Encounter group outcomes as correlates of selected personality variables
by Vivian Yvete Jenkins

A thesis submitted in partial fulfillment of the requirements for the degree of MASTER OF SCIENCE in Psychology
Montana State University
© Copyright by Vivian Yvete Jenkins (1980)

Abstract:
The notion that some encounter group participants benefit more than others was the central concern of this investigation. One hundred encounter group participants were each given one administration of the Rokeach D-Form-E, the Rotter Internal-External Locus of Control Scale, and a pre- and post-administration of the Personal Orientation Inventory in order to ascertain the relationships of dogmatism and locus of control to changes in self-actualization as a result of an encounter group experience. Results of the discriminant analyses supported the hypotheses that high and low dogmatic and internal and external locus of control individuals can be differentiated by the interaction of changes realized as a result of an encounter group experience. Results did not, however, support the hypothesis that low dogmatic individuals and internal locus of control individuals would realize greater benefit from an encounter group experience than would their high dogmatic and external locus of control counterparts. These results indicate that individuals exhibiting differing levels of dogmatism and locus of control are changing differently as a result of an encounter group experience as evidenced by the interaction of several variables. However, the direction of those differences—who is changing more—was not ascertained. It appears as though these two personality constructs may be influencing the outcomes of encounter groups.
STATEMENT OF PERMISSION TO COPY

In presenting this thesis in partial fulfillment of the requirements for an advanced degree at Montana State University, I agree that the Library shall make it freely available for inspection. I further agree that permission for extensive copying of this thesis for scholarly purposes may be granted by my major professor, or, in his absence, by the Director of Libraries. It is understood that any copying or publication of this thesis for financial gain shall not be allowed without my written permission.

Signature

Date May 19, 1980
ENCOUNTER GROUP OUTCOMES AS CORRELATES
OF SELECTED PERSONALITY VARIABLES

by

VIVIAN YVETE JENKINS

A thesis submitted in partial fulfillment
of the requirements for the degree
of
MASTER OF SCIENCE
in
Psychology

Approved:

Chairperson, Graduate Committee

Head, Major Department

Graduate Dean

MONTANA STATE UNIVERSITY
Bozeman, Montana

June, 1980
ACKNOWLEDGEMENTS

I wish to express my thanks to the members of my thesis committee, Dr. Douglas T. Kenrick, Dr. Robert L. Morasky, and Dr. M. Paul Willis for their valuable advice and criticism. I wish to express my special thanks to my committee chairman, Dr. George E. Rice, whose guidance, time and patience were invaluable.

My very special thanks go to my family and to my dear friends for their constant support and encouragement.

I would also like to thank the very special people at Camp Armac in Seattle, Washington, who created the opportunity for a large part of this investigation to take place, as well as all the individuals who spent time and energy completing the questionnaires that made this thesis possible. My sincere appreciation must also go to my typist, Evelyn Richard, whose experience and nimble fingers removed the burden of preparing the final draft.
## TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vita</td>
<td>ii</td>
</tr>
<tr>
<td>Acknowledgements</td>
<td>iii</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>iv</td>
</tr>
<tr>
<td>List of Tables</td>
<td>v</td>
</tr>
<tr>
<td>Abstract</td>
<td>vi</td>
</tr>
<tr>
<td>1 INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>6</td>
</tr>
<tr>
<td>Hypothesis</td>
<td>12</td>
</tr>
<tr>
<td>2 METHOD</td>
<td>13</td>
</tr>
<tr>
<td>Subjects</td>
<td>13</td>
</tr>
<tr>
<td>Apparatus</td>
<td>13</td>
</tr>
<tr>
<td>Procedure</td>
<td>16</td>
</tr>
<tr>
<td>3 RESULTS</td>
<td>18</td>
</tr>
<tr>
<td>4 DISCUSSION</td>
<td>29</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>39</td>
</tr>
<tr>
<td>Table Number</td>
<td>Title</td>
</tr>
<tr>
<td>-------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>Mean Dogmatism Scale Scores, Locus of Control Scores and Demographic Characteristics for all Subjects.</td>
</tr>
<tr>
<td>2</td>
<td>t-test Results for Pre-Test and Post-Test Personal Orientation Inventory for all Subjects.</td>
</tr>
<tr>
<td>3</td>
<td>Ranges, Means and Standard Deviations: Dogmatic Groups.</td>
</tr>
<tr>
<td>4</td>
<td>Results of Discriminant Analysis for High and Low Dogmatic Groups</td>
</tr>
<tr>
<td>5</td>
<td>Prediction Results from Discriminant Analysis for High and Low Dogmatic Groups.</td>
</tr>
<tr>
<td>6</td>
<td>Ranges, Means and Standard Deviations: Locus of Control Groups</td>
</tr>
<tr>
<td>7</td>
<td>Results of Discriminant Analysis for Internal and External Locus of Control Groups</td>
</tr>
<tr>
<td>8</td>
<td>Prediction Results from Discriminant Analysis for Internal and External Locus of Control Groups</td>
</tr>
</tbody>
</table>
ABSTRACT

The notion that some encounter group participants benefit more than others was the central concern of this investigation. One hundred encounter group participants were each given one administration of the Rokeach D-Form-E, the Rotter Internal-External Locus of Control Scale, and a pre- and post-administration of the Personal Orientation Inventory in order to ascertain the relationships of dogmatism and locus of control to changes in self-actualization as a result of an encounter group experience. Results of the discriminant analyses supported the hypotheses that high and low dogmatic and internal and external locus of control individuals can be differentiated by the interaction of changes realized as a result of an encounter group experience. Results did not, however, support the hypothesis that low dogmatic individuals and internal locus of control individuals would realize greater benefit from an encounter group experience than would their high dogmatic and external locus of control counterparts. These results indicate that individuals exhibiting differing levels of dogmatism and locus of control are changing differently as a result of an encounter group experience as evidenced by the interaction of several variables. However, the direction of those differences—who is changing more—was not ascertained. It appears as though these two personality constructs may be influencing the outcomes of encounter groups.
Chapter 1

INTRODUCTION

Encounter groups have recently emerged from a wave of phenomenal growth. From about 1966 to 1971 they proliferated, and were attacked, defended, publicized, scrutinized and developed, probably as much as any social science phenomenon in many decades. The initial exuberant response to encounter has apparently subsided and a period of reflection and integration appears to be setting in.

Encounter groups are geared toward increased openness to experience, trust, interpersonal satisfaction, insight into one's feelings, and risk taking (Rogers, 1970). Individuals interact in settings that are conducive to openness and acceptance, learning, understanding, and growth. The methods of encounter are eclectic, drawing from a wide variety of experiences and techniques of interpersonal relating.

Despite the numerous varieties in the manner in which these groups are being conducted, the essential ingredients still remain the same. An encounter workshop usually consists of several meetings spread over a weekend or over several days, with all residents typically living in the same location during this time. The workshop usually takes place in a carpeted room devoid of furniture, with all participants sitting on the floor or on pillows. The participants come together in small (usually 8-15 members), face-to-face groups
In order to interact with and receive feedback from one another in ways which have proven to develop a variety of interpersonal as well as intrapersonal skills. Each member, by reflecting on his own behavior and by way of the feedback he receives from the other members, has an opportunity to get a feeling for, experiment with, and improve his interactional or human relations style.

Criticism has been directed at the entire field of encounter group practice. Some of the critics make justifiable points, such as the lack of minimal professional standards, the need for more research, and the exaggerated claims made by some practitioners.

Many authorities are convinced that a significant advance has been made by encounter groups. Rogers (1968), for example, considers the encounter group as "perhaps the most significant social invention of this century" (p. 268). Abraham Maslow (1965) also values the group experience as a genuine contribution to growth and increased psychological soundness.

Attempts at fostering growth or more successful functioning in normal individuals have of late turned to the encounter group experience (Bach, 1966; Gottschalk and Pattison, 1969). Participants usually leave the groups glowing with enthusiasm, and there is considerable anecdotal material indicating that therapeutic gains are often permanent. As a therapeutic technique, however, encounter groups are still unproven.
The goals for encounter groups generally include increased self-confidence, personal interdependence, and positive attitude (Egan, 1970); self-insight, sensitivity to the behavior of others, and effective social skills (Campbell and Dunnette, 1968; Egan, 1970); reduced defensiveness, spontaneous expression and greater self-acceptance (Rogers, 1970); becoming more aware of one's self, breaking through self-deception, and getting to know and like one's self (Schutz, 1973). In general, the encounter group experience is an attempt to create a more positive self-concept and to develop improved social attitudes and skills. According to Schien and Bennis (1965), the overriding goal of the encounter group is to increase an individual's personal growth level and self-actualization.

There is no clear-cut empirical agreement as to the nature of the outcomes of encounter groups. Some studies suggest that the outcomes are no better for those who experience groups than for those with no group experience at all (e.g., McCardel and Murray, 1974); others suggest that the group experience is a detriment to the health of the participants (e.g., Lieberman, Yalom, and Miles, 1973); and still others swear to the efficacy of such an experience (e.g., Bach, 1966).

In discussing these discrepant findings and opinions, Weigel (1968) suggests that encounter group leaders may, in fact, be obtaining significant results that are being obscured by group
averages or comparison techniques. The Counseling Center Staff at the University of Massachusetts (1972) suggest the possibility of a subject X treatment interaction operating to obscure clearcut group differences. As Chassan (1960) points out, statistical significance can underestimate as well as over-estimate clinical effectiveness. This unfortunate circumstance occurs when a treatment is quite effective with a few members of the experimental group while remaining members do not improve or even deteriorate somewhat. Statistically, the experimental group does not differ from the control group whose members are relatively unchanged. When broad divergence such as this occurs among clients in response to intervention, statistical treatments will average out the clinical effects of the intervention. Bergin's (1966) review of large outcome studies highlights this problem.

Additionally, reference is made in the psychotherapy literature to the "patient uniformity assumption" (Kiesler, 1966). This refers to the belief that clients, "at the start of treatment are more alike than they are different" (p. 110). It is generally assumed that by choosing available samples from therapy and taking pre- and post-measures, the efficacy of a treatment will be reflected. It is generally believed that by this procedure one gets a homogeneous group of clients, differing little in terms of meaningful variables, and are homogeneous simply because they all sought therapy,
Far from being relatively homogeneous, clients coming to therapy are almost surely quite heterogeneous—actually much more different than they are alike. Because of the initial client differences, no matter what the effect of therapy in a particular study, one can conclude very little. No meaningful conclusions regarding the types of clients for whom therapy was effective or ineffective are possible.

In accord with this rationale, the results of three studies (Jones, 1973; Kilmann, 1973; Kilmann, Albert and Sotile, 1975) suggest that sub-group comparisons should be undertaken to tap the differential effects of the encounter group on the participants, as the usual variability of participant response to treatment may not surface in comparisons of the group means. Similar to what has been found in the evaluation of traditional therapy formats, these studies illustrate the importance of separately examining individual's responsiveness to treatment rather than relying upon group mean changes.

Following the lead of several investigators (e.g., Kiesler, 1966; Paul, 1967), increased attention has been given in the general counseling and therapy literature to the client variables that moderate the outcomes of treatment. Guinan and Foulds (1970) have raised the question of which kinds of clients profit most, or least, from encounter groups. And in a review article, Kilmann and Sotile (1976) suggest that research should be undertaken that will contrast participants within the same group, in order to begin to identify the
personality characteristics of the persons who benefit most and least from encounter group experiences.

Recently, studies have explored the relationship of personality characteristics and encounter group outcomes. Several (e.g., Bennis, Burke, Harrington, and Hoffman, 1957; Kimball and Gelso, 1974; Luke and Seashore, 1965; Miles, 1965; Steele, 1968) have reported this relationship to be negligible, while others report a significant relationship. For example, Jones (1973) found that high and medium ego-strength encounter subjects gained significantly more on the Personal Orientation Inventory (Shostrom, 1966) than their control counterparts and that low ego-strength encounter subjects gained significantly less than the control low ego-strength subjects.

Kilmann and Howell (1974) and Kilmann et al., (1975) explored the relationship between locus of control and outcomes of encounter group participants. They suggest that individuals with an internal locus of control orientation are more likely to benefit from the group session than their externally oriented counterparts.

Statement of the Problem

There appears to be theoretical reason to believe that individual differences should influence the effects of events in encounter groups, but there is little reliable data to support this conclusion or to show the nature of these expected effects. Since all
participants do not profit equally from an encounter group (Yalom and Lieberman, 1971) the search for significant client variables needs to continue.

This investigation is an attempt to begin delineating personality constructs that correlate significantly with encounter group outcomes. It is assumed here that the encounter group experience is capable of creating an environment conducive to change of one sort or another in individuals; it is hypothesized that the degree and kind of change is influenced by personality variables within each individual participating in the group.

There are certainly many personality variables and constructs to choose from, and most certainly the interaction involved is multidimensional. However, to avoid burdening subjects with excessive forms and questionnaires, the investigation focuses on two constructs of particular interest to the investigator -- Locus of Control and Dogmatism.

Previous research (Joe, 1971; Lefcourt, 1966; Rotter, 1966) has shown locus of control to be one of the better constructs for predicting a wide range of behaviors. It represents an individual's generalized expectancy concerning the contingencies of the reinforcements that follow behaviors. As a general principle, an "internal" individual perceives life events as being largely under his own personal control. Conversely, an "external" person perceives life
events as being outside his personal control and understanding and more likely a result of fate, luck or chance. Whether an individual believes he has control over the outcomes he receives or believes that his outcomes are controlled by external agents has been found to have important effects upon performance in various learning situations (Lefcourt, 1966; Rotter, 1966).

Of relevance to therapeutic change and personal growth is evidence demonstrating that internals, in contrast to externals, are less dogmatic (Joe, 1971), less anxious (Feather, 1967), more trusting and less suspicious of others (Hamscher, Geller and Rotter, 1968), more self-confident and insightful (Joe, 1971), and less maladjusted (Hersche and Schiebe, 1967). Internals have also been shown to be more willing to remedy personal problems, while evidencing a greater tendency to seek information and adopt behavior patterns which facilitate personal control over their environment (Lefcourt, 1966; Rotter, 1966).

As stated earlier, Kilmann and Howell (1974) and Kilmann et al., (1975) report that internally focused individuals show more benefit as a result of the encounter experience than do externally focused individuals. Cohen and Alpert (1978) also report a poor treatment response to hypnotherapy by externally focused patients.

Dogmatism has been defined by Rokeach (1954) as "a) a relatively closed cognitive organization of beliefs and disbeliefs about reality,
b) organized around a central set of beliefs about absolute authority which in turn, c) provides a framework for patterns of intolerance toward others (p. 195)."

Rokeach (1960) has also postulated that a belief system "represents all the beliefs, sets, expectancies or hypotheses, conscious or unconscious, that a person at a given time accepts as true of the world he lives in (p. 33)." Conceptually, belief systems vary along an open-closed continuum; that is, they vary in the degree to which they are open to the acquisition of new beliefs and to the change of old beliefs. The degree to which this belief system is open is postulated to affect the nature of specific abilities and adjustment to life. A central proposition of Rokeach's theory of the organization of belief-disbelief systems is that the cognitive system of closed-minded (dogmatic) persons is highly resistant to change. The basic assumption is that closed-minded persons are less able than open-minded persons to learn new beliefs and to change old ones. Evidence (Adams and Vidulich, 1962; Ehrlich, 1961a, 1961b; Rokeach, 1960) shows that a high level of dogmatism is directly associated with a high resistance to change.

In a field study, Ehrlich and Bauer (1966) demonstrated that the length of hospitalization of psychiatric patients was significantly associated with the degree of open- and closed-mindedness of the patients. The researchers interpreted the longer hospitalization
of closed-minded patients to be a consequence of their greater resistance to change.

Vacchiano, Strauss, and Schiffman (1968) conclude that, "the dogmatic subjects are confident in what they have been taught to believe...and are cautious and compromising in regard to new ideas, ...

Rokeach further conceptualizes beliefs as being in five categories located on a central-peripheral continuum. Rokeach, Reyher and Wiseman (1968) consider "consensual primitive beliefs" to be "Type A" beliefs. These beliefs represent an individual's "basic truths" about physical reality, social reality, and the nature of the self.

"Type B" beliefs involve beliefs of personal existence and self-identity. These beliefs do not require any support from reference groups. Examples include phobias, delusions, and hallucinations. But more routine beliefs are also retained with no consensus--beliefs held on pure faith as well as many self-enhancing and self-deprecating beliefs. "I believe my body is ugly," "I am a good person," for example (Rokeach, 1960).

"Type C" represents the beliefs a person has in and about the nature of authority. While "Type D", or derived beliefs, are basically those that we accept because they derive from our trust in an authoritative source. Finally, there are "Type E" beliefs, the
"inconsequential beliefs" within a belief system. Most of these are matters of taste and are not an integral part of one's self-beliefs.

Beliefs about self-identity, that is, "Type B" beliefs are those being dealt with by the encounter group experience, and therefore, are of specific concern for this investigation.

These five categories of belief are ordered along the central-peripheral dimension of the belief system, with "Type A" being the most central and "Type E" the most peripheral. Rokeach hypothesizes that a change in central beliefs will cause more changes in the belief system than will a change in peripheral beliefs. Because of the consequences of change for a belief system, highly central beliefs are postulated to be the most resistant to change.

Hallenbeck and Lundstedt (1966) assessed the level of dogmatism and the degree of acceptance of visual loss of blind males. The authors conclude that the closed-minded person appeared less willing to accept major changes of the self than did the open-minded person.

The only clear test of the hypothesis that central beliefs are more resistant to change than peripheral beliefs is reported in Rokeach et al., (1968). The hypothesis that the relative order of change would be A < B < C < D < E was confirmed.
Hypothesis

In view of the evidence presented above concerning the relationship of personal change to dogmatism and locus of control, it appears reasonable to consider the following hypotheses for this investigation:

1) that high and low dogmatic individuals will be differentiated by the interaction of changes (i.e., the Personal Orientation Inventory subscale changes) shown by participants; 2) that the internally and externally focused individuals will be differentiated by the interaction of changes realized by the participants; 3) that the low dogmatic group participant will exhibit significantly more benefit (positive change in self-actualization) than will the high dogmatic individual; and 4) that, consistent with previous research, individuals exhibiting an internal locus of control will display a significantly greater amount of benefit than will those exhibiting an external focus.

The possibility that the high and low dogmatic subjects are simply changing differently than each other and that external and internal locus of control subjects are also changing differentially will be explored first. Then the possibility of ascertaining the direction of these differences will be considered.
Subjects

Subjects for this field study included 36 participants in several encounter groups conducted at a Human Potential Center in Seattle, Washington, 35 students enrolled in a one-quarter Group Dynamics course at Montana State University, 12 participants from an "encounter weekend," 5 individuals from a private on-going group experience, and an encounter group of 28 male inmates from a Federal Penitentiary.

None of the groups involved were created for the purpose of research. Each was in a series of already existing groups organized independently of the investigation. Each subject involved was, therefore, first choosing to experience an encounter group, as well as choosing which particular group he was to be a member of. This follows a very basic norm of the encounter culture, that people choose the group they want when they feel ready for it (Rowen, 1975).

Apparatus

The primary purpose of the Rokeach Dogmatism Scale (Rokeach, 1960) is to measure individual differences in the amount of openness or closedness of belief systems. It purports to be independent of the content or directions of belief, measuring openness to new
concepts which might change the belief system versus closedness to concepts and situations which might threaten one's established belief system. Subjects are asked to respond with their opinion to forty social and personal questions and to indicate agreement or disagreement with each item on a six-point scale. Agreement with any statement is scored in the dogmatic direction, i.e., the higher the score, the more dogmatic a person is considered to be.

On a pragmatic level, investigators report that the scale works. People respond to the items in a consistent manner, their responses are stable over time, the items are logically connected to the theory and are empirically connected to other events predicted by the theory (Ehrlich, 1978).

The most widely used measure of locus of control is the Rotter Internal-External Locus of Control Scale (Rotter, 1966). It is a 29 item forced-choice questionnaire. Subjects are asked to read a pair of statements and then indicate with which of the two statements he more strongly agrees. The test is scored in the external direction; i.e., the higher the score, the more external a person is considered to be.

The Personal Orientation Inventory (POI) is a self-report measure developed by Everett Shostrom (1966) to meet the need for a comprehensive measure of values and behavior believed to identify the person who is more fully functioning than the average or below average
individual, that is, self-actualized. Conceptually, this inventory relates well to the encounter group's overriding goal of increasing the personal growth level and self-actualization (Schien and Bennis, 1965) of the participants. Because of the conceptual relevance and applicability to the encounter group experience, it was chosen as the dependent measure for this investigation. Previous research (e.g., Cooper, 1971; Culbert, Clark and Bobele, 1968; Foulds, 1970; Guinan and Foulds, 1970; Kilmann, Follingstad, Price, Rowland and Robinson, 1976; Kimball and Gelso, 1974; Young and Jacobson, 1970) has demonstrated its sensitivity and ability to detect movement within a group receiving a self-actualization treatment such as an encounter group experience.

The inventory has 150 two-choice paired-opposite statements of personal values, concepts and self-percepts. Scores are reported for twelve scales: Time Competence, Inner Directedness, Self-actualizing Value, Existentiality, Feeling Reactivity, Spontaneity, Self-regard, Self-acceptance, Nature of Man, Synergy, Acceptance of Aggression, and Capacity for Intimate Contact. However, the scale of Inner Directedness includes 123 of the 150 items and makes it the single most representative over-all measure of self-actualization (Knapp, 1965).

Findings of research conducted thus far using the POI suggest that the inventory is a reasonably valid and reliable measure of

Procedure

At the time of registration for the groups being studied, each participant was told that the group was an information gathering group and that he could expect to be asked to complete several questionnaires. Each participant was given a packet containing one copy each of a demographic questionnaire, the Dogmatism Scale Form E, the Rotter Locus of Control Scale and the POI. Each test had previously been numerically coded such that each subject had an identification number appearing on all his test materials. This allowed the participants to remain anonymous, while providing individual pre- and post-test information. The original packets were returned to the investigator at the first meeting of each group.

The Human Potential Center and Federal Penitentiary subjects all experienced a relatively highly structured, intensive group; that is, the treatment format followed a defined sequence of group exercises with the facilitator taking responsibility for the format. The remaining subjects experienced more low-structure encounter groups. There was no preconceived schedule and the group exercises utilized
were fit to the immediate perceived needs of the participants.

At the close of the group experience, participants were again asked to complete the POI. The average amount of time the subjects spent in their respective encounter conditions, between the pre-test and post-test, was about forty hours.
Chapter 3

RESULTS

The final sample used for analysis included 100 subjects: 63 males and 37 females. Table 1 below provides further descriptive information for the current sample.

Table 1
Mean Dogmatism Scale Scores, Locus of Control Scores and Demographic Characteristics for all Subjects

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>N</th>
<th>( \bar{X} )</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dogmatism Scale(^a)</td>
<td>100</td>
<td>135.82</td>
<td>29.93</td>
</tr>
<tr>
<td>Locus of Control(^b)</td>
<td>100</td>
<td>8.53</td>
<td>4.53</td>
</tr>
<tr>
<td>Age</td>
<td>97</td>
<td>30.04</td>
<td>10.98</td>
</tr>
<tr>
<td>Years of Education</td>
<td>97</td>
<td>14.03</td>
<td>2.46</td>
</tr>
<tr>
<td>Number of Groups Attended Prior to Current One</td>
<td>90</td>
<td>1.68</td>
<td>6.46</td>
</tr>
</tbody>
</table>

\(^a\) Maximum score = 280

\(^b\) Maximum score = 23

In determining whether these two personality constructs are related to encounter group outcomes, perhaps the first question to be considered is if, in fact, change occurred as a result of the
group experience, thereby justifying further analysis.

Each of the POI subscales consists of a differing number of responses. Therefore, to allow for comparison across subscales, the raw scores of each subscale, for each individual, were converted to standard scores. "Change" was defined as the differences between the pre-test and post-test standard scores for each subscale. The movements toward self-actualization from pre- to post-test were defined as "benefit," and were represented for the analyses by positive numbers. The movements away from self-actualization from pre- to post-test were represented by negative numbers.

A correlated t-test was performed on the POI pre- and post-inventories for the 100 subjects. The results of these tests are presented in Table 2 below.

As can be seen, the post-test scores are significantly higher than the pre-test scores for each of the twelve POI subscales, signifying that self-actualization had, on the average, been enhanced as a result of the group experience. These results must, however, be viewed with a certain degree of caution. Shostrom (1966) reports high (up to $r = .71$) intercorrelations among the subscales of the POI. Ten of the POI's subscales are not independent of each other and we must keep in mind the inferential pitfalls associated with performing multiple t-tests. Knapp (1965) and Damm (1969) have indicated that the Inner Directedness scale is the best single indicator of the
**Table 2**

*t*-test Results for Pre-Test and Post-Test

Personal Orientation Inventory for all Subjects

(N = 100)

<table>
<thead>
<tr>
<th>POI Scale</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \bar{X} )</td>
<td>SD</td>
<td>( \bar{X} )</td>
</tr>
<tr>
<td>Time Competence</td>
<td>45.68</td>
<td>12.92</td>
<td>50.46</td>
</tr>
<tr>
<td>Inner Directness</td>
<td>48.71</td>
<td>9.01</td>
<td>54.03</td>
</tr>
<tr>
<td>Self-actualizing Value</td>
<td>51.31</td>
<td>10.34</td>
<td>54.46</td>
</tr>
<tr>
<td>Existentiality</td>
<td>48.80</td>
<td>9.33</td>
<td>51.48</td>
</tr>
<tr>
<td>Feeling Reactivity</td>
<td>50.76</td>
<td>9.24</td>
<td>55.29</td>
</tr>
<tr>
<td>Spontaneity</td>
<td>51.92</td>
<td>9.86</td>
<td>57.87</td>
</tr>
<tr>
<td>Self-regard</td>
<td>50.47</td>
<td>11.11</td>
<td>54.45</td>
</tr>
<tr>
<td>Self-acceptance</td>
<td>44.33</td>
<td>8.90</td>
<td>48.95</td>
</tr>
<tr>
<td>Nature of Man—Constructive</td>
<td>46.30</td>
<td>10.38</td>
<td>48.90</td>
</tr>
<tr>
<td>Synergy</td>
<td>46.39</td>
<td>11.68</td>
<td>49.39</td>
</tr>
<tr>
<td>Acceptance of Aggression</td>
<td>47.44</td>
<td>10.22</td>
<td>51.39</td>
</tr>
<tr>
<td>Capacity for Intimate Contact</td>
<td>49.79</td>
<td>10.03</td>
<td>54.83</td>
</tr>
</tbody>
</table>

**** \( p < .001 \)

*** \( p < .005 \)

** \( p < .01 \)

* \( p < .05 \)
level of self-actualization contained in the POI. Klavetter and Mogar (1967) report that three subscales, Inner Directedness, Time Competence, and Self-actualizing Value, account for most of the test's variance. As can be seen from Table 2, change was significant for the subjects at the $p < .001$ level for both Inner Directedness and Time Competence, and significant at the $p < .005$ level for Self-actualizing Value. Even if only these three subscales are used, it can still be seen that a significant change did, on the average, occur for the encounter group participants.

The scope of this investigation, however, is to further these results by providing information about their relationship to the individuals involved. Several analyses were performed on the available data in an attempt to extract a comprehensive pattern for personality variables and encounter outcomes. The results of the most meaningful analyses are presented here.

In order to test the first two hypotheses, those stating that the high and low dogmatic individuals and the internal and external locus of control individuals will be differentiated by the interaction of benefits shown by participants, discriminant function analyses were performed to determine if the interactions of the changes in the POI subscale scores could discriminate between the opposite poles of two personality variables.

Marks, Conry and Foster (1973) suggest performing discriminant
function analyses on the standardized POI subscale scores in order to bypass the inferential problems with non-independent means. Additionally, this method allows conclusions to be drawn from analyses utilizing other than the often misleading group mean change scores discussed above.

The subjects were divided into two groups according to the level of dogmatism exhibited on the Dogmatism Scale. Individuals with the highest 30 percent and lowest 30 percent of the scores made up the high dogmatism and low dogmatism groups respectively (Rokeach, 1960). Sixty-two subjects were included in the analyses. Table 3 below provides the ranges, means, and standard deviations of the dogmatism scores for these two groups.

Table 3
Ranges, Means and Standard Deviations:
Dogmatic Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Range</th>
<th>X</th>
<th>SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Dogmatic</td>
<td>31</td>
<td>81 - 118</td>
<td>102.90</td>
<td>12.56</td>
<td>-16.54</td>
<td>.001</td>
</tr>
<tr>
<td>High Dogmatic</td>
<td>31</td>
<td>152 - 227</td>
<td>170.23</td>
<td>18.87</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A discriminant analysis was performed on these two groups to ascertain if the self-actualization benefits realized as a result of
the encounter experience would discriminate between the high dogmatic and low dogmatic individuals. The results of the stepwise analysis are provided in Table 4 below.

Table 4
Results of Discriminant Analysis
for High and Low Dogmatic Groups
(N = 62)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardized discriminant function coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self-regard</td>
<td>.93319</td>
</tr>
<tr>
<td>2. Locus of Control</td>
<td>.60187</td>
</tr>
<tr>
<td>3. Feeling Reactivity</td>
<td>-.54107</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Eigenvalue</td>
<td>.2101</td>
</tr>
<tr>
<td>Canonical correlation</td>
<td>.4167</td>
</tr>
<tr>
<td>Chi square</td>
<td>11.157</td>
</tr>
<tr>
<td>df</td>
<td>3</td>
</tr>
<tr>
<td>p</td>
<td>.011</td>
</tr>
</tbody>
</table>

The variables are those that were determined to be group discriminators and are presented in decreasing order of importance.

The variables used by the analyses produced a relatively high degree of separation between dogmatism groups as indicated by the
significant chi square. One discriminant function was derived and its eigenvalue and canonical correlation are fairly large. The eigenvalue is a measure of the relative importance of the discriminant function and the canonical correlation indicates how closely the function and the group variables are related, thus indicating the ability of the function to discriminate between groups. The function is composed of two of the original twelve POI variables, Feeling Reactivity and Self-regard. Each standardized discriminant function coefficient represents the relative contribution of its associated variable to the function (the sign denotes the direction of that contribution). The adequacy of the calculated discriminant function can be checked by predicting the classification of the original set of cases to determine how many are correctly classified by the variables being used. The results of this classification prediction are presented in Table 5.

The percent of cases correctly classified is well above the chance level of 50 percent, indicating that the discriminant function can be used to classify individuals of unknown group membership at better than chance level, but that there is overlap among the groups. They are not completely separated even though the discrimination is statistically significant.

Individuals were also then divided into two groups according to their direction of locus of control. Subjects whose Locus of Control
Table 5
Prediction Results from Discriminant Analysis for High and Low Dogmatic Groups

<table>
<thead>
<tr>
<th>Actual Group</th>
<th>N</th>
<th>Predicted Group Membership</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Dogmatic</td>
<td>31</td>
<td>Low</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>71.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>29.0%</td>
</tr>
<tr>
<td>High Dogmatic</td>
<td>31</td>
<td>Low</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>32.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>High</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>67.7%</td>
</tr>
</tbody>
</table>

Percent of Grouped Cases Correctly Classified: 69.35%

Scale scores were seven or less were designated as internals, and those whose scores were twelve or greater were designated as externals (Kilmann and Howell, 1974). Sixty-seven subjects were included in this analysis. Table 6 below provides the ranges, means, and standard deviations of the locus of control scores for these two groups.

Table 6
Ranges, Means and Standard Deviations:
Locus of Control Groups

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Range</th>
<th>X</th>
<th>SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal</td>
<td>43</td>
<td>0 - 7</td>
<td>4.35</td>
<td>1.82</td>
<td>17.96</td>
<td>.001</td>
</tr>
<tr>
<td>External</td>
<td>24</td>
<td>12 - 23</td>
<td>14.71</td>
<td>2.48</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Again a step-wise discriminant analysis was performed for the two groups. The results appear in Table 7 below.

### Table 7

Results of Discriminant Analysis for Internal and External Locus of Control Groups
(N = 67)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Standardized discriminant function coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dogma</td>
<td>-.63873</td>
</tr>
<tr>
<td>2. Feeling Reactivity</td>
<td>-.56311</td>
</tr>
<tr>
<td>3. Self-regard</td>
<td>.49696</td>
</tr>
<tr>
<td>4. Spontaneity</td>
<td>.43068</td>
</tr>
<tr>
<td>5. Synergy</td>
<td>-.39827</td>
</tr>
<tr>
<td>6. Existentiality</td>
<td>.38642</td>
</tr>
<tr>
<td>7. Self-acceptance</td>
<td>-.31893</td>
</tr>
</tbody>
</table>

Eigenvalue     .4011  
Canonical correlation  .5350  
Chi square     20.741
df              7
p               .004

\[ a \]The variables are those that were determined to be group discriminators and are presented in decreasing order of importance.
The variables used again produced a relatively high degree of separation between the two locus of control groups as indicated by the significant chi square. The eigenvalue and canonical correlation indicate the relatively large capability of the one derived function to discriminate between groups. Seven variables, six of which are the original POI subscale change scores, are considered to be making a significant contribution to the discriminant function. The classification prediction results for these two groups are presented in Table 8.

Table 8

Prediction Results from Discriminant Analysis for Internal and External Locus of Control Groups

<table>
<thead>
<tr>
<th>Actual Group</th>
<th>N</th>
<th>Predicted Group Membership</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Internal</td>
</tr>
<tr>
<td>Internal</td>
<td>43</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td></td>
<td>88.4%</td>
</tr>
<tr>
<td>External</td>
<td>24</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td></td>
<td>54.2%</td>
</tr>
</tbody>
</table>

Percent of Grouped Cases Correctly Classified: 73.13%

The percent of cases correctly classified is again well above the chance level, therefore indicating that the seven variables chosen are relatively effective in discriminating between individuals with either
an internal or external locus of control. Again there is still a fair amount of overlap among the groups and the groups are not completely separated.

In an attempt to test the remaining two hypotheses, those stating that the low dogmatic and internal locus of control individuals will benefit more than their high dogmatic and external locus of control counterparts, several analyses were performed. Independent samples t-tests, multiple linear regression, and canonical correlation analyses were utilized to delineate relationships between level of dogmatism or locus of control and direction of change on the POI subscales. The results of these analyses were not statistically significant, indicating a failure to overturn the null hypothesis.
This investigation constitutes an attempt to delineate the relationship of personality variables to encounter group outcomes in two ways. First, by examining the notion of Kiesler (1966) and Paul (1967) that different people change differently as a result of a therapeutic intervention. And second, by considering the question of Guinan and Foulds (1970) of which clients benefit most or least from an encounter group experience. It is also a utilization of multivariate statistical analyses for an obviously multi-dimensional situation.

This investigation differs from those previously conducted in several important ways. It is a field study of pre-existing groups, the groups were not being created for the sole purpose of research. Group members were not being recruited, nor were they volunteering for a task they knew nothing about. Members were participating because they chose to be in that particular group at that time (Rowen, 1975).

It is not within the scope of this investigation to make differential predictions of outcomes for either various styles of group encounter or different demographic samples within the population. Therefore, to increase the generalizability of this investigation, a non-homogeneous sample of participants of various types of groups
was selected. Each group climate and resulting experience is unique. No leader can produce identical results in all groups even with identical formats. And the fact that clients are seldom truly homogeneous has been discussed in an earlier portion of this paper.

The results of the correlated t-test performed on the Personal Orientation Inventory pre- and post-tests clearly indicate that, on the average, positive changes in self-actualization (benefits) occurred for the sampled encounter group participants. This finding is consistent with previous research using group mean changes on POI pre- and post-tests (e.g., Culbert, Clark and Bobele, 1968; Foulds, 1970; Guinan and Foulds, 1970; Kimball and Gelso, 1974; Young and Jacobson, 1970).

The multi-variate analyses were performed in an attempt to delineate personality variables that may be involved in encounter group outcomes. The two personality variables being considered here were Dogmatism as measured by Rokeach's D-Form-E (Rokeach, 1960), and Locus of Control as measured by Rotter's Internal-External Locus of Control Scale (Rotter, 1966).

The hypotheses for this investigation, as stated, consist of four parts. The first two are that the levels of dogmatism and locus of control will be differentiated by the interaction of changes on the POI shown by the individuals. The possibility of discriminating between the high and low dogmatic individuals and the internally and
externally focused individuals based on the interactions of POI change scores was investigated. Discriminant analysis was utilized to determine if the changes in the POI subscale scores could discriminate between the opposite poles of each of these two personality dimensions.

The discriminant analyses for the dogmatic groups extracted three interacting variables—Locus of Control, changes in Self-regard and changes in Feeling Reactivity—as significantly discriminating between the high and low dogmatic individuals.

Discriminant function analysis reduces these three variables to one which is a compound of the original three. When these three variables are appropriately weighted and viewed as being one variable, it is possible to discriminate between the two groups of dogmatic individuals. This indicates that the two groups are scoring significantly different on this one variable created by compounding the three selected variables. Thus supporting the first hypothesis which states that the interaction of the change scores will differentiate between the two dogmatism groups.

It appears as though the encounter groups were dealing with "Type B" (self-identity) beliefs, as evidenced by the significant changes in the POI subscale scores, such as Self-Regard—feelings of self-worth, Feeling Reactivity—sensitivity to one's own needs and feelings, and Self-acceptance—acceptance of one's own self in spite of weaknesses. There is evidence to suggest that the dogmatic
individual is more likely than the low dogmatic individual to hold more negative self-beliefs as "Type B" beliefs (Ehrlich, 1978; Rokeach and Fruchter, 1956). Vacchiano, Strauss and Schiffman (1968) conclude that the "dogmatic subject lacks self-esteem, is doubtful of his own self-worth, is anxious, lacks confidence in himself, lacks either self-acceptance or self-satisfaction...and is dissatisfied with his behavior, his physical state, his own personal worth, and his adequacy" (p. 84).

Since "Type B" beliefs are more central and thus more difficult to change, especially so in the highly dogmatic individual, it is perhaps not surprising that Self-regard and Feeling Reactivity have been extracted as discriminating variables for the dogmatic groups.

The discriminant analysis for the Locus of Control groups extracted seven interacting variables—Dogmatism and changes in Self-regard, Feeling Reactivity, Spontaneity, Synergy, Existentiality and Self-acceptance—as discriminating between the internal and external locus of control groups.

Again, the discriminant function analysis reduces these seven variables to one which is compounded of the original seven. And the hypothesis stating that the two locus of control groups will be differentiated by the interaction of the change scores, hypothesis two, has been supported.

The self-actualizing individual has been defined as a person who is more fully functioning and lives a more enriched life than does the
average person. Such an individual is seen as developing and utilizing all of his unique capabilities, or potentialities, free of the inhibitions and emotional turmoil of those less self-actualizing (Shostrom, 1966).

As previously stated, research evidence indicates that individuals exhibiting an internal locus of control are more willing to remedy personal problems and to seek information and adopt behavior patterns which facilitate personal control over their environments. The typical internal individual is viewed as one who comes to grips with the world.

Although there is no apparent empirical evidence at present to support such a notion, it would appear reasonable to suppose that the internally focused individual would be more likely to seek the qualities of the self-actualizing individual. It would therefore appear reasonable that the six POI change variables: Self-regard—feelings of self-worth; Feeling Reactivity—sensitivity to one's own needs and feelings, Spontaneity—expressing feelings freely, Synergy—seeing opposites of life as meaningfully related, Existentiality—flexible application of values, and Self-acceptance—acceptance of one's self in spite of weakness, were chosen as discriminators for the locus of control groups.

The last two hypotheses state that the low dogmatic and the
internally focused individuals will realize significantly more benefit than will the high dogmatic and the externally focused individuals. In an attempt to test these hypotheses, relationships between the level of dogmatism or locus of control and direction of change on the POI subscales were investigated by the use of independent samples t-tests, multiple linear regression, and canonical correlation analysis. The results of these analyses were negligible. Hypotheses three and four were therefore not supported, perhaps indicating that the answer to the originally stated question of which clients profit most or least from an encounter group experience posed by Guinan and Foulds (1970) is not quite so simple.

Additionally, the discriminant analysis discussed above does not imply the particular qualitative differences between either the two dogmatism groups or the two locus of control groups on the selected variables. These analyses do not lend support to either the third or fourth hypothesis of this investigation concerning the amount of change as a result of the level of dogmatism or direction of locus of control.

The results of these analyses do not easily lend themselves to the straight-forward interpretation originally intended. That is, it is not possible to infer with confidence that highly dogmatic individuals, for example, change less than low dogmatic individuals on any one aspect of self-actualization as a result of an encounter
group experience. It is, however, possible to state that by looking at the interactions of three different weighted variables, it is possible to identify variables that the two polar groups changed differently on. The highly dogmatic individuals are changing differently than low dogmatics as evidenced by the discriminating power of the interaction of three variables.

The separation of groups created by the calculated discriminant functions in both the dogmatic and locus of control analyses was neither complete nor extremely clear-cut, even though they were statistically significant. Several explanations for this are possible.

First, it is possible that there are no satisfactorily clear-cut differences between externally and internally focused or high and low dogmatic individuals in the ways they change as a result of an encounter experience. This study indicates that there is a statistically significant difference, therefore it appears reasonable to assume that additional evidence is needed to fully support the lack of clear-cut differences.

Secondly, it is possible that there is a clear-cut difference between these groups, but that the individuals choosing to participate in an encounter group are not a representative sample of the two extremes of each personality construct. Perhaps by virtue of being extremely closed-minded or externally focused these individuals would...
not choose to participate in an encounter group and are therefore not involved in this sort of investigation. To test the effects of an encounter group on the highly dogmatic or externally focused individuals it would be necessary to sample those individuals who are not choosing such an experience. As discussed above, this goes against a basic encounter norm and does little for the ecological validity of the investigation.

It must additionally be assumed that the subjects were classified correctly in the first place according to levels of dogmatism and locus of control. Neither locus of control nor dogmatism should be viewed as typological concepts. It is not the case that individuals are either internally or externally controlled, strictly open or closed-minded. Both represent continuums, and individuals are ordered along those continuums. For the sake of convenience, we refer to internals and externals, high and low dogmatics, but the behavior of an individual in any given situation is determined by many converging factors. To classify one as internal or external, high or low dogmatic is a typological error that ignores these factors and oversimplifies the predictive process.

Both the Rotter Internal-External Locus of Control Scale and the Rokeach D-Form-E sample a wide array of human resources. Therefore, the scales should relate to behavior across a very broad band of situations. It is therefore also likely that the scales correlate
only modestly with other behaviors singly. And certainly the utilization of dogmatism and locus of control as personality variables does not constitute an exhaustive investigation of an obviously multi-dimensional phenomena.

This investigation has been centered around the proposition that individuals occupying different positions along the continuum of a personality variable will realize different benefits as a result of an encounter group experience. The results indicate that the changes taking place in an encounter group are best viewed in terms of individual changes, not group mean changes.

Further research should be concerned with delineating other personality variables that may be involved with the differential change of individuals in an encounter group experience. If one goal of the encounter movement is to improve the personal growth and self-actualization of its participants, it appears reasonable to assume that the movement could fulfill this mandate better by being made aware of what types of individuals currently participating are not benefiting fully from the experiences. This is not to imply that certain types of individuals cannot benefit from an encounter group, but rather, that with the proper approach, most individuals could realize the personal growth and self-actualization.

Other multi-variate statistical analyses should be utilized for future investigations of this nature. To judge the effectiveness of
an encounter group experience by relying on group mean changes can lend itself to misleading and incomplete conclusions.

Additionally, there are difficulties in the utilization of discriminant function analysis. Its weakness is that it will tend to produce a maximal discrimination among groups which may not be justified upon replication.

When the outcomes of encounter group experiences are examined by analyses appropriate to a multi-dimensional situation, patterns become apparent that are generally overlooked by analyses relying on the often misleading group mean changes. It has been demonstrated that individuals are changing differently as a result of an encounter group experience based on level of dogmatism and locus of control exhibited by each. It therefore appears as though these two personality constructs may be influencing the outcomes of encounter groups. More importantly, however, it indicates that when considering the success or failure of the outcomes of an encounter group experience, the individuals who are involved must not be overlooked.
References


Fox, J., Knapp, R. R., and Michael, W. B. Assessment of self-
actualization of psychiatric patients: Validity of Personal
Orientation Inventory. Educational and Psychological Measurement,
1968, 28, 565-569.

T-groups and the laboratory movement: An overview. American

Grossack, M. M., Armstrong, T., and Lusaeiv, G. Correlates of self-

Guinan, J. R., and Foulds, M. L. The marathon group: Facilitator of
personal growth? Journal of Counseling Psychology, 1970, 17,
145-149.

Ilardi, R. L., and May, W. T. A reliability study of Shostrom's
Personal Orientation Inventory. Journal of Humanistic Psychology,
1968, 68-72.

Hallenbeck, F. N., and Lundstedt, S. Some relations between dogmatism,
denial and depression. Journal of Social Psychology, 1966, 70,
53-58.

Hamsher, J. H., Geller, J. D., and Rotter, J. B. Interpersonal trust,

Hersch, P. D., and Schiebe, K. E. On the reliability and validity of
internal-external control as a personality dimension. Journal of


Kilmann, P. R., and Howell, R. J. The effects of structure of marathon group therapy and locus of control on the therapeutic outcome.


McCardel, J., and Murray, E. J. Nonspecific factors in weekend


