subscales, and this lack of independence makes subscale interpretation difficult. For example, the Sy scale has only nine items, seven of which also appear on the SAV scale (Klavetter and Mogar, 1967; Shostrom, 1968; Silverstein and Fisher, 1968).

To serve the purposes of this study, internality, as defined by self-actualization theory, will be measured using the Inner-Directed (I) scale of the POI. This scale is reported to measure the tendency of an individual to determine, direct, and control his behavior according to an internal set of values and beliefs, as opposed to being determined, directed and controlled by external
pressures, demands, and expectations.

Support for exclusive use of the I scale comes from a variety of sources: (1) this scale is more statistically independent since it is not affected by the pervasive item overlap as are the subscales, (2) the I scale contains 127 of the 150 items, and therefore is the single most representative overall measure of self-actualization (Knapp, 1965), (3) the I scale is probably the most reliable and valid of the scales, and (4) the I scale is closely related to the purpose of this study.

Reliability

Two major reliability studies on the POI have been reported. The first was a one-week interval test-retest study by Klavetter and Mogar (1967) using a sample of 48 students. Reliability coefficients ranged from .55 to .85 with the I scale yielding a coefficient of .84.

The second study was a one-year interval test-retest reliability study by Ilardi and May (1968). Reliability coefficients ranged from .32 to .71. While higher correlations would be much more desirable, those reported are acceptable and within the reliability generally reported for personality tests. This suggests that the instrument, particularly the I scale, is a reasonably reliable instrument for research purposes.
Validity

The validity of the POI has been demonstrated by several studies in which it has differentiated subjects already identified as representing various levels of self-actualization. In a study comparing a group of clinically selected self-actualized adults \((n = 29)\) with a group of clinically selected non-self-actualized adults \((n = 34)\) Shostrom (1964) found highly significant differences on 11 of the 12 scales.

Fox, Knapp, and Michael (1968) found that all twelve POI scales significantly differentiated between a group of hospitalized psychiatric patients \((n = 100)\), a group of self-actualized adults \((N = 29)\), and a group of normal adults \((N = 158)\). Shostrom and Knapp (1966) also found significant differences on all 12 scales between a group of patients entering therapy \((N = 57)\) and a group of patients in advanced states of psychotherapy \((N = 39)\).

In addition to the above mentioned studies, the POI has been found to differentiate between alcoholics, normal adults, and self-actualized adults \((Zaccaria and Weir, 1967)\), achievers and underachievers \((LeMay and Damm, 1968)\), and psychopathic felons and normal adult males \((Fisher, 1968)\). In all of these studies, the I scale is generally the most discriminating scale.

Additional support for the validity of the I scale is its demonstrated ability to measure change from pre-treatment to post-treatment as a result of independent variables such as sensitivity training \((Culbert, Clark, and Babele, 1968)\), marathon groups \((Guinan and Foulds, 1970)\), personal growth groups
(Foulds, 1971), and creative risk takers (Byrd, 1967).

With respect to construct validity, the POI has generally been compared to measures of pathology. The I scale has been found to be positively correlated with scholastic achievement (LeMay and Damm, 1968), extraversion (Knapp, 1965), the autonomy scale of the EPPS (Grossack, et al., 1966), and creativity (Damm, 1970).

Negative correlations have been obtained between the I scale and a measure of conformity behavior (Crosson and Schwendiman, 1972), neuroticism (Knapp, 1965), and depression, psychasthenia, and social-introversion as measured by the MMPI (Shostrom and Knapp, 1966).

**Relationship of measure to study**

It has been demonstrated that internality is significantly related to autonomy, proaction, and health. The I scale, as a measure of internality, has been correlated with resistance to influence (Hekmat and Theiss, 1917), nonconformity (Crosson and Schwendiman, 1972), achievement (Leib and Snyder, 1967), and neuroticism (Knapp, 1965). The I scale would appear to be adequate, for the purposes of this study, as a measure of the values and behavior construed to be of importance in the development of internality.
Procedure

Assignment to groups

One week prior to the beginning of the group workshops, the subjects met at the Counseling Center for a pre-group orientation meeting. During this meeting the general goals of the groups were discussed, and the subjects were given an idea of what they could expect to happen. The POI was administered to the students, and they were asked to fill out a schedule indicating the times and days that they would be available to meet. They were told that due to staff and time limitations, some students would have to wait until the second 8 weeks of the semester before their groups would begin. At the conclusion of the meeting they were informed that they would be notified within three days as to the time and date their group would meet.

As soon as the tests were scored, the names of all potential subjects were placed in a hat and ten were randomly removed to leave a total of 72. The remaining subjects were then rank-ordered from highest to lowest in terms of their I scale scores. The top three scores were randomly assigned, by drawing from a hat, to one of the two treatment conditions and the control condition. This method of assignment continued until all people had been placed in a treatment or no treatment condition. The subjects in each condition were then rank-ordered from highest to lowest in order of pretest scores, and then were randomly assigned to one of two treatment groups within each condition. The names were then matched with available times and dates, and groups were
assigned to a time and day. Eight people had time conflicts and were changed with others with similar scores to a more appropriate time and day. The subjects were then notified of their first group meeting by phone. During this process, five people indicated a desire to discontinue, and they were replaced with similar scoring subjects from the original subject pool. There were four treatment groups with 12 students in each group for a total of 48 experimental subjects. Each group had an equal number of high, moderate, and low scoring subjects.

Treatment 1 groups met Tuesday afternoons from 3:00 to 5:00 (Group A) and Thursday evenings from 7:00 to 9:00 (Group B). Treatment condition 2 groups met Tuesday evenings from 7:00 to 9:00 (Group C) and Thursday afternoon from 3:00 to 5:00 (Group D). Each group met for 2 hours, once a week, for 8 weeks, for a total of 16 hours. None of the subjects missed more than one group meeting. The posttest was given at the conclusion of the last group meeting. All of the group meetings took place in a large room in the Counseling Center, and all were under the direction of the author of this study, who was a full-time member of the Counseling Center with over six years experience in leading groups.

A concerted effort was made to assure that the POI was administered under standardized conditions. The testing was supervised by a trained graduate student who was not connected with the experiment in any other way. The tests were administered according to instructions given in the POI manual (Shostrom, 1968).
Treatment conditions

Self-Directed Behavior Change Group (Treatment Condition 1). This treatment consisted of an intensive, experiential, intrapersonal, structured, systematic, less intimate, short-term group counseling program. The general direction of this group was from experiencing to conceptualizing to relating to one's self, to experimenting with alternative responses, and finally to expanding response patterns. The content of the program was focused on experiential and cognitive tasks which enabled the participants to discover and define specific self-defeating behaviors; to begin to own, to accept responsibility for, and to experience the consequences of these behaviors; to create, experiment with and select more self-fulfilling behaviors; and to create a belief system that may facilitate continued self-directed growth and problem solving. Each group session had a cognitive component (mini-lecture or discussion) and a self-exploration component (task, exercise). The role of the leader was to teach and clarify the process and facilitate subject movement and involvement by helping each person plan and initiate specific attitude and behavioral changes which took the form of homework assignments (see Appendix A).

Experiential Growth Group (Treatment Condition 2). This treatment consisted of an intensive, experiential, interpersonal, semi-structured and intimate short term group counseling program. The general direction of this group is from self to others, to the larger group, to the environment outside the group, and back to self. The content of the program focused on emotional
understanding based on the experiencing of threatening feelings, the disclosure of these feelings, interpersonal feedback, encounter and confrontation, and group trust and cohesion. Each group session focused on the "here and now" of experience and deeper exploration of the self in terms of feelings, ideas, and behavior, and the impact of these functions on others. There was little focus on group goals, but there was emphasis on interpersonal behavior, and individual experimentation with self and others through a variety of verbal and non-verbal techniques such as dance, body movement, sensory awareness, painting, touch, play, group and individual fantasy, and Gestalt awareness exercises. Group normative pressures were restricted, and participants were encouraged to own, accept, and take full responsibility for their behavior, and to discover and express emotions, respond to relationships, initiate activity, and develop self and interdependent support. The leader's role is one of participant, and facilitator. He often acted on his own personal growth goals, and modeled non-judgmental and responsible experimentation. He was less likely to play "expert" by probing and analyzing. He often would interrupt opinion and interpretation games that had no substance (see Appendix B).

No-Treatment Control Group (Treatment Condition 3). This group consisted of 24 subjects who were assigned to two groups in the same manner as were treatment subjects. The S's met at the conclusion of the group program to take the posttest and to select a time for their group to begin meeting. It was explained to these subjects that limitations of time and space made it necessary for them to begin in eight weeks. Every effort was made to insure
each subject that the Counseling Center was interested in them and they would receive a complete group program as soon as the others were finished. At the end of four weeks each subject was contacted to check on how they were doing. At the end of seven weeks each subject was again contacted and told of the meeting that would take place in one week to discuss their upcoming group experience, and select a time and day.

Analysis of Data

This investigator concluded that the randomized block design (treatment by levels) employed in analysis of variance, would be most adequate for this study. The statistical procedure used was analysis of variance of the pre-test-posttest gain scores. The main strengths of this design is that it allows for a comparison of the main effects of treatments, and an analysis of the effects of treatments at different levels of the control variable.
CHAPTER IV
RESULTS

The purpose of this chapter is the presentation and analysis of the data collected in the present study. To assess the effects of treatments and treatments by levels an analysis of variance appropriate for a randomized block design (treatment by levels) was employed. The unit of analysis used was the pretest-posttest gain (improvement) scores for each subject. To assess the main effects of treatment, and the simple effects due to interaction, the t-test for differences among correlated means was employed. The .05 level of confidence was selected as the significance level for all data. To facilitate analysis and significance testing, treatment groups were combined into their respective treatment conditions.

Preliminary Data

The size of the sample employed in this study necessitated the division of each treatment condition into two treatment groups containing 4 subjects from each level, for a total of 12 subjects in each group. For the purpose of analysis, the groups were recombined to form the total sample for each treatment condition. As stated in Chapter III, group A (SDB) and group D(EGG) were held in the afternoon, while group B (SDB) and group C (EGG) were held in the evening. Prior to combining group A with group B, group C with group
D, and group E with group F (no-treatment control groups), it was necessary to determine if there were any significant pre-treatment differences between the groups. Table 2 presents an analysis of variance of the pretest data with individual "I" scale scores serving as the units of analysis.

Table 2. Analysis of variance of POI "I" scale pre-test scores

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>SS</th>
<th>df</th>
<th>ms</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>7395</td>
<td>71</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Levels</td>
<td>5821</td>
<td>2</td>
<td>2910</td>
<td>107.77***</td>
</tr>
<tr>
<td>Treatments</td>
<td>53</td>
<td>5</td>
<td>10.6</td>
<td>.392</td>
</tr>
<tr>
<td>Treatments X Levels</td>
<td>55</td>
<td>10</td>
<td>5.50</td>
<td>.204</td>
</tr>
<tr>
<td>Experimental Error</td>
<td>1466</td>
<td>54</td>
<td>27.00</td>
<td>-</td>
</tr>
</tbody>
</table>

***Significant at .001 level.

Since each group was assembled to represent different levels of inner-directedness, as Table 2 indicates, there were highly significant differences between levels. There were no significant differences, however, between the three treatment groups or the treatment groups by levels. The fact that none of the means were significantly different at pretesting indicates that the random assignment of subjects was within the limit of chance expectations.

Since the groups were conducted in both the afternoon and the evening, the time of day of treatment could have influenced improvement scores. To examine this potential source of bias, afternoon and evening groups, within
each treatment condition, were compared at each level to determine if there were any significant post-treatment differences. The t-test for correlated mean changes was used to determine significance. Table 3 presents posttest means, standard deviations, and t-tests for the groups within each treatment condition by levels. This analysis indicates that there were no significant differences between the afternoon and evening groups in each treatment condition at the termination of treatment. Therefore, time of day of treatment was not an influential factor in this study. Data contained in Tables 2 and 3 support the combination of groups into treatment conditions.

Table 4 shows pretest-posttest gain scores, means, and standard deviations for each treatment condition by levels. This table presents the overall means which were used to determine the main effects of treatments.

Results of Hypothesis Testing

The purpose of this study was to investigate the comparative effects of two different group counseling methods on the inner-directedness of college students, and to compare these methods with the effects of testing and the promise of treatment (no-treatment control). Due to the personality characteristics which differentiate internals and externals, there was reason to believe that the success of the group counseling methods would depend on the subjects pre-treatment level of inner-directedness. This treatment by levels interaction became an important second focus of this study.
Table 3. Posttest means, standard deviations and t-tests for significance of differences between treatment groups within each treatment condition by levels

<table>
<thead>
<tr>
<th>Treatments</th>
<th>SDB</th>
<th></th>
<th>EGG</th>
<th></th>
<th>NTC</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
</tr>
<tr>
<td>Time</td>
<td>Mean SD</td>
<td>Mean SD</td>
<td>Mean SD</td>
<td>Mean SD</td>
<td>Mean SD</td>
<td>Mean SD</td>
</tr>
<tr>
<td>Levels</td>
<td>Afternoon</td>
<td>Evening</td>
<td>Afternoon</td>
<td>Evening</td>
<td>Afternoon</td>
<td>Evening</td>
</tr>
<tr>
<td>High</td>
<td>104.00 4.54</td>
<td>105.00 2.16</td>
<td>107.75 3.78</td>
<td>108.75 3.32</td>
<td>97.50 7.14</td>
<td>96.50 5.42</td>
</tr>
<tr>
<td>Normal</td>
<td>94.75 5.75</td>
<td>95.25 5.12</td>
<td>95.50 4.18</td>
<td>95.25 7.04</td>
<td>86.25 4.72</td>
<td>85.50 4.37</td>
</tr>
<tr>
<td>Low</td>
<td>89.25 7.89</td>
<td>87.75 13.23</td>
<td>77.75 4.58</td>
<td>81.50 6.94</td>
<td>76.50 2.65</td>
<td>76.37 4.86</td>
</tr>
</tbody>
</table>

*All t-values in this table are non-significant.*
Table 4. Pretest-posttest gain score means, standard deviations, and tests of significance for each treatment condition by level

<table>
<thead>
<tr>
<th>Level</th>
<th>Self-Directed behavior</th>
<th>Experiential Growth Group</th>
<th>No-Treatment Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>SD</td>
<td>Means</td>
</tr>
<tr>
<td>1. High (Internals)</td>
<td>7.625***</td>
<td>3.67</td>
<td>10.620***</td>
</tr>
<tr>
<td>2. Normals</td>
<td>10.875****</td>
<td>3.48</td>
<td>9.630***</td>
</tr>
<tr>
<td>3. Low (Externals)</td>
<td>15.000***</td>
<td>12.45</td>
<td>4.250**</td>
</tr>
<tr>
<td>Overall</td>
<td>11.330</td>
<td>8.10</td>
<td>8.160</td>
</tr>
</tbody>
</table>

*Significant at .05 level.
**Significant at .02 level.
***Significant at .01 level.
****Significant at .001 level.
It was predicted that exposing subjects to group counseling would result in improvement as measured by the POI "I" scale, whereas exposure to a no-treatment control condition would not result in improvement. It was also predicted that the average effect of each treatment condition, ignoring levels, would result in equivalent change when comparing SDB with EGG with the no-treatment control condition.

Table 5 presents the results of the analysis of variance employed to determine the significance of the main effects of treatments and the simple effects of treatments by levels.

Table 5. Analysis of variance of POI "I" scale gain score data

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>SS</th>
<th>df</th>
<th>ms</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>3548.66</td>
<td>71</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Levels</td>
<td>7.46</td>
<td>2</td>
<td>3.73</td>
<td>.14 n.s.</td>
</tr>
<tr>
<td>Treatments</td>
<td>1342.70</td>
<td>2</td>
<td>671.35</td>
<td>23.89***</td>
</tr>
<tr>
<td>Treatments X Levels</td>
<td>428.63</td>
<td>4</td>
<td>107.16</td>
<td>3.82**</td>
</tr>
<tr>
<td>Experimental Error</td>
<td>1769.87</td>
<td>63</td>
<td>28.09</td>
<td></td>
</tr>
</tbody>
</table>

**Significant at .01 level.
***Significant at .001 level.

In regards to the first prediction, Table 5 indicates that while there were no significant differences due to the effects of levels independent of treatment, there were significant differences for the main effects of treatments and the simple effects of treatments interacting with levels.
The following hypotheses were used to investigate the significant differences for the main effects of treatments:

**Hypothesis 1**

There will be no significant gain score difference, on a measure of inner-directedness, between subjects exposed to treatment condition 1 (SDB) and subjects exposed to treatment condition 2 (EGG).

**Hypothesis 2**

There will be a significant gain score difference, on a measure of inner-directedness, between subjects exposed to treatment condition 1 (SDB) and subjects exposed to treatment condition 3 (NTC).

**Hypothesis 3**

There will be a significant gain score difference on a measure of inner-directedness, between subjects exposed to treatment condition 2 (EGG) and subjects exposed to treatment condition 3 (NTC).

Pretest-posttest gain score means and tests of significance for treatments main effects are presented in Table 6. As predicted, there were no significant differences between the self-directed behavior treatment condition and the experiential growth group treatment condition. Therefore, hypothesis
1 was confirmed. The mean pre-post gain scores slightly, but not significantly favored the SDB approach.

Table 6. Pretest-posttest gain score means and tests of significance for treatments main effects

<table>
<thead>
<tr>
<th>Treatment Conditions</th>
<th>EGG</th>
<th>NTC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Means</td>
<td>8.12</td>
<td>1.00</td>
</tr>
<tr>
<td>SDB</td>
<td>11.33</td>
<td>3.12 n.s.</td>
</tr>
<tr>
<td>EGG</td>
<td>8.12</td>
<td>7.12*</td>
</tr>
</tbody>
</table>

*Significant at .001 level
n.s. - Non-significant

There were, however, highly significant differences between each of the treatment conditions and the no-treatment control condition. Therefore, hypotheses 2 and 3 are confirmed. All forms of treatment appear to be more effective than exposure to testing and waiting.

There were no hypotheses to assess within conditions change. However, Table 4 presents data indicating that the pretest-posttest differences for subjects at each level of each experimental condition were significantly different, indicating that both forms of treatment, at all three levels, were effective in increasing inner-directed scores.
In summary, the analysis of pretest-posttest gain score data confirmed hypotheses 1, 2 and 3. Ignoring treatment levels, both the treatment conditions produced greater increases in inner-directedness than the no-treatment control condition. The relative effects of the SDB approach compared to the EGG approach appeared to be similar, with a slight but non-significant trend in favor of the SDB treatment.

The second question of this study concerned the interaction of treatment conditions with initial level of inner-directedness. It was predicted that the subjects who obtained low scores on a pre-treatment measure of inner-directedness (externals) would show greater gain from an SDB group than from EGG experience. Subjects who obtained high pretreatment scores would show greater gain from exposure to the EGG approach than from the SDB group. Two hypotheses were formulated to answer the following question: Is the outcome effectiveness of an SDB group and an EGG experience influenced by the initial, pre-treatment level of subjects inner-directedness? The specific hypotheses were as follows:

**Hypothesis 4**

With regard to high-scoring subjects (internals), the order of effectiveness of the three treatment conditions in increasing inner-directedness will be (from most to least effective): EGG, SDB, and NTC.
Hypothesis 5

With regard to low-scoring subjects (externals), the order of effectiveness of the three treatment conditions in increasing inner-directedness will be (from most to least effective): SDB, EGG, and NTC.

The analysis of data presented in Table 5 indicates that there was a significant interaction between treatments and levels of inner-directedness. Data presented in Table 7 indicates the location of significant interactions. This table, along with Table 4, indicates that the relative effectiveness of the treatments depended somewhat upon the level at which they were used.

As predicted, the SDB approach produced the greatest increase in internality, with externals, and significantly less increase with internals. The EGG treatment condition produced the greatest increase in internality with internals, and significantly less amount of increase with externals.

Internals receiving SDB improved somewhat more than expected, nearly equaling the EGG intervals in pre-post gain scores and gain score means. The differences between these two treatment conditions were not significant, but gain score means do indicate that the order of effectiveness of the three treatment conditions for internals is (from most to least effective) as follows: EGG, SDB, and NTC. Therefore, hypothesis 4 was confirmed.

Externals receiving SDB improved much more than expected, and significantly more than externals treated by EGG and NTC. The difference between the SDB and the EGG treatments was highly significant while the difference between exposure to the growth group and exposure to a no-treatment
Table 7. Comparisons of pretest-posttest gain score means for treatments by levels effects

<table>
<thead>
<tr>
<th>Treatments</th>
<th>Level</th>
<th>Means</th>
<th>SDB</th>
<th>EGG</th>
<th>NTC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Normal</td>
<td>Normal</td>
<td>Normal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>High</td>
<td>High</td>
<td>Normal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Low</td>
</tr>
</tbody>
</table>

- **SDB**
  - High: 7.625, 3.250, 7.875, 2.995, 1.875, 3.375, 6.750, 6.625, 6.505
  - Normal: 10.875, 4.625, 1.375, 6.625, 10.000, 9.875, 9.755
  - Low: 15.500, 4.880, 6.000, 11.250, 14.675, 14.500, 14.380

- **EGG**
  - Normal: 9.500, 5.250, 8.625, 8.500, 8.380
  - Low: 4.250, 3.375, 3.250, 3.130

- **NTC**
  - High: .875, .125, .245
  - Normal: 1.000, .120

**Significance Levels**

- **A** - Significant at .001 level.
- **B** - Significant at .01 level.
- **C** - Significant at .02 level.
- **D** - Significant at .05 level.

Numbers in columns represent mean differences.
control condition does not produce change, for externals, greater than could be expected by chance. However, gain score means indicate that the order of effectiveness of the three treatment conditions, for externals, is (from most to least effective) as follows: SDB, EGG, and NTC. Therefore, hypothesis 5 was confirmed. While externals exposed to EGG improved more than NTC, their improvement was not significantly greater.

It appears that the no-treatment control condition demonstrated a fairly stable and consistent influence on both internals and externals.

In summary, when levels are ignored, the general appearance of the data slightly favors the SDB treatment condition, although either treatment model was effective at producing self-reported value changes towards increased inner-directedness.

When levels are considered, the SDB condition and the EGG condition seem to be equally effective in producing improvement with internals, with the data slightly favoring the EGG condition. The SDB approach was clearly more effective in producing value changes with externals than the EGG or NTC conditions.

Both forms of treatment were significantly more effective than the no-treatment condition, at all levels, except for the EGG condition with externals. While the trend slightly favored the EGG method, there were no significant differences between externals exposed to EGG and NTC. Apparently, external subjects will profit as much from testing and waiting as they will from exposure to a growth group.
Ancillary Findings

The results reported in this section do not constitute part of the research design for hypotheses testing, but nevertheless, they may be of interest to the reader.

The levels used in this study were established by rank ordering all subjects within each treatment condition and assigning the top 8 pretest scores to level 1 (internals); the next 8 scores to level 2 (normals), and the last 8 scores to level 3 (externals). In establishing the validity of the POI, Shostrom (1964) obtained POI scores on clinically nominated self-actualized, normal, and non-self-actualized subjects. Table 8 compares the mean "I" scale scores for the three levels assigned for this study with mean "I" scale scores obtained by Shostrom (1964) for his three classifications. Comparison of these means indicates the similarity of pretest scores and validates the levels established for this study. Although the level 1 means for each treatment are slightly higher than those obtained by Shostrom, the difference is not significant. They are within the self-actualizing range (within one standard deviation of the mean). Level 2 and level 3 means are slightly lower, but the difference is not significant.

Of further interest, is a study performed by Knapp (1965) correlating the POI with the Eysenck Personality Inventory. His results indicated that a group of high neurotics obtained an "I" scale score of 74.00, and a group of
Table 8. Comparison of pretest mean scores, by levels, of this study with mean scores from other studies

<table>
<thead>
<tr>
<th>Level</th>
<th>SDB</th>
<th>EGG</th>
<th>NTC</th>
<th>Shostrom*</th>
<th>Knapp*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. High (internals)</td>
<td>96.875</td>
<td>97.625</td>
<td>95.625</td>
<td>92.86**</td>
<td></td>
</tr>
<tr>
<td>2. Normal</td>
<td>84.125</td>
<td>85.750</td>
<td>84.500</td>
<td>87.25***</td>
<td>84.14****</td>
</tr>
<tr>
<td>3. Low (externals)</td>
<td>73.600</td>
<td>75.375</td>
<td>75.250</td>
<td>75.76****</td>
<td>74.00*****</td>
</tr>
</tbody>
</table>

*Shostrom (1964)
*Knapp (1965)
**Self-actualized category
***Normal category
****None-self-actualized category
*****Low Neurotic category
******High Neurotic category

Low neurotics obtained an "T" scale score of 84.14. Comparison of these means are included in Table 8.

Since it was possible that learning was different for men and women in this type of experience, t-tests for POI differences between men and women were also computed. Table 9 presents means, standard deviations, and tests for significance of differences between means for each treatment group separated by sex. The conventional t-test was used to test for significance. From this data it may be concluded that none of the female and male experimental groups differed from each other, but they were all significantly different from the male and female groupings within the no-treatment control condition.
Table 9. Gain score means, standard deviations, and tests of significance for males and females in each treatment condition

<table>
<thead>
<tr>
<th>Treatments</th>
<th>Self-Directed Behavior</th>
<th>Experiential Growth Group</th>
<th>No-Treatment Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>Males</td>
<td>Females</td>
<td>Males</td>
</tr>
<tr>
<td>Means</td>
<td>9.75</td>
<td>9.88</td>
<td>6.42</td>
</tr>
<tr>
<td>SD</td>
<td>4.80</td>
<td>4.08</td>
<td>5.33</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.91</td>
<td>.95</td>
<td>.93</td>
<td>1.90</td>
</tr>
<tr>
<td>10.67</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SDB</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>9.75</td>
<td>.05</td>
<td>1.60</td>
</tr>
<tr>
<td>4.30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.83</td>
<td></td>
<td></td>
<td>1.81</td>
</tr>
<tr>
<td>4.08</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EGG</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>6.42</td>
<td></td>
<td>3.05*</td>
</tr>
<tr>
<td>5.33</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at .01 level
**Significant at .001 level

Therefore, the SDB condition and the EGG condition appear to have equal impact on both males and females, but both conditions result in much greater internality than does exposure to testing and waiting.
Similar results were found with subjects separated by age into two groups: 24 years and above, and 23 years and below. Apparently age had no effect on improvement scores.

With students designated as normals, the SDB and the EGG approaches were equally effective (Table 7). The trend was slightly in favor of the SDB condition, but was not beyond what would be expected due to chance. Both group approaches, however, did result in improvement far beyond the change produced by the no-treatment control. As Table 7 indicates, normals exposed to the SDB approach gained significantly more than externals exposed to EGG, while externals receiving SDB improved significantly more than normals receiving EGG.

In summary, in the attempt to compare the relative effectiveness of SDB and EGG group counseling for increasing inner-directedness in college students, it was found that there was no significant difference between SDB and EGG, but there was, however, a trend favoring the SDB approach. Both forms of treatment were significantly more effective than a no-treatment control condition.

In analyzing the interaction of treatment by levels of inner-directedness, it was found that the order of effectiveness for externals was (from most to least effective) as follows: SDB, EGG, and NTC. For internals, the order of effectiveness was as follows: EGG, SDB, and NTC. The SDB and EGG conditions produced statistically equivalent results with internals, but the EGG condition produced generally higher scores. The SDB condition was clearly
superior to the EGG condition at the external level. Both treatment conditions produced equivalent results with normal scoring subjects.
CHAPTER V
DISCUSSION

At least four interacting variables were potentially responsible for the outcomes achieved in this study. These variables were (1) the personality characteristics and the competency of the counselor, (2) the treatment methods and the behavior employed by the counselor, (3) the personality characteristics of the subjects, and (4) the intrasession interaction between subject. It should be noted that these variables are somewhat artificial in that they cannot be clearly differentiated.

In designing this study, some attempt was made to control for the effects of intrasession interaction. Following the suggestion of White (1974) and Reddy (1972), the groups were composed of subjects with high pretest variability. It was predicted that subject similarity would provide support and dissimilarity would provide motivation for growth. In addition, the SDB condition focused primarily on self-to-self and self-to-leader interaction such that interpersonal interaction was somewhat limited. No other attempts were made to control unique intrasession history.

Undoubtedly, the counselor's personality and competency influenced outcome. The extent and direction of this influence is unknown, and this unknown provides important areas for future study. In both treatment conditions the counselor attempted to be emphatic and accepting without being overly
permissive. In the EGG condition, the counselor's personality was more visible since he participated in pursuing his own growth goals, and was considerably more self-disclosing.

Given a reasonable amount of counselor competency, and an atmosphere of empathy and acceptance, it is possible to attribute the results of this study to the techniques employed in treatment, and the personality characteristics of the subjects (Strupp and Bergin, 1969).

While treatment and counselor variables such as cognitive input, tasks and exercises, emotional stimulation, modeling, empathy, caring, confrontation, intrasession structure, and interpretation were not exclusive to either group method, they were differentially emphasized (see Appendixes).

Client characteristics, as assessed by pretesting, were consistent across groups, and therefore, these variables independent of treatment, did not significantly affect outcome. As has been previously reported (Chapters I and IV) sex, age, academic ability, and various demographic factors apparently exerted little influence.

Main Effects of Treatments

The first three hypotheses were designed to assess the relative contribution of each treatment condition with the same dependent variable.

The results obtained in analyzing the main effects of the treatment conditions clearly indicate the superiority of both treatment conditions to a
no-treatment control condition. Ignoring levels, the mean gain scores of subjects exposed to either treatment rated themselves as significantly more inner-directed following treatment than they did prior to treatment. All subjects exposed to testing and waiting (no-treatment control) failed to evaluate themselves as significantly different at the end of eight weeks. Therefore, hypotheses 2 and 3 were confirmed.

These findings are hardly surprising, in view of the notion that doing something is usually better than doing nothing (Strupp and Bergin, 1969). They demonstrate, however, that group counseling does produce positive value changes towards increased internality.

The confirmation of Hypotheses 2 and 3 is consistent with the outcomes reported by previous studies with college students who have participated in sensitivity training (Culbert, Clark, and Bobele, 1968), marathon groups (Guinan and Foulds, 1970; Kimball and Gelso, 1974), and personal growth groups (Foulds, 1970; Walton, 1973; and White, 1974). These changes are also consistent with Rogers' (1970) observation that group experiences often result in increased independence, responsibility, and self-reliance.

Data confirming Hypothesis 1 indicates that neither treatment condition was statistically superior to the other. There was, however, a slight trend favoring the SDB approach. Any attempt to explain this trend must take into account the broad, indiscriminate grouping of subjects for the analysis of treatments main effects. In examining levels of the dependent variable it is apparent that the SDB method was nearly as effective as the EGG
method with subjects designated as internals, while the SDB approach was clearly superior to the EGG approach with external subjects. While the interaction of treatment and levels will be discussed later, it is apparent that failure to consider the personality characteristics of subjects may confound results obtained in comparative treatment studies, especially when these characteristics may influence changes more than any other variable (Strupp and Bergin, 1969).

The only statistically valid explanation for the above mentioned trend would be to attribute variation to chance. There are, however, at least two speculative explanations. First of all, college students are often seen as being in various stages of exposure to and experimentation with a variety of values and beliefs. Lacking the depth of experience which seasons and confirms carefully chosen values, it may be suggested that students possess belief systems which are tentative despite their functional adequacy. The SDB approach may have generally served to support and confirm these tenuous beliefs and encourage their expression in self-ratings.

A second explanation may reflect the nature of the more immediate experience of being a student. Since college is primarily a cognitively focused process, the SDB approach may have been more consistent with the subjects present level of functioning, yet different enough to provide impetus for self-exploration and change. Focusing on ideas is what students are used to doing, and therefore, represents no radical, anxiety arousing departure from usual activities.
Regardless of the trend, the results do indicate that group counseling results in value judgment changes characteristic of psychological growth in terms of independence, autonomy, and increased reliance on one's self for the determination, evaluation, direction, and control of behavior. Apparently, attacking inappropriate cognitions, expanding behavioral alternatives, and experiencing and expressing emotion results in different ways of thinking which more closely resemble the values of self actualizing people.

**Interaction of Treatments by Levels**

Since the treatment conditions were effective overall, it may be suggested that subject personality characteristics may be the most significant source of outcome influence. The last two hypotheses were designed to assess this suggestion. Specifically, it was anticipated that attacking irrational cognitions in addition to experiencing successful behavior change would prove to be more effective for subjects who had maladaptive ideas, values and behaviors (externals). Experiencing and expressing emotion, and engaging in satisfying interpersonal interaction was expected to be more effective at increasing internality with subjects who already possessed reasonably functional value systems (internals).

Observation of the data confirmed that these expectations were valid. Subjects who were classified as anxious, dependent, suggestible, conforming, passive, and reactive (externals) demonstrated significantly greater improve-
ment in internality from exposure to the counselor structured, intrapersonal, cognitive-oriented, systematic, behavior change group (SDB) than they did from exposure to a more permissive, nondirective, interpersonal, group structured, affective-oriented, experiential growth group (EGG).

On the other hand, subjects who were classified as proactive, initiatory, independent, and autonomous were able to profit from either approach, but the trend of their change was decidedly, but non-significantly, in favor of the EGG approach. Therefore, the SDB method was effective with both internals and externals, but in comparison, the results significantly favored the externals. The EGG method was effective with both internals and externals but, in comparison, the results significantly favored the internals.

The discovery that pre-treatment personality characteristics influence subjects receptivity to various treatment conditions aids in understanding which method worked best with which type of client. The SDB approach was definitely more effective with externals than was the EGG approach. This implies that warmth, empathy, and emotional expressiveness are not enough for externals and that a variety of techniques are required to engage these subjects in a growth process that will lead to substantial change. The additional techniques employed by the SDB approach included confrontation of cognitions and behavior, imposed structure, persuasion, and intrapersonal interaction (self-to-self).

The theoretical and empirical formulations presented in Chapter II may help to explain the different responses of internals and externals to the treatment conditions. If these formulations are valid, then it is primarily the
irrational and less functional beliefs and values of a restricted self-theory which cause externals the problems they experience. Their reluctance to be self-reliant and inner-directed stems from the belief that they are unable to control, direct, and determine their behavior and emotion, and results in symptomatology characterized by dependency, passivity, reactivity, impulsiveness, conformity, fear, and feelings of alienation and helplessness. These characteristics imply susceptibility to external stimulation, particularly of a directional nature.

The direct confrontation of irrational ideas and self-defeating behaviors, along with the opportunity to behaviorally experiment with new ideas may have enabled external subjects to understand and eliminate their irrational cognitions, and to replace them with more functional and congruent beliefs and behaviors. The forceful and persuasive nature of the SDB approach may have been necessary for externals to mobilize the effort needed to engage in more autonomous and self-initiated behavior. Hjelle (1970) has demonstrated that externals are more likely to change than are internals when imposed values contradict their own. In addition, changes should have been reinforced when the subjects experienced success in altering dysfunctional behavior.

The imposition of structure may also help to explain the results obtained with externals through exposure to the SDB approach. There is some evidence to support the notion that dependent people need structure to grow. Lieberman, Yalom, and Miles (1972) have stated their belief that psycho-
logically vulnerable people need structure in order to defend against overwhelming anxiety. Wispe (1951) has suggested that this anxiety is aroused as subjects fear making mistakes and subsequently avoid personal responsibility for success. Structure only allows this avoidance to occur. Be that as it may, there is empirical evidence to support the notion that structure is necessary.

Gilbreath (1967) compared a leader structured group with a member structured group and found that dependent, submissive, and defensive students demonstrated increased ego-strength from exposure to the leader structured group, whereas independent, spontaneous, and expressive students profited more from the member-structured approach. McKeachie (1958) demonstrated the same interaction effects with similar dependent variables using teaching methods as the independent variables. With anxiety as the criterion, structured and focused counseling has been demonstrated to be more effective in reducing anxiety in highly anxious subjects than a less structured and more spontaneous approach (Kaplan, 1966). The general premise of these studies is that less healthy people need therapeutic structure to avoid anxiety while they develop and integrate more independent cognitive and behavioral strategies. For highly anxious and neurotic subjects, structure may even be more important than a warm, empathic and supportive relationship with a therapeutic agent (Grimes and Allinsmith, 1961). Since they possess minimally functional value systems, what externals may most immediately require, if they are to engage in psychological growth, is a way to conceptualize and
integrate the data of their experience in order to maximize the opportunity
for success.

At any rate, the EGG approach did not lead to sufficient exploration
of the cognitive components of behavior and emotion to alter the value systems
of externals to any significant extent.

The foregoing discussion aids in understanding why the EGG approach
was so significantly less effective for externals. It may be that they lack the
cognitive framework necessary to introspect, verbalize, and process the data
of growth groups into insight. In addition, as Eysenck (1961) has stated, ex­
ternals are likely to react too strongly and persistently to external and inter­
personal stimuli. Since growth groups typically lack any systematic or order­
ly process, this approach, for externals, may have overstimulated, distracted,
and aroused anxiety sufficient to interfere with learning. Lacking the ability
and motivation for the active interpersonal participation required by the EGG
approach, it is logically consistent to assume that externals may profit more
from an intrapersonal rather than a relational process. As Rogers (1967) has
suggested, there are some characteristics which clients must possess in order
to profit from interpersonal growth groups. The assumption that a reasonably
substantial level of mental health is necessary to profit from encounter
therapies is apparently widespread, since most growth group leaders prefer
to select participants who are "normals". This study supports the validity of
this assumption, and suggests that one such characteristic may be the concept
of internality.
While irrational and poorly integrated conceptual systems do not appear to be the primary problem of internals, it could be suggested that incongruence between values and their behavioral and emotional expression is the central problem of internals. Perls (1969) states that in the course of contact with the environment it is possible that thinking, feeling, and acting get fragmented. In other words, what some people think they are may be different from their way of being, both affectively and behaviorally. This incongruence is most likely to result from a lack of awareness (Shostrom, 1972). If there is validity to this theoretical assumption, then increased awareness of self through interpersonal feedback, along with the experiencing of previously unallowed or distant emotion, and the strengthening and/or creative alteration of behavioral responses should result in greater value-behavior-emotion congruency, improved mental health, and increased POI scores. This explanation of the significant changes made by internals as a result of exposure to the EGG experience is consistent with the findings of Shostrom (1973).

In addition, the EGG treatment condition allowed internals to experience the effects of their tendency to be autonomous and independent. The respect for individual uniqueness which characterized this approach may have reinforced inner-direction, and partially contributed to increased POI scores.

The fact that internals responded more favorably to the EGG approach may also be partially explained by the simple observation that many sources of feedback data were utilized in this approach, while in the SDB method, the counselor was the primary source of feedback.
In contrast to externals, internals profited from both treatment conditions with statistical equivalency. The most plausible explanation for this discovery must include consideration of the personality characteristics of internal subjects. As has been outlined in Chapter II, internals are typically alert, curious, active, and open to a wide variety of experiences. They relate to their problems and are willing to assume responsibility for confronting their difficulties, gathering information, and finding solutions. They trust themselves to do well in less clearly defined and structured situations. In short, they are simply better therapeutic risks. According to Carkhuff and Truax (1965), Rogers (1967), and Strupp and Bergin (1969), clients who are healthier are more likely to demonstrate greater improvement in therapy.

Chapter II reported studies indicating that internals are resistant to influence unless reasoned arguments were consistent with their own beliefs. Their favorable response to the SDB condition does not support this notion. The counselors direct confrontation of the subjects affective, cognitive, or behavioral inconsistencies was not met with stubborn resistance as far as outcome was concerned. Apparently, internals are willing to work to solve their problems, and this willingness is more significant than their desire to flaunt their independence.

In summary, this study indicates that, in terms of inner-directedness, affectively-focused, experiential growth group counseling was statistically more effective with internals; cognitively-focused self-directed behavior group counseling was statistically more effective with externals; and when ignoring
subject personality characteristics, the self-directed behavior group counseling method is generally more effective.

Therefore, since improved scores on the POI indicate "healthier" functioning, it appears that the treatment conditions were growth-promoting experiences for subjects depending, somewhat, on their initial level of inner-directedness.

This discovery implies that the diagnostic assessment of a particular client should lead to some conclusions as to the kind of therapeutic experience he is most likely to benefit from. The selection of particular clients for particular types of group counseling is becoming more popular, and this study adds some tentative support to this practice. It is both false and misleading to assume that group participants have relatively uniform characteristics (Kiesler, 1966). If this study had not been designed to focus on treatment by personality interactions, very little useful information would have been gained. As Lieberman et al (1972), Rogers (1967), and Strupp and Bergin (1969) have all stated, the personality characteristics of subjects are instrumental in determining the effectiveness of different treatment conditions and must therefore be considered when planning therapeutic programs and assessing outcomes.

If one attempts to answer the question "Which form of group counseling is more effective with more clients more of the time," then the results of this study would indicate the self-directed behavior method.
CHAPTER VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The use of group techniques, as the most economical and perhaps the most effective treatment modality for meeting the increasing public demand for therapeutic experience, has become quite popular in the past few years. The enormous amount of experimentation with programs, methods, and techniques has left little time for empirical validation. In addition, much of the research reported in the literature has suffered from serious methodological limitations. To facilitate the usefulness of research findings, it has been suggested that experimental investigation should employ comparative treatment designs, including control subjects selected from the same population pool as the experimental subjects, and that the relative effectiveness of various treatments with clients who possess different personality characteristics should be assessed.

The primary goal of this study was to compare the relative effectiveness of an experiential growth group counseling method and a self-directed behavior group counseling method on the inner-directedness of college students who were differentially classified, on the basis of pre-treatment levels of mental health, into internals and externals. The secondary goal of this investigation was to directly compare the general outcome of each method,
independent of initial level of measured mental health, with the other method and with a no-treatment control group.

The sample for this study consisted of 72 college students who volunteered to participate in a group workshop. Each subject was randomly assigned to one of the two self-directed behavior groups, one of the two experiential growth groups, or to one of the two no-treatment control groups. Each of the six groups consisted of twelve subjects.

The 48 subjects in the treatment groups received 16 hours of group counseling. The 24 subjects in the no-treatment control condition received testing and the promise of future treatment.

The dependent variable selected for use in this study was inner-directedness as measured by the Personal Orientation Inventory "I" scale (Shostrom, 1964). The POI consists of 150 forced-choice items which are designed to measure the values basic to mental health as defined by self-actualization theory.

It was suggested (Chapter II) that the development of a value structure or a cognitive framework with which to understand, process and assimilate experience is essential for mental health. Such a framework was referred to as a self-theory or self-concept, and it was further suggested that the most important value in the self-theory, and the value selected for manipulation in this study, was the personally held idea that one can control, direct, and determine his behavior and emotion from within, versus the idea that one should or must defer to, or rely upon, the values, expectations, and needs of others for decision-making and evaluation. Subjects who indicated a preference for the
former set of beliefs were designated as "internals". Subjects who selected the latter set of beliefs were designated as "externals". The personality characteristics of internals and externals suggested the possibility that clients may prefer one form of treatment over another. This preference was assessed by outcome performance.

Relationships were drawn between the possession of an internal set of values and other important variables such as reduced anxiety, increased self-confidence, more efficient problem resolution, proaction, independence, and a decrease in pathological symptomatology. It was postulated that as subjects develop a more functional self-theory, they will be more likely to use this system of values for the determination, direction and control of behavior, and that they would evaluate themselves as being more inner-directed and more dependent on the demands and expectations of others.

Two group counseling methods were employed as the independent variables. One method focused on cognitive reorientation and systematic behavior change (SDB). The other method focused on experiencing and expressing emotion and the expansion of behavioral alternatives (EGG). It was anticipated that a direct attack on cognitions, in addition to the experience of successfully altering maladaptive behavior, would enable college students to rate themselves as more self-reliant (Hypothesis 2).

It was also anticipated that experiencing previously blocked emotion, expressing this emotion, and engaging in fulfilling interpersonal interaction would enable college students to rate themselves as more self-reliant
than control subjects (Hypothesis 3).

Since subjects were grouped with equal numbers of internals and externals in each treatment condition, it was expected that overall changes would indicate equal outcome when comparing treatment 1 with treatment 2.

The decision to use the previously mentioned treatment methods was based on a number of considerations. Since these approaches are currently in use by the author, evaluation of their effectiveness is an important aspect of professional responsibility. Secondly, since potency and powerlessness are important constructs in contemporary society, their therapeutic alteration deserves attention. Finally, since there is a considerable amount of speculation that client personality characteristics are the single most important variable effecting outcome, it is important to research the validity of this notion.

The study was organized according to a randomized block design (treatment by levels). Analysis of variance was employed as the basic statistical procedure and the t-test for correlated means was used to determine significance between treatments and for the interaction of treatments with levels of mental health.

A more detailed analysis (Chapter II) of the client and treatment variables described above resulted in the hypotheses that were developed and tested in the present study. Those hypotheses were as follows:

1. There will be no significant gain score difference, on a measure on inner-directedness, between subjects exposed to Treatment Condition 1, and subjects exposed to Treatment Condition 2.
2. There will be a significant gain score difference, on a measure of inner-directedness, between subjects exposed to Treatment Condition 1 and subjects exposed to Treatment Condition 3.

3. There will be a significant gain score difference, on a measure of inner-directedness, between subjects exposed to Treatment Condition 2 and subjects exposed to Treatment Condition 3.

4. With regard to high-scoring subjects (internals), the order of effectiveness of these three treatment conditions in increasing inner-directedness will be (from most to least effective): Treatment 2, Treatment 1, and Treatment 3.

5. With regard to low-scoring subjects (externals), the order of effectiveness of these three treatment conditions in increasing inner-directedness will be (from most to least effective): Treatment 1, Treatment 2, and Treatment 3.

Treatment 1 was the Self-Directed Behavior change group counseling method. Treatment 2 was the Experiential Growth Group counseling method. Treatment 3 was the no-treatment control group.

Hypotheses 1, 2, and 3 were designed to compare the main effects of treatments. Analysis of these effects confirmed all three hypotheses. While subjects in each of the treatment conditions were significantly more inner-directed following treatment, comparison of the two treatments indicated that they did not produce statistically different results. There was, however, a slight trend favoring the SDB approach.
Subjects in both treatment conditions became significantly more inner-directed than subjects exposed to a no-treatment control group, which consisted of testing and the expectation of treatment.

Hypotheses 4 and 5 were designed to assess the relative effects of each treatment upon subjects who had different pre-treatment levels of inner-directedness. Analysis of the interaction of treatment by levels confirmed both hypotheses. For internals, the EGG condition produced the greatest improvement in inner-directedness, and the SDB condition was more effective with externals. There was, however, a non-significant difference between the two treatment conditions with internals, while at the external level, improvement clearly favored the SDB approach. The EGG method resulted in change that was only slightly, and non-significantly, different from the change reported by subjects in the no-treatment control condition.

Ancillary findings indicate that time of day, sex, and age were probably not responsible for the changes made by the group participants.

Conclusions

The somewhat nonspecific and uncontrolled nature of the treatment conditions requires a certain tentativeness in drawing conclusions, particularly in regards to the effects of different techniques with different subjects. The following conclusions, however, appear to be warranted:
1. Group counseling was associated with improved subject self-ratings which indicated significantly increased inner-direction. Therefore, group counseling would appear to be an effective process for improving mental health as measured by the POI 'I' scale, in college students.

2. While there was a slightly favorable, but non-significant trend favoring the SDB condition, both of the group methods were significantly more effective than a no-treatment control condition.

3. Values and beliefs can be substantially altered, in a positive direction, by exposure to short-term group counseling methods which are considerably different in process, emphasis and technique.

4. Subjects scoring high on a pre-treatment measure on inner-directedness (internals) responded favorably and statistically equivalent to both the treatment conditions, with self-rated improvement slightly favoring the EGG condition. Therefore, an affective group can result in cognitive change, and apparently internals are people who can profit from a wide variety of experiences.

5. Subjects scoring low on a pre-treatment measure of inner-directedness (externals) responded favorably and significantly greater to the SDB condition than they did to the EGG condition. This finding indicates that externals are more responsive to a cognitive-oriented, structured, counselor-directed approach than to an affective-oriented, less structured, member-directed approach.
6. Conclusions 4 and 5 provide direct evidence that subjects who differed along the multi-dimensional construct of inner-directedness were differentially responsive to a behavior change group and an experiential growth group. Therefore, the widely held notion that group participants have uniform characteristics and subsequently are somewhat uniformly responsive to treatment is not supported by this study. This discovery indicates the necessity for assessing the personality characteristics of subjects and including these differences in the analysis of outcome results. Failure to do so may result in broad and indiscriminate subject groupings that will obscure valuable information.

Recommendations

The results of this study suggest the following recommendations for future investigations of the effects of group experiences on inner-directedness:

1. It has been suggested that group counseling outcomes are multi-dimensional (Strupp and Bergin, 1969). Since few individual measures are adequate for assessing therapeutic change, it is recommended that a variety of criterion measures be utilized in future studies of the effects of group counseling. A variety of measures would provide additional insight into the precise nature of outcomes.

2. One of the major limitations of this study was the use of a single group leader. In order to determine the effect of counselor competency and
personality, a variety of skilled group leaders should be employed in future studies.

3. Future studies should attempt to assess the effects of specific counselor behaviors and interventions. For example, Hekmat and Theiss (1971) have demonstrated that internals are resistant to influence, reinforcement, and manipulation, but may be less resistant to a leader who models. This study suggests the possibility that the use of modeling may be more effective with internals and that reinforcement and direct influence may be more effective with externals. Furthermore, this study suggests that the variables of warmth, acceptance, and empathy were perhaps necessary, but not sufficient, conditions for therapeutic change with external subjects. The role of counselor behavior in effecting outcome appears to be an important area for further study.

4. Since counseling centers typically see a wide variety of distressed students, it may be necessary for group counselors to develop the flexibility necessary to modify their approaches to successfully meet the specific needs that their clients express.

5. While outcome measurement is essential to understand the value of group counseling, additional investigation should include some measurement of process, particularly the interaction of counselor and clients. Process measures may allow further understanding of the specific phases of counseling models in an attempt to define more accurately the most potent parts of the models.
6. Each group treatment method employed in this study consisted of several techniques. While these techniques were differentially emphasized, they were not exclusive to either approach. Therefore, an attempt should be made to design and implement specific treatment models in order to isolate and identify specific variables and combinations of variables that may be connected with personal growth with particular clients. For example, the effects of counselor direction and structure may have partially contributed to the success of the SDB model with externals and internals. The experiencing and expression of emotion may have contributed to the success of internals with the EGG condition, but probably did not contribute to the success of externals with the SDB condition. The success of the SDB approach with both internals and externals implies the possibility that specific variables may be effective with a wide variety of client types. Isolation of these variables would be a significant step forward for group counseling, and may prepare the way for combining different approaches.

7. Effective group counseling should produce demonstrable changes in subjects' behavior outside the group setting. While this study demonstrated significant changes in values, further studies should employ some means of assessing behavioral changes in the subjects' life outside the treatment setting.

8. Research comparing group methods should attempt to differentiate the personality differences of clients as part of any analysis of outcome.
9. Comparison of the treatment approaches utilized in this study should be replicated with different subject populations to determine if they have any application beyond their use with college students.

10. Subject heterogeneity has been suggested as a variable which contributes to positive outcome. It would be interesting to compare the SDB and the EGG approach with homogenous groups.

11. Further research should be designed to add to present understanding of how and in what ways a person changes as he becomes more inner-directed.

12. The use of follow-up investigations to determine the permanency of value changes, and to assess changes that may occur after treatment would appear to be an essential part of group counseling evaluation.

In summary, this study indicates the need for additional comparative experimentation with the effects of a variety of specific treatment techniques and counselor variables on subjects with differentiated personality characteristics who are seeking various kinds of personal change. This statement suggests that attempts to answer the question, "Is group counseling effective?" should be discontinued in favor of the more essential question, "What forms of group counseling, administered by what kinds of group counselors, is most effective with what kinds of clients, with what kinds of concerns?"


APPENDIXES
Appendix A

A Description of the Self-Directed Behavior Model

This approach consists of an intensive, intrapersonal, structured, systematic short-term group counseling program. The primary assumption underlying this method is that intrapsychic and interpersonal functioning will be enhanced as a person learns a way in which to understand the information of his experience, and a way in which to process this data for effective problem resolution. In essence, members are encouraged to become their own self-scientists and therapeutic agents by learning and experiencing a way to reduce cognitive, emotional, behavioral, and interpersonal dissonance.

A second assumption of this method is that group members can engage in specific and clearly defined learning experiences that will expand their self-theories, increase receptivity and responsiveness to this internal system, provide success experiences with self-initiated, directed, and determined behavior, and aid in the elimination of self-defeating behavior.

The model focuses on intrapersonal rather than interpersonal data, and on identity skills rather than relational skills. Each participant is encouraged to work primarily with himself using the group content for direction and support. Giving and receiving feedback is only minimally acceptable on the premise that interpersonal confrontation can be an effective self-avoidance technique. Obviously, group cohesion is not a major focus, although oftentimes much self-
disclosure takes place. Members of the group are encouraged to utilize shared ideas, emotions, and behaviors for self-discovery rather than for understanding others.

The general direction of this model is from experiencing to conceptualizing to relating to one's self to experimenting with alternative behavioral responses, and finally to broadening response patterns. It is hoped that the client will move from initial dependency to greater independence in which significant choices are increasingly the responsibility of the client.

The content of the group sessions is directed toward enabling the client to: (1) discover and define specific self-defeating behaviors, (2) begin to own, to accept responsibility for, and to experience the consequences of these behaviors, (3) to create, experiment with, and select more self-fulfilling behaviors, and (4) to create a belief structure which may facilitate self-directed growth and problem solving. It is believed that as a person experiences these steps he will develop a more individual and rational philosophy of life which will subsequently affect perception, evaluation, and emotion.

Each group session usually has a cognitive component, or mini-lecture-discussion, and a self-exploration component, or exercise. The task session often follows the mini-lecture, and requires the members to engage in an exercise designed to provide direct experiencing of the phenomena discussed in the lesson section. Subjects are taught to assess how they felt, what they did, and what the content of their internal conversation was in each experience they were involved in. This data facilitates the clients awareness of how he defeats him-
self, and aids in experimenting with and evaluating changes. It helps him understand his ideas and values, and how he can change growth-inhibiting beliefs, and develop and utilize internal and consciously chosen beliefs. Interaction within the group is primarily self-to-self, secondarily self-with-counselor, and finally, self-with-others. The role of the leader is to teach and clarify the process and facilitate subject movement and involvement. Since his role is one of warmth-giving, imposing direction, and challenging, the anxiety often present in unstructured groups is lessened. The structured approach aids the client in discovering that behavior change is not a mystical act, but can be learned and consciously applied as a result of acquiring specific personal skills. Success at goal achievement may lead to increased internality.

In order for goals and objectives to be reached, the participants must involve themselves in the group learning experiences and discussions, and they must continue to examine and experiment between sessions. To facilitate outside the group involvement, specific homework assignments are given which involve reading handouts, experiencing pre-determined tasks, and preparing brief written reports which are given to the counselor. These homework assignments encourage self-exploration and the practice of difficult or new behavior. They help the participants learn that it is possible to change and that they can live life more successfully than in the past.

Source materials consulted in the development of this model include: Assagioli (1971), Berzon and Solomon (1966), Cudney (1972), Ellis (1962),
Session 1

Goal: To expand knowledge of one's self through awareness, observation, introspection and identification.

Objectives: (1) To observe one's self in a variety of experiences and situations, and (2) to gather data describing affective, behavioral, and cognitive responses to these events.

Tasks: Values exercises, relaxation, imagery, spectogram, peak-experiences, strengths-weaknesses, data recording.

Discussion: How to gather personal data. General theory of human behavior.

Session 2

Goal: Same as above.

Objectives: (1) To begin to organize and process data into typical behaviors and response patterns, and (2) to further clarify, define, and observe self-defeating behavior.

Discussion: Typical response patterns

Tasks: Same as above.
**Session 3**

Goal: To internalize response patterns.

Objectives: (1) To own and accept responsibility for behavior, and (2) to determine the goals of typical response patterns.

Discussion: Concept of responsibility. Behavior as purposive action.

Tasks: Role playing, intentionality, fantasy, paradox situation, and disowning through language.

**Session 4**

Goal: Same as above.

Objectives: (1) To experience the consequences of response patterns.

Discussion: The cost of self-defeating behavior.

Tasks: Same as above.

**Session 5**

Goal: Same as above.

Objectives: (1) To challenge the ideas upon which behavior and emotions are based, and (2) to differentiate the functions of the self from the core of the self.

Discussion: Control of behavior. Ellis' ABC theory.

Tasks: Role-playing, disidentification.
Sessions 6 and 7

Goal: To expand response patterns.

Objectives: (1) To explore alternative responses, and (2) to implement and experiment with alternative responses.

Discussion: Fears, and choices.

Tasks: Gestalt awareness exercises, and counselor-client interaction.

Session 8

Goal: Same as above.

Objectives: (1) To evaluate experiments, and (2) to reinforce self-fulfilling behavior.

Discussion: Evaluation

Tasks: Flowering of Rose
Appendix B

A Description of the Experiential Growth Group Model

This approach consists of an intensive, experiential, interpersonal, semi-structured, and intimate short-term group counseling program. The primary focus is on experiencing and expressing feelings about one's self and other group members, particularly feelings that might be threatening. This model emphasizes awareness, self-exploration, self-disclosure, interpersonal feedback, encounter, and confrontation. All of these processes are directed towards uncovering, expressing, and accepting emotion, exploring interpersonal styles, and resolving interpersonal conflict.

The major assumption of this model is that cognitive, behavioral, and emotional incongruence is based on a lack of awareness and acceptance. Increased awareness through interpersonal feedback, experiencing and expressing previously distant emotion, and the development of interdependent, relational skills should reduce incongruence and result in increased internality. Therefore, participants can grow emotionally as they let down barriers, get in touch with feelings, permit conscious awareness of feelings to emerge and then experience, acknowledge and own these feelings.

Since self-disclosure is generally a high risk activity, interpersonal trust is somewhat necessary to lessen anxiety and threat, and to promote risk-taking, involvement, authenticity, and openness. In this model, interpersonal trust is viewed as primarily a function of each individual's relationship with
himself and therefore group cohesion and group goals, in the classical sense, receive little attention. The emphasis is on individual growth goals, and the creative pursuit of these goals interdependently with others. Therefore, each person becomes aware of his own need for support and how this need may limit and/or enhance his functioning. Participants were encouraged to differentiate themselves from the group so that they can know what is theirs and what is others. At times, they would merge with the group and experience a sense of community and belongingness. As they experienced both autonomy and homonomy, they often recognized and expressed the higher satisfaction derived from interdependent functioning.

For the purposes of this study, an attempt was made in each experiential growth group, to follow the same general procedure, particularly in regards to the first few moments of each group session. During this period of time, experiential-interactional warmup techniques were utilized to aid members in making the shift from previous activities to the group, and to generate data for developing personal growth goals. Some of the techniques used include communicating through body movement, group sensory-awakening exercises, blind-milling, verbal and non-verbal dyads, group fantasy, guided imagery, relaxation training, music-meditation, and gestalt-awareness exercises.

The first group session began by having the subjects introduce themselves and talk for a few moments about their expectations for the group. Discussion continued until it was felt that each person had a similar view of the nature of the group, and its purpose for meeting. Subjects were then asked to
state what they hoped to accomplish and what they feared the most. The focus in this lengthy discussion period was primarily on defining the relationship problems people were experiencing, recognizing similarities and differences, and establishing personal goals for experimentation. The focus during this discussion was largely cognitive. Relaxation procedures were introduced and the subjects were asked to re-experience a highly successful experience of the past through imagery and visualization.

Subsequent group meetings usually focused on one individual's concerns and goals at a time. A variety of exercises were introduced depending on the content being explored. Some subjects were asked to be the opposite of what they usually were. One shy student was responsible for initiating discussions, while a particularly verbal student practiced active listening. Each person was encouraged to show anger, caring, and physical affect as he was touched by others.

Members were encouraged to focus on the "here and now", and "what and how," and to become aware of fears, avoidances, and manipulations. They often worked on discovering feelings, responding to relationships, expressing emotions, activating their own wishes, and developing additional self-support. The general direction of the group was from self to others, to the larger group, to others outside the group, and back to self.

The content of each group session arose spontaneously from the needs and desires of the group members. No formal, on-going structure with its attendant production goals was developed at any time, with the exception of
warm-up exercises. The boundaries for expression and interaction were loosely defined in hopes of maximizing behavioral freedom. However, the engagement of others in activities was considered in terms of their needs. After the first couple of group sessions, some students began to initiate group and individual activities.

The counselor's role was one of facilitator, therapist, and participant. These roles were shared by other group members. The counselor primarily acted on his own personal growth goals, and served more as a model than as a teacher or director. He occasionally offered procedural help, initiated tasks, challenged, confronted, and cared. He risked self-disclosure, and usually did not play expert through analysis games. He was, however, quick to respond to opinion and interpretation games that had no substance.

A source list of references related to this model include Perls (1969), Rogers (1970), Schutz (1973), and Shostrom (1973).
### Appendix C

**A Comparative Analysis of Treatment Conditions Variables**

<table>
<thead>
<tr>
<th>Focus:</th>
<th>SDB: Intrapersonal with an emphasis on the development of introspective and identity clarification skills.</th>
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<tbody>
<tr>
<td>EGG: Interpersonal with an emphasis on the development of relationship skills.</td>
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<table>
<thead>
<tr>
<th>Goals:</th>
<th>SDB: To increase inner-directedness through the discovery and elimination of nonfunctional ideas, goals, and behaviors. To learn a process for conflict resolution.</th>
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<tbody>
<tr>
<td>EGG: To increase inner-directedness through experiencing and expressing emotion and experimenting with interdependent and interpersonal strategies in the pursuit of individual growth goals.</td>
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<table>
<thead>
<tr>
<th>Direction:</th>
<th>SDB: From experiencing to conceptualizing to relating to one's self to experimenting with alternative ideas to broadening response patterns.</th>
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</thead>
<tbody>
<tr>
<td>EGG: From self to others, to the group, to others outside the group, and back to self.</td>
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<tr>
<th>Structure:</th>
<th>SDB: Leader directed with high intrasession structure. Content of group systematically arranged.</th>
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<tbody>
<tr>
<td>EGG: Member directed with minimal intrasession structure. Content of group spontaneous.</td>
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<tr>
<th>Interaction:</th>
<th>SDB: Primarily one to one counseling in a group setting.</th>
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<tr>
<td>EGG: Significantly more interaction among members.</td>
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<tr>
<th>Experiential Tasks:</th>
<th>SDB: To generate data primarily for self knowledge.</th>
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<tr>
<td>EGG: To clarify and expand data being explored.</td>
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Pretraining: SDB: Mini-lecture explaining goals and objectives and specific process.

EGG: Group discussions of member goals and expectations and general process.

Time Limits: Identical for each treatment.
VITA

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