DEMONSTRATED INTERNAL-EXTERNAL REWARD EXPECTANCIES

AS A VARIABLE IN GROUP COUNSELING

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DEMONSTRATED INTERNAL-EXTERNAL REWARD EXPECTANCIES
AS A VARIABLE IN GROUP COUNSELING

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# TABLE OF CONTENTS

| LIST OF TABLES                          | iv  |
| LIST OF ILLUSTRATIONS                  | v   |

**Chapter**

I. PROBLEM ............................................. 1

- Introduction
- Statement of the Problem
- Hypotheses
- Definition of Terms
- Limitations
- Assumptions
- Related Literature

II. METHOD .............................................. 40

- Description of Subjects
- Procedure
- Description of the Measuring Instruments
- Treatment of the Data

III. RESULTS AND DISCUSSION ......................... 60

IV. SUMMARY, CONCLUSIONS, INTERPRETATION, AND RECOMMENDATIONS ......................... 80

- The Problem
- The Hypotheses
- The Method
- Results
- Conclusions
- Interpretation
- Recommendations

APPENDIX ................................................. 98

BIBLIOGRAPHY ........................................... 121
<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Analysis of Variance of Pre- to Post-Test Difference Scores on the Personal Orientation Inventory Time Ratio</td>
<td>61</td>
</tr>
<tr>
<td>II.</td>
<td>Means and Standard Deviations of Time Ratio Scores</td>
<td>62</td>
</tr>
<tr>
<td>III.</td>
<td>Analysis of Variance of Pre- to Post-Test Difference Scores on the Personal Orientation Inventory Support Ratio</td>
<td>64</td>
</tr>
<tr>
<td>IV.</td>
<td>Means and Standard Deviations of Support Ratio Scores</td>
<td>65</td>
</tr>
<tr>
<td>V.</td>
<td>Analysis of Variance of Pre- to Post-Test Difference Scores on the Tennessee Self Concept Scale</td>
<td>68</td>
</tr>
<tr>
<td>VI.</td>
<td>Significance of the Relationship Between Pre- to Post-Test Difference Scores on the Tennessee Self Concept Scale in Internally-Externally Oriented Groups in Directive and Client-Centered Group Counseling</td>
<td>69</td>
</tr>
<tr>
<td>VII.</td>
<td>Analysis of Variance of Pre- to Post-Test Difference Scores on the Dogmatism Scale</td>
<td>74</td>
</tr>
<tr>
<td>VIII.</td>
<td>Means and Standard Deviations of Dogmatism Scale Scores</td>
<td>74</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>1.</td>
<td>Pre- and post-test mean Time Ratio scores for the four groups</td>
<td>64</td>
</tr>
<tr>
<td>2.</td>
<td>Pre- and post-test mean Support Ratio scores for the four groups</td>
<td>67</td>
</tr>
<tr>
<td>3.</td>
<td>Pre- and post-test mean self concept scores for the four groups</td>
<td>72</td>
</tr>
<tr>
<td>4.</td>
<td>Pre- and post-test mean Dogmatism Scale scores for the four groups</td>
<td>76</td>
</tr>
</tbody>
</table>
CHAPTER I

PROBLEM

Introduction

Generally, counseling approaches tend to be placed in one of two broad categories, directive or client-centered. The general differences between the two are noted by Coleman:

In directive counseling the counselor takes the attitude of the authority who is in a position to give the client direct advice. In essence he tells the client what he considers the best solution to his problem.

In nondirective counseling the counselor places the primary responsibility on the client for working out a solution to his problems. The counselor largely restricts himself to supplying information the client may need. . . . He then further helps the client clarify his thinking about himself in relation to the problem. . . . The nondirective counselor tries to avoid suggesting decisions and solutions so that the final responsibility for the outcome of the counseling rests on the client himself (7, p. 406).

Client-centered theory indicates that the client's eventual acceptance of responsibility for his actions is primarily due to the growth of a positive concept of self that seems to accompany successful client-centered counseling. Several investigations have noted this growth (35, 30, 45).

The directive and client-centered approaches to counseling have each initiated research and theoretical activity. Some of this activity has been concerned with attempts to adapt group counseling to the specifications of divergent
approaches (18, p. 229), while economy of time has also been a consideration in the shifting emphasis to group counseling (18, p. 228). Theorists have come to realize, however, that group counseling is of primary importance, for "... the disturbances of individuals are in a sense not confined to the individual alone. Both in their origins and in their effects, psychological ailments and disturbances can be said to reach outward so that other people are involved ..." (51, p. 405). Research has indicated that group counseling is as effective as individual counseling (14) with the result that group counseling has been extended to many counseling and therapeutic situations (52, 10).

Hadley has noted: "As experience has been gained [in group counseling], it has become clear to workers in the field that group procedures in counseling provide many 'extras'" (18, p. 228). These 'extras' tend to characterize group counseling as being unique from individual counseling: (1) members of the group tend to recognize common problems; (2) the group situation brings into focus interpersonal interaction; (3) interactions and mutual help among members is essential, and members have the opportunity to evaluate pressures created by the group situation; (4) as a member of a group the individual learns what it means both to give and to receive emotional support; and (5) the participants are stimulated by group standards toward evaluation of self and
opportunities, making wise choices, accepting responsibility, and initiating courses of action (19, pp. 289-292; 52, pp. 143-144).

As in individual counseling, there are some differences between directive and client-centered group counseling methods. Hobbs has delineated some of the differences:

That group-centered therapy is radically different from other approaches is clear from a simple description of what occurs. Interpretation is heavily relied upon in some approaches, and various activities in others; in some, a topic for discussion is set by a brief introductory lecture; in nearly all approaches, other than the one described here [client-centered], the leader makes a consistent effort to "draw out" the members. Most comparable to group-centered therapy is the analytic technique described by Foulkes.... But even in Foulkes' approach one is impressed, in reading protocols, with the activity of the therapist in asking questions, pointing up the discussion, and interpreting behavior. One of the most widely used approaches is that advocated by the Army, in which a topic for group discussion is set by the leader. Analysis of a series of such meetings in an Air Force convalescent hospital indicated that 81 per cent of all protocol lines were accounted for by the leader's comments. This preponderance of leader activity in the Army method may be contrasted with the less dominant position of the therapist in the approach described here, in which therapist participation has been shown to account for about 5 per cent of all activity (19, pp. 301-302).

Stone (47), however, has argued that the directive and client-centered concepts do not necessarily represent discrete entities. Stone offers a theoretical continuum along which are varying degrees of directiveness and non-directiveness. At either end of the continuum are the opposing poles of directive and client-centered. Toward
the midpoint of the continuum, the two approaches tend to blend together.

The conclusions that can be drawn from the literature on the relative merits of directive and client-centered counseling are seemingly inconsistent and often contradictory. This confused state can be more readily understood if it is noted that some individuals respond to certain techniques and other individuals respond to other techniques (51, pp. 298-299). Perhaps the failure to recognize individual differences can, in part at least, help explain the considerable evidence that many clients deteriorate rather than improve as counseling progresses (4). To espouse one approach to the exclusion of other approaches is to deny the reality of individual psychological differences. It is suggested that perhaps the main criterion of effective counseling is not whether directive or client-centered techniques, per se, are employed but in other factors, such as the group atmosphere (12) and the counseling relationship established (51, pp. 306-307; 46). It is further suggested that the recognition and understanding of basic individual differences is paramount in the creation of an adequate counseling atmosphere. Perhaps one concept in the realm of individual differences basic to the establishment of the conditions necessary for adequate group counseling is the construct of internal versus external control of reinforcement.
The concept of internal versus external control of reinforcement (internal-external locus of control) has developed from the social learning theory of Rotter (38) and is concerned with the individual's expectations of whether or not he is self-directed. Internal-external locus of control more formally refers to the extent to which an individual expects to have control over the reinforcements that occur relative to his behavior. "The basic formulation of social learning theory states that one of the major predictors of behavior is the subject's expectancy regarding the outcome of his behavior in a given situation" (38, p. 240). Rotter's theory places emphasis on the individual's expectation and perception of events in a social context. More specifically, this theory states an important determinant of behavior to be the individual's perception of whether he has control over the reinforcements relative to his behavior, or whether such reinforcements are externally manipulated. In general, this idea comes to describe the degree to which individuals accept personal responsibility for their actions, in contrast to the attribution of responsibility to forces outside their control. The external forces might be those of fate, chance, luck, an inability to understand the events of the world, or the influence of other powerful people (2, p. 482).

In social learning theory . . . this construct is considered to describe a generalized expectancy, operating across a large number of
situations, which relates to whether or not the individual possesses or lacks power (or personal determination) over what happens to him (2, p. 482).

The internal-external concept involves a high-level learning skill affecting behavior in a wide variety of problem-solving situations (17, p. 58). Rotter has stated that Harlow's concept of learning sets is quite similar to "... the notion that individuals differ in learned generalized expectancies involving relationships between a wide variety of behaviors and their possible outcomes" (37, p. 2).

Thus, the individual’s generalized expectancies and feelings toward the outcomes of his behavior appear to be a basic variable operating within the dynamics of human behavior. If these learned expectancies are basic to the individual’s behavior, it would not be illogical to assume that they represent an important consideration in the group counseling process. Perhaps the failure to consider the individual’s generalized expectancies can in part explain why some clients get progressively worse as counseling progresses (4). As Bergin has noted, counseling and psychology must ascertain with all due speed why some clients improve and why some deteriorate (4, p. 238). An investigation of the internal-external control of reinforcement concept as a basic variable in group counseling may also serve to offer additional evidence that counseling techniques are not sufficient to explain successful or unsuccessful counseling.
Statement of the Problem

The problem was the relationship of responses of individuals with demonstrated differences in internal-external reward characteristics and directive, client-centered group counseling techniques.

The specific purposes investigated were

1. To determine the consequences of directive group counseling techniques used with individuals demonstrating an internal reward posture.

2. To determine the consequences of directive group counseling techniques used with individuals demonstrating an external reward posture.

3. To determine the consequences of client-centered group counseling techniques used with individuals demonstrating an internal reward posture.

4. To determine the consequences of client-centered group counseling techniques used with individuals demonstrating an external reward posture.

Hypotheses

The following hypotheses were tested:

I. In directive group counseling situations, groups comprised of individuals characterized by an external reward posture will demonstrate more change in a positive direction as measured by the Personal Orientation Inventory and the Tennessee Self Concept Scale, Counseling Form than will
groups comprised of individuals characterized by an internal reward posture.

II. In client-centered group counseling situations, groups comprised of individuals characterized by an internal reward posture will demonstrate more change in a positive direction as measured by the Personal Orientation Inventory and the Tennessee Self Concept Scale, Counseling Form than will groups comprised of individuals characterized by an external reward posture.

III. In directive group counseling situations, groups comprised of individuals characterized by an external reward posture will become less dogmatic as measured by the Dogmatism Scale, Form E than will groups comprised of individuals characterized by an internal reward posture.

IV. In client-centered group counseling situations, groups comprised of individuals characterized by an internal reward posture will become less dogmatic as measured by the Dogmatism Scale, Form E than will groups comprised of individuals characterized by an external reward posture.

Definitions of Terms

1. Directive group counseling.--This is defined as a group counseling situation in which purposeful direction will be provided by the counselor. The counselor has the responsibility of selecting and imparting information to the subjects. The lines of communication go directly from the
counselor to the subjects and from the subjects to the counselor.

2. **Client-centered group counseling.**—This is defined as a group counseling situation in which the course of direction is provided essentially by the members of the group. The counselor has the responsibility of imparting information to the subjects. The counselor is a member of the group, adding his resources to the group without dominating or leading, as in the case of the directive group counselor. There are no formal lines of communication. Group interaction and individual-group decisions are encouraged.

**Limitations**

Only college students were utilized as subjects in this study.

**Assumptions**

1. Any differences in socio-economic levels of the subjects did not have a significant effect in this study.

2. The measuring instruments used give a relatively accurate picture of the dimensions they are purported to measure.

3. Any differences in group dynamics between the small groups were not great enough to be a significant factor in this study.
Related Literature

The review of related literature is presented in six sections: (1) Directive and Client-Centered Group Counseling; (2) Internal-External Locus of Control as a Learning and Personality Variable; (3) Internal-External Locus of Control and Knowledge and Control of the Environment; (4) Internal-External Locus of Control and Achievement Motivation; (5) Internal-External Locus of Control and Resistance to Subtle Suggestion; and (6) Synthesis of the Literature.

Directive and Client-Centered Group Counseling

The literature abounds with the issues postulated by various theoretical positions centering around the directive and client-centered philosophies. Support for any particular approach is readily found to such an extent that the conclusions to be drawn from the literature often seem contradictory and inconclusive.

Using data from six recorded group sessions and the subjective evaluation of responses to a questionnaire study made three months after completion of therapy, Peres (32) attempted to determine the relationship between verbal expression of members during the group sessions and the value received from such therapy. His study revealed decided differences in patterns of conversation of those who felt they had benefited and those who felt they had not benefited
by the group sessions. Peres found that the members who felt they had benefited showed a therapeutic pattern similar to that used in nondirective individual counseling in that statements indicative of insight, plans and actions became more prevalent as counseling progressed. Bovard (5) found that group-centered processes, where verbal interaction is maximized, produces a higher level of interpersonal affect than leader-centered processes, where such interaction is held to a minimum.

Randomly assigning 192 eleventh-grade pupils to individual and group counseling settings, Krumboltz and Thoresen (26) attempted to measure the effect of behavioral counseling on students' information-seeking behavior. Four behavioral procedures were used by the counselor: (1) reinforcement of verbal information-seeking behavior; (2) presentation of a tape-recorded model interview followed by reinforcement counseling; (3) presentation of film or filmstrip plus discussion as a control procedure; and (4) inactive control. Model-reinforcement and reinforcement counseling were found to be effective in increasing information-seeking behavior in both group and individual counseling.

Landsman and Sheldon (27) have reported client-centered counseling to be more effective than directive counseling in the aiding of college students having academic difficulty. Twenty-eight freshmen, whose first semester college performance was below expectation, were invited to participate in
a course in Academic Methods. The students were divided into two classes, which met jointly each week for a lecture on study habits. The lecture was followed by a question and answer period. The two groups then met separately two times a week. One group was taught in the conventional lecture and discussion manner, while the other group spent its two periods in client-centered group therapy. Those students in client-centered group counseling achieved significantly higher grade point averages following counseling than did those in directive group counseling. No differences were found between the groups on reading and personality measures. A higher school drop out rate was noticed in the directive group. In another study Sheldon and Landsman (44) reported the same findings.

Frequency of counselee withdrawal from counseling and its relationship to counselor orientation were studied by Krueger (25). Findings indicated that the more client-centered the approach, the greater the number of counselee withdrawals from counseling sessions. Krueger concluded that a somewhat structured, clinical approach seems to be most effective for secondary school counseling.

Boy (6) found nondirective techniques to be most effective with junior high school students classified as behavior problems. Arbuckle (1), working with students considered to be behavior problems, found client-centered
counseling to be effective even when the student had not voluntarily sought counseling.

Ryan and Krumboltz (42) have found that planned counselor reinforcement of client decision and deliberation responses significantly increased the clients' decision-making behavior. Generalization of decision-making behavior to non-counseling settings occurred.

Internal-external orientation has been indirectly linked to successful client-centered counseling by Raskin (36, pp. 248-250). Believing that the task of the counselor is to think with the client, rather than for or about the client, Raskin predicted that the client's perceived locus of evaluation would become more internal during brief counseling. Raskin found that the more successful and client-centered the counseling, the greater the degree to which the client based his values and standards upon his own experience, and decreased the degree of reliance upon the judgments and expectations of others in forming his values.

Internal-External Locus of Control as a Learning and Personality Variable

Rotter has noted that people in the American culture have developed

... generalized expectancies in learning situations in regard to whether or not reinforcement, reward, or success in these situations is dependent upon their own behavior or is controlled by external forces, particularly luck, chance, or experimental control (37, p. 75).
These expectancies are fairly consistent from individual to individual (37, p. 25).

The belief in internal or external control affects performance of specified tasks. Phares (33) has demonstrated the effect of situational variables on expectancy changes. Since obtained scores (reinforcements) in a skill situation are a result of performance, Phares felt that individuals would utilize past performance as a basis of future expectancies for performance. In a chance situation, obtained scores are not controlled by the individual, thus providing little generalization for future performance. From this framework, Phares predicted that expectancies for future reinforcement would show greater changes following reinforcement in a skill situation than in a chance situation. Using a color-matching task and a line-matching task, Phares instructed half of his subjects that the tasks were so difficult that success had been found to be a matter of luck. The other half was told that success depended upon skill. The findings indicated that the increments and decrements of expectancies following success and failure were significantly greater for those who believed the reinforcement to be contingent upon their behavior (skill) than those who believed that reinforcement occurred by chance.

Postulating the internal-external concept of reinforcement to be a basic dimension by which learning situations can be categorized, James (22) found (1) internally
oriented individuals have significantly greater increments in expectancy than externally oriented individuals; (2) these increments in expectancy are significantly more stable, predictable, and readily generalized to new situations under internal control conditions; (3) expectations developed under internal control conditions are more resistant to extinction than those developed under external control conditions; (4) the generalized extent to which a person categorizes events as internally or externally controlled is a personality characteristic which can be reliably measured; (5) measures of this personality characteristic are significantly predictive of individual differences in expectancy changes; and, (6) extreme scores at either end of the generalized variable tend to be related to psychological maladjustment.

Liverant and Scodel (31) indicated internal-external orientation to be a determinant of the decision-making process. Working from Rotter's general description of the internally and externally oriented individual, Liverant and Scodel felt that under conditions in which chance was perceived as governing success or failure, individuals of internal posture would attempt to assure themselves of control of outcomes by a cautious and planned selection of probabilities. It was felt that the externally oriented individual would tend to respond either on the basis of "hunches" or previous outcomes, generally ignoring objective probabilities. Twenty-eight internally oriented and twenty-six
externally oriented individuals took part in a gambling situation in which each subject was required to roll a pair of dice thirty times, betting on each outcome. On every trial the subjects selected one of four amounts to bet on one of the seven alternative outcomes with known objective probabilities. It was found that significantly more internally oriented than externally oriented individuals chose more intermediate and fewer high or low probability bets, wagered safer amounts of money avoiding risky betting, and were less variable in choice of alternatives. The authors concluded:

... the internal-external control variable ... apparently does make a difference in the manner in which the same objective situation is categorized and knowledge of this differential categorization is necessary for increased predictability in the study of decision making under conditions of risk" (31, p. 66).

Lefcourt (29) has indicated a possible explanation for these findings. This author was able to show that individuals who maintain external control expectancies tend to withdraw from challenges and avoid involvement. Lefcourt asserted that a person who believes that desired outcomes are not within his control will be less vigilant and perceptive toward opportunities for obtaining desired reinforcements. Such an individual expects no success due to his own efforts. When he fails, his expectation is reinforced. The individual who maintains internal control expectancies is actively involved in situations. He is highly perceptive toward cues relevant to reinforcement because he believes these to be
determined by his own behavior. Thus he expects to succeed and when success comes, his expectancy is reinforced. Others have noted this phenomenon in school children (28).

Reinforcements, then, have a greater effect on raising or lowering expectancies when the individual believes that his behavior is responsible for the reinforcement. When the individual believes the outcomes of his behavior depend upon external forces, he relies less on his own ability and experiences, tending to withdraw from the situation.

Previous research has generally indicated that partial reinforcement is more effective than total reinforcement. The bulk of this research has been conducted with animals and has dealt with relatively simple responses. In learning situations, perceived internal-external control of reinforcement should be a major variable in determining the effectiveness of partial or total reinforcement.

Testing this idea, James and Rotter (23) contrasted total (100 per cent) and partial (50 per cent) random reinforcement with eighty college freshmen. One-half of the subjects was told that successful performance on the task was dependent on skill. The other half was instructed that successful performance on the task was due entirely to chance. The subjects were then divided into equal skill groups of 100 per cent and 50 per cent reinforcement, and equal chance groups of 100 per cent and 50 per cent reinforcement. The experimental task was comprised of a
card-guessing game. All subjects were given ten acquisition trials before commencement of extinction. The results indicated that the externally controlled groups (chance) were typical of other findings on partial reinforcement. However, a reversal occurred in the skill groups: the 100 per cent group was superior to the 50 per cent group in resistance to extinction. The 100 per cent skill group also took significantly more trials to extinguish than did the 50 per cent chance group (23). It was felt that

In the case of 100 per cent or near 100 per cent reinforcement the individual who regards the reinforcement as dependent upon some kind of external control would assume early in the extinction trials either that luck had turned against him or that the experimenter was no longer rewarding the same behavior. On the other hand, a subject who regarded reinforcement as a function of his own skill would extinguish more slowly under 100 per cent reinforcement than under partial reinforcement because it would take him longer to accept the fact that his presumably stable skills had diminished. He is not anticipating external changes in the situation which will account for failure (41, p. 163).

Holden and Rotter (20) substantiated the above findings using a nonverbal measure of extinction. Extending the James and Rotter study by using two different tasks, Rotter, Liverant, and Crowne concluded that under conditions where reinforcement is felt to be due to chance, the occurrence of reinforcement leads to less learning because previous experience is a less stable predictor of the future occurrence of the event (41). Schroder and Rotter have further
demonstrated that generalization of extinction from one situation to the other is greater when the rewards in the two situations are the same than when the rewards are different (39, p. 263).

It can thus be seen that expectancies generalize from a specific situation to a series of situations which are perceived as related or similar. "Consequently, a generalized expectancy for a class of related events has functional properties and makes up one of the important classes of variables in personality description" (37, p. 2).

Internal-External Locus of Control and Knowledge and Control of the Environment

The concept of alienation has been linked to a generalized belief in internal or external control. Defining alienation as a feeling of powerlessness, Seeman and Evans (43) predicted differences in alienation to be associated with differential learning of behavior-relevant information. The hypothesis was based on the idea that the individual's sense of powerlessness, or more formally stated, "the expectancy or probability held by the individual that his own behavior cannot determine the occurrence of the outcomes, or reinforcements, he seeks" (43, p. 773), is directly related to the amount of objective knowledge he will acquire concerning his life situation.

The anticipated formula is simple enough: high alienation goes with limited knowledge, for, in an important sense, knowledge acquisition is
irrelevant for those who believe that fate, luck, chance, or external forces control the fall of events (43, p. 2773).

Matching tuberculosis patients in regard to social background and hospital experience, Seeman and Evans (43) found that internally oriented individuals knew more about their own condition, questioned the staff about their condition more, and expressed less satisfaction with the amount of feedback they received concerning their medical status than did the externally oriented patients. The authors felt that their findings have significance for the understanding of the mass society.

Our general point is that . . . alienation, in the powerlessness sense, serves as the hypothetical intervening variable between the individual's social circumstances (i.e., his structural place) and his social learning. . . . We would provisionally hold that our data—which clearly support the idea that alienation and knowledge are related—speak not only about hospitals and patients, but also about the general theme of alienation in contemporary life (43, p. 782).

Related to the findings that internally oriented individuals seek objective knowledge concerning their life situation is the utilization to which this knowledge is put. Not only does one believe that he does or does not exercise control over his destiny; he believes that he does or does not possess control over himself. Straits and Sechrest (48) demonstrated that individuals who smoke are significantly more externally oriented than those who do not smoke. James, Woodruff, and Werner (24) have offered support for these
findings and further demonstrated that following the Surgeon General's report smokers who were convinced by the evidence in the report were more internally oriented than those who were not convinced. Those males who stopped smoking following the report were more internally oriented than those who continued smoking. The difference was not significant for females. It was felt that females were motivated by other variables including the tendency to gain weight when not smoking.

The concept of internal-external control, then, is an important variable in the individual's perception of his life situation. It has been demonstrated that the individual's sense of personal control within himself and of his destiny is a factor in the determination of the degree of interest and knowledge he will possess concerning his affairs, as well as the manner in which this knowledge will be put to use.

There is evidence that a generalized belief in internal-external locus of control is related to the initiation of social change. Gore and Rotter (17) obtained internal-external measurements and other data from students at a southern Negro college. Four weeks after the data were obtained, a student confederate went into the classes participating in the study and asked the subjects for their cooperation in a Students for Freedom Movement. Subjects were then divided into groups according to their degree of
verbal commitment to social action-taking behavior. It was found that activists in the civil rights movement were significantly more internally oriented than non-activists. This was viewed by Gore and Rotter as indicating that those individuals who were "more inclined to see themselves as the determiners of their own fate tended to commit themselves to more personal and decisive social action" (17, p. 62). A trend was also noted: persons measuring high in social desirability motive tended to commit themselves less to social action.

Strickland extended the Gore and Rotter study, predicting behavioral commitment to social action by the internal-external dimension (49). Subjects were two groups of Negroes. One group was comprised of young Negroes actively engaged in civil rights movements throughout the South while the other group contained students in three southern Negro colleges who were not engaged in civil rights movements. Strickland found that the more internally oriented the individual, the more likely he was to be a member of the activist group.

Phares (34) has examined the relationship between the internal-external dimension and attitudinal change. Prior to the experiment, two groups of female subjects with scores near the mean on the internal-external continuum filled out an attitude questionnaire. Experimenters were males who rated either high or low on the internal-external dimension. The experimenters read from standardized instructions the
same attitude statements to which the subjects had previously responded. Subjects again responded to the questionnaire. Internally controlled experimenters were able to induce significantly greater changes in expressed attitudes than were the externally controlled experimenters. Control subjects who merely filled out the questionnaire the second time without any attempted influence showed changes equal to those subjects in the group of the externally controlled experimenters.

With a different cultural population, Seeman (37) found similar results. Studying workers in Sweden, Seeman found that membership in unions, activity within the union, and a general knowledge of political affairs were all significantly related to one's belief in internal locus of control.

Thus, those individuals who see themselves as more in control of their own fate tend to attempt to influence the culture in which they live more than those who see themselves as externally controlled (21, p. 610). This group of studies lends strong support to the concept that a "generalized expectancy—that one can affect the environment through one's own behavior—is present in at least two different cultures, can be reliably measured, and is predictive of logical behavioral construct referents" (37, p. 21).
Internal-External Locus of Control and Achievement Motivation

The concept of internal-external control of reinforcement has been linked to achievement motivation. Efran (11) produced an indirect indication of the relationship between striving for achievement and the belief in internal or external control by studying high school students' tendencies to forget failures rather than successes. It was found that the tendency to forget failures was significantly related to the scores of those who indicated a belief in internal control. Efran felt that these results suggest that the individual oriented toward an external locus of control has less need to repress his failures because he has already accepted external factors as determining his success and failure.

McClelland, Atkinson, Clark, and Lowell (37, p. 3) found that adults who register high need achievement have some belief in their own ability to determine the outcome of their efforts. Crandall, Katkovsky, and Crandall (8) reported much the same findings with children. In addition, the latter investigators noted a relationship between a personal sense of responsibility and actual success in primary grade girls. In grade five, boys' beliefs in self-responsibility for failures related to their beliefs in internal control. These relationships became less significant in the secondary grades. The sense of self-responsibility for behavior did relate
moderately to intelligence and social status. It would appear that the moderate relationships found between both self-crediting and self-blaming responses and intelligence are partially accounted for by the greater ability of the brighter child to see the relationship between the rewards and punishments he receives and his own instrumental behavior (8, p. 104).

Franklin (13) predicted seventeen relationships between achievement motivation and the internal-external dimension. Included were such behaviors and feelings as early attempts to investigate college, amount of time spent doing homework, and parents' interest in homework. A significant relationship was found in predicting direction of behavior on fifteen of the seventeen items. This would indicate that the internal-external dimension could be used to predict achievement.

Crandall, Katkovsky, and Preston (9) working with primary school children, reported internal control to be associated with the amount of time chosen by boys to spend in intellectual activities during free play time and the degree to which they strived to succeed in these activities. No such relationship was found for girls.

The stronger motivation of the internally oriented individual towards achievement has been further demonstrated by Rotter and Mulry (40). The hypothesis investigated was that internally oriented and externally oriented individuals differ in the value placed on the same reward depending upon
whether it is perceived as contingent upon chance or skill. Subjects' decision time on a difficult matching task was measured. One-half of the subjects were told the task outcome depended upon chance; the other half were instructed that performance was a matter of skill. The results demonstrated that internally oriented individuals took significantly longer with skill instructions than did externally oriented individuals, while individuals of external orientation took significantly longer with chance instructions than did individuals of internal orientation. It was felt that those who believe in internal control become more involved in a task under skill instructions and tended to value reinforcement for performance of a skill much more than chance rewards.

These results have some interesting implications for the study of cultural differences. If it is true that groups who learn to expect chance or fate or powerful others to control the environment tend also to place value on reinforcements which they see as controlled by these outside influences than those which they perceive as a function of their own skill, it would imply that they would be less motivated towards an increase in skill or achievement (40, p. 603).

The important point to be derived from the research on achievement motivation is the implication that the internally oriented individual tends to perceive that which happens to him as dependent upon his own actions; hence the greater motivation and involvement in achievement.
Internal-External Locus of Control and Resistance to Subtle Suggestion

The internal-external dimension is considered to be of some importance as a variable of personality. As such, it may be considered to be basic in understanding and working with human behavior. James and Rotter note some implications for psychotherapy:

In actual practice one (the clinician) may encounter patients who tend to view their experiences both positive and negative as being externally controlled and due to the whims of fate or the manipulation of other people. Before the therapist can either raise or lower expectancies in order to produce behavioral changes, it may be necessary to get the patient to perceive that to some extent the potential reinforcements (positive or negative) in situations are consequences of his own actions and can be controlled. At the other extreme one may encounter patients who attribute most of their experiences to factors they consider to be internally controlled. These patients may blame themselves for frustrating events which were beyond their control and in effect may unrealistically reduce expectancies for gratification (23, p. 402).

Strickland (50) and Getter (15) demonstrated that those individuals of internal orientation who were aware of experimenter attempts at latent conditioning resisted such external manipulation. Gore (16), however, found that this relationship is not present in overt conditioning. Apparently, when given the conscious choice, the internally oriented individual is not resistive. However, this individual reacts negatively to attempts at subtle manipulation.
There appears to be a relationship between social class and a belief in internal or external control. Battle and Rotter (2) examined this relationship in eighty Negro and white school children. A cartoon test developed by Battle was administered to all of the children, and the Bialer Locus of Control Scale was given to one-half of the children. The relationship of test scores to sex, age, social class, ethnic group, and behavior on a line-matching task was investigated. Battle and Rotter found (1) lower-class Negroes were significantly more externally oriented than middle-class Negroes; (2) middle-class children were significantly more internally oriented than lower-class children; (3) no relationship was found to exist between sex and internal-external posture; (4) no relationship was found to exist between intelligence and internal-external posture when class and race were undifferentiated; (5) on a line-matching test, higher internal-external scores were significantly associated with lower mean expectancy for success; and (6) lower-class Negroes with higher I.Q.'s were more externally oriented than middle-class whites with lower I.Q.'s. It is possible that brighter lower-class Negroes may develop an external posture as a defense reaction to perceived reduced choices for cultural or material rewards (2, p. 489).

Gore and Rotter (17) found sex not to be a determiner of internal-external orientation in college students, thus
giving support to this aspect of the Battle and Rotter study (2). In other research, Rotter (37) reported evidence that females were more externally oriented than males. Rotter did feel, however, that uncontrolled variables entered into this study and might explain the results. Gore and Rotter (17) substantiated Battle and Rotter's findings of no relationship between the internal-external dimension and intelligence. However, Cardi (37) reported a low correlation between intelligence and internal-external control of reinforcement. Bialer (3) found a significant tendency, as children increased in age, to perceive internal locus of control, to respond to success-failure cues rather than to hedonistic cues, and to delay gratification when such delay led to the eventual attainment of a larger reward. This relationship holds constant for both normal and mildly retarded children. Bialer concluded that educable mentally retarded children do not differ qualitatively from normal children in the development of the ability to conceptualize success and failure.

**Synthesis of Reviewed Literature**

Research fostered by directive and client-centered counseling has often yielded seemingly inconsistent and contradictory results. Peres (32) and Bovard (5) have indicated that the verbal interaction present in group-centered counseling is most effective in producing a high level of
interpersonal affect. Krumboltz and Thorossen (26) demonstrated that the most effective means of aiding clients to increase their information-seeking behavior is reinforcement counseling. Reinforcement counseling was also found to effectively aid clients in learning to make decisions (42). Landsman and Sheldon (27) and Sheldon and Landsman (44) reported client-centered counseling to be more effective than directive counseling in helping college students with academic difficulty. Boy (6) found that nondirective counseling was beneficial to junior high school behavior problems. Arbuckle (1), also working with behavior problems, indicated nondirective counseling to be effective even when the student had not voluntarily sought counseling. However, Kruger (25) reported that the more client-centered the approach, the greater the number of counselee withdrawals from counseling sessions.

A review of the research related to directive and nondirective group counseling leads to the conclusion that perhaps the important factor in the effectiveness of counseling is not the particular technique employed but in other factors, such as group atmosphere (12) and the counseling relationship itself (51, pp. 306-307; 45). Perhaps even more basic is an understanding of the general outlook, expectancies, and needs of the client, for it seems that different techniques work with different people, and different counselors are able to foster meaningful relationships.
different clients (51, pp. 298-299). It is at this level of depth in human relationships that the importance of the concept of internal versus external control of reinforcement may be properly placed.

The internal-external construct has been formally developed in the social learning theory of Rotter (38). The internal-external dimension refers to "generalized expectancies in learning situations in regard to whether or not reinforcement, reward, or success in these situations is dependent upon their own behavior or is controlled by external forces, particularly luck, chance, or experimental control" (37, p. 25). This construct ultimately comes to describe the degree to which individuals come to accept personal responsibility for their actions, in contrast to forces outside their control. Various aspects of Rotter's theory have been put to empirical test.

The internal-external dimension has been found to be a basic variable of learning and personality (22). Phares (33) indicated that the increments and decrements of expectancies following success and failure on learning tasks were significantly greater for those who believed the reinforcement to be contingent upon their behavior than those believing that reinforcement occurred by chance.

Liverant and Scodel (31) have reported internal-external orientation to be a determinant of the decision making process. Lefcourt (29) has attempted an explanation of these
findings by demonstrating that individuals of internal orientation are more ego-involved in various situations, while the externally oriented tend to withdraw from challenges.

Research has indicated that the internally oriented individual tends to persist longer than externally oriented individuals under laboratory extinction trials (22, 23, 41, 20, 39). Because of this, Rotter concludes that generalized laws of learning from the laboratory are a dangerous procedure unless internal-external control is considered (37, p. 25).

The continuum of internal to external control of reinforcement has been linked with the degree of the individual's knowledge and control of his environment. Those of internal control postures tend to have more interest and possess more knowledge of their affairs than those of an external posture (43). This greater knowledge tends to be utilized because of a belief in control over the self (48, 24). Individuals of internal control tend to attempt to control their destiny (17), be more actively engaged in controlling their environment (49), and be more persuasive in changing others' attitudes than are individuals of external orientation (34, 37).

Studies have indicated a relationship between the internal-external dimension and achievement motivation. It has been demonstrated that internally oriented people tend to forget failures more easily (11), believe in their ability
to determine the outcome of their efforts (37, p. 3; 8), spend more time in intellectual activities (9), and become more involved in tasks that depend upon skill (40) than those of external orientation. Franklin (13) demonstrated that the internal-external continuum can be used to predict achievement.

Strickland (50), Getter (15), and Gore (16) have offered evidence that the individual who believes in internal control actively resists attempts at latent conditioning, but does not necessarily resist attempted overt conditioning.

Battle and Rotter (2) found that the lower the social class, the greater the belief in external control. Sex was not found to be related to the internal-external dimension (2, 17). Conflicting evidence has been presented on the relationship between internal-external control postures and intelligence (2, 17, 37). Bialer (3) demonstrated that as normal and mildly retarded children increase in age, there is a tendency for these children to become more internally oriented.

In general, the individual who has a strong belief that he can control his own destiny is likely to (1) be more alert to those environmental cues that are relevant in providing direction for future behavior; (2) take action to implement change and improvement in his life situation; (3) be achievement oriented and place greater value on his
ability; and (4) be resistant to subtle attempts to influence him (37, p. 25).
CHAPTER BIBLIOGRAPHY


11. Efran, Jay Steven, "Some Personality Determinants of Memory for Success and Failure," unpublished doctoral dissertation, Department of Psychology, Ohio State University, Columbus, Ohio, 1963.


16. Gore, Pearl Mayo, "Individual Differences in the Prediction of Subject Compliance to Experimenter Bias," unpublished doctoral dissertation, Department of Psychology, Ohio State University, Columbus, Ohio, 1962.


50. , "The Relationship of Awareness to Verbal Conditioning and Extinction," unpublished doctoral dissertation, Department of Psychology, Ohio State University, Columbus, Ohio, 1962.


CHAPTER II

METHOD

Description of Subjects

The subjects were forty white students enrolled in Introductory Psychology during the Fall semester, 1967, at North Texas State University. Five Introductory Psychology classes were contacted three weeks after the semester began, and class members were offered the opportunity to take a battery of tests. The students were told that these tests could possibly aid them in better understanding themselves, thereby enabling them to make realistic vocational choices. It was explained that these tests were part of an experiment and would take several hours of the student's time; in return for this time, the students were promised a thorough interpretation of the test results. Volunteers were then sought and were accepted.

Volunteers were asked to supply personal information: name, age, scholastic classification, sex, time available for testing, and identity of the instructor of their psychology class. Testing sessions were then scheduled and volunteers were instructed to report for testing. All testing was done in classrooms or the auditorium of the Education-Home Economics Building. The tests were administered
in a series of sessions for a period of five days. No testing session exceeded two hours in length.

The volunteers were administered the Kuder Preference Record, Occupational, Form D, and Guilford-Zimmerman Temperament Survey, the General Aptitude Test Battery, Form B, (GATB), and the Otis Quick-Scoring Mental Ability Test, Gamma Form. These tests were used primarily as vehicles for the counseling sessions. Also administered to all volunteers were the I-E Scale, the Personal Orientation Inventory, the Dogmatism Scale, Form E, and the Tennessee Self Concept Scale, Counseling Form.

Of the 118 students indicating interest in participating in the study, 105 completed the testing. From this group, 40 subjects were selected by a matching procedure. To ensure that the final groups were similar in terms of variables that research has indicated are influential in internal-external orientation, the matching procedure was based on intelligence as measured by the Otis Quick-Scoring Mental Ability Test, age, and sex. The I-E Scale was also used for matching purposes.

Limits were established for the matching variables within the boundaries of certain guidelines. Following research reported by Rotter (9, p. 15), the value of 8.0 was established as the mean on the I-E Scale. Other research has indicated that extreme scores at either end of the internal-external dimension are indicative of maladjustment (2). In
order to exclude maladjusted subjects, and to ensure a distinct division between the internally and externally oriented, individuals with extreme scores and individuals with scores centering around the mean were eliminated. Scores on the I-E Scale ranging from two to five were considered to demonstrate a posture of internal orientation. Scores ranging from eleven to seventeen were considered to demonstrate a posture of external orientation. Students demonstrating internal orientation were defined as being characterized by an internal locus of control. Students demonstrating external orientation were defined as being characterized by an external locus of control. To set limits of intelligence for matching purposes, common distribution of categories of intelligence illustrated by Kimble and Garmezy were followed (3, p. 110). The categories of intelligence were described in terms of I.Q.: 80-89, 90-109, 110-119, 120-129, and 130-139. Limits of eighteen to twenty years of age were set.

After the students had been divided into categories of internal and external reward postures, subjects were matched on the matching variables and divided into four groups of ten members each. Each subject was matched with one other subject in every group within the limits of the categories of the matching variables of intelligence and age. Of the forty subjects, twenty demonstrated an external orientation and twenty demonstrated an internal orientation. Males and
females were equally divided in the groups of twenty. Two of the four groups were comprised of individuals demonstrating external posture.

Group I consisted of internally oriented individuals in a directive group counseling setting. Group II consisted of externally oriented individuals in a directive group counseling setting. Group III consisted of internally oriented individuals in a client-centered group counseling setting. Group IV consisted of externally oriented individuals in a client-centered group counseling setting.

Procedure

Two weeks after the testing was completed, six counseling sessions were arranged with each of the four groups. The group counseling sessions met on a Monday, Wednesday, Friday schedule for two weeks. Each session was one hour in length. Group I met from 2:00 to 3:00 P.M., Group IV met from 3:00 to 4:00 P.M., Group II met from 10:00 to 11:00 A.M., and Group III met from 9:00 to 10:00 A.M. Thus, internally and externally oriented groups met both in the morning and afternoon.

Both counselors were doctoral candidates in Counseling and Personnel Administration at North Texas State University. The directive counselor had previous experience in group counseling as a psychologist at one of the Texas correctional institutions for boys. The client-centered counselor had
previous experience in group counseling as a counselor in the public schools of Texas. The two counselors were given a trial group counseling session which was audio-taped. The trial tapes were then judged by two members of the North Texas State University counseling staff to ensure that a directive counselor and a client-centered counselor had been properly selected.

Prior to the counseling sessions, both counselors were given general instructions of the techniques to be utilized and the counseling relationships to be established.

The following instructions were given to the directive counselor:

1. The counselor's approach to the subjects and the counseling sessions should be consistently directive.

2. The counselor presents and interprets empirical and subjective information to the counselee. Such information aids the counselee in better understanding his capabilities and weaknesses. Such understanding is necessary in making realistic decisions.

3. The counselor believes the measuring instruments he uses are valid. These measuring instruments are accurate reflections of the individual.

4. The lines of communication go directly from the counselor to the clients and from the clients to the counselor.

5. Purposeful direction is provided by the counselor.
6. The counselor makes most of the decisions and bears a major part of the responsibility for counseling activities.

7. Counseling is a learning situation. It is the task of the counselor, with the help of empirical evidence, to teach the subject about himself.

8. Emphasis is placed on the subject gaining an understanding of the meaning of the test data.

9. In the interpretation of the GATE, it is important that the subjects be aware that these are aptitude scores and not intelligence scores.

10. Use the following I.Q. categories on the interpretation of the Otis Quick-Scoring Mental Abilities Test: 80-89, dull-normal; 90-110, normal; 111-119, bright normal; 120+, superior.

11. The counselor is the judge of whether a session should be terminated or last the full hour.

The following general directions were given to the non-directive counselor:

1. The counselor's approach to the subjects and the counseling sessions should be consistently client-centered.

2. The counselor has the responsibility of presenting empirical information to the subject. Interpretation of such information depends on whether or not the subjects feel a need for interpretation. However, the counselor never allows the subjects to leave a session with misinformation.
Some interpretation may be necessary to dispel misinformation.

3. The counselor recognizes the limitations of the measuring instruments and that test scores may or may not be valid. The counselor is more concerned with dealing with the subjects' feelings than with test scores.

4. The direction of the counseling sessions is provided by the group members.

5. The counselor is a member of the group, adding his resources to the group without dominating or leading.

6. The counselor makes few decisions and bears little responsibility for counseling activities. The counselor is more concerned with relationships, atmosphere, and experiencing and feeling.

7. Counseling is a learning situation. It is the task of the counselor to aid the subject to learn about and understand himself. The counselor allows, aids, and joins the subject in experiencing the exploration of self. The counselor does not teach the subject; he learns with him.

8. In the presentation of the GATE results, the subjects need to be aware that these are aptitude scores and not intelligence scores.

9. If interpretation of the Otis Quick-Scoring Mental Abilities Test is required, use the following I.Q. categories: 80-89, dull normal; 90-110, normal; 111-119, bright normal; 120+, superior.
10. The counselor is the judge of whether a session should be terminated or last the full hour.

The counseling sessions followed a general format. In the directive groups, the first session began with the counselor introducing himself, explaining the purpose of the counseling, and attempting to establish rapport with and among the subjects. The counselor then gave the subjects their profiles on the GATB. The second session began with the subjects receiving their results on the Otis Quick-Scoring Mental Abilities Test, in written form. At the beginning of the third session, the subjects were handed their profiles on the Kuder Preference Record, and the fourth session commenced with the subjects receiving their centile scores for the Guilford-Zimmerman Temperament Survey. The remainder of the first four hour sessions followed a procedure of the counselor interpreting the test results to the subjects. Emphasis was placed on the subjects gaining an understanding of the meaning of the test results. While discussion and questions directed to the counselor were encouraged, the final fifteen minutes of each of the first four hour sessions were reserved for questions and a summary by the counselor of what transpired during the session. The fifth session was primarily a planning session, in which the counselor pointed out to the subjects possible courses of action in the academic realm based on their test results,
providing ample opportunity for discussion and questions. The sixth session was devoted to re-administering to the subjects the Personal Orientation Inventory, the Dogmatism Scale, and the Tennessee Self Concept Scale.

In the client-centered groups, the first session began with the counselor introducing himself, explaining the purpose of the counseling, and attempting to establish rapport with and among the students. The counselor then gave the subjects their profiles on the GATB and asked them how they felt about their scores. No further leading was done by the counselor. The course of discussion and depth of interpretation was directed entirely by the group members deciding what was of importance to them. Approximately five minutes at the end of each session was used for summary by the counselor. At the second, third, and fourth sessions the subjects received their results on the Otis Quick-Scoring Mental Abilities Test, Kuder Preference Records, and the Guilford-Zimmerman Temperament Survey, respectively. The second, third, and fourth sessions followed the format described in conjunction with the first session. At the beginning of the fifth session, the counselor suggested that the session could be utilized in planning courses of action in the academic realm based on the subjects' feelings about the test data. The direction of this session was of course dependent on the wishes of the subjects. The sixth session followed the same format as that in the directive groups.
Each counseling session was audio-tape recorded and reviewed by the experimenter for the purpose of ascertaining if either counselor failed to maintain their respective directive and client-centered orientation. Reviewing the tapes indicated no discrepancy in the orientation of either counselor.

Description of the Measuring Instruments

The I-E Scale was used to describe the basic variable for this study. Three evaluative criteria were used in this study: The Tennessee Self Concept Scale, Counseling Form, the Personal Orientation Inventory, and the Dogmatism Scale, Form E.

The I-E Scale

The first instrument to measure belief in internal-external control of reinforcement was a Likert-type scale devised by Phares (9). This work was followed by James' revision of Phares' test (2), also a Likert-type scale. Liverant, Seeman, and Rotter undertook to broaden the James-Phares scale (9, p. 9). This scale was comprised of 100 forced-choice items, each one comparing an external belief with an internal belief. Liverant reduced the scale to sixty items through item and factor analysis. This revised version of the Liverant, Seeman, and Rotter scale was not considered adequate. Therefore the reduction and purification of the sixty item scale was undertaken by Liverant,
Rotter, and Crowne (9, pp. 9-10), which produced the present scale.

The present I-E Scale (9) measures the generalized orientation of individuals toward internal versus external control of rewards. (See Appendix A.) The scale is a forced-choice test containing twenty-nine items. Six of the items are filler items designed to make the purpose of the test somewhat more ambiguous. The score is the total number of external choices.

The items on the I-E Scale deal with the individual's belief about the nature of the world, or in other terminology, the individual's expectations about how reinforcement is controlled. Thus, the test is considered to be a measure of a generalized expectancy. The individual's generalized expectancy correlates with the value he places on internal or external control but none of the items specifically refers to a preference for internal or external orientation (9, p. 10).

Internal consistency estimates are relatively stable with a reported split-half coefficient of .65, Spearman-Brown coefficient of .79, and Kuder-Richardson coefficients ranging from .69 to .73. It is recognized that these estimates are only moderately high for a scale of this length. As Rotter notes, however, "it should be remembered that the items are not arranged in a difficulty hierarchy, but rather are samples of attitudes in a wide variety of different situations. The test is an additive one and items
are not comparable" (9, p. 10). Thus, split-half reliability
tends to underestimate internal consistency. Kuder-Richardson
reliabilities are also somewhat limited since the I-E Scale
is a forced-choice test "in which an attempt is made to
balance alternatives so that probabilities of endorsement of
either alternative do not include the more extreme" (9, p. 10).
Research indicates test-retest reliability to range from .69
to .79. The I-E Scale is considered to have discriminant
and construct validity.

The Dogmatism Scale, Form E

The Dogmatism Scale represents an attempt to measure
Rokeach's theory of a belief-disbelief continuum. A belief
system represents all the "beliefs, sets, expectancies, or
hypotheses, conscious and unconscious, that a person at a
given time accepts as true of the world he lives in" (8,
p. 33). A disbelief system "is composed of a series of sub-
systems rather than merely a single one, and contains all
the disbeliefs, sets, expectancies, conscious and unconscious,
that, to one degree or another, a person at a given time
rejects as false" (8, p. 33). All belief-disbelief systems
serve two conflicting sets of motives at the same time: the
cognitive need of the individual to know and understand and
the need to defend against threatening aspects of reality.

To the extent that the cognitive need to know
is predominant and the need to ward off threat
absent, open systems should result. In the
service of the cognitive need to know, external pressures and irrational drives will often be pushed aside, so that information received from outside will be discriminated, assessed, and acted on according to the objective requirements of the situation. But as the need to ward off threat becomes stronger, the cognitive need to know should become weaker, resulting in more closed belief systems. Under threat, information and source should become inseparable and should be evaluated arbitrarily in line with the rewards and punishments meted out by authority (8, p. 67-68).

The Dogmatism Scale, Form E, is the final product of five revisions. A total of eighty-nine items have been employed. Form E contains forty items designed to scrutinize various defining characteristics of open and closed belief systems. (See Appendix B.) Responses to the items are made along a six point scale: +3, +2, +1, -1, -2, -3. The individual's response is weighted according to the degree to which he agrees or disagrees with the item statement. For all of the items, agreement is indicative of dogmatism and disagreement is indicative of openness (8, p. 73).

Reliabilities are reported as ranging from .68 to .93 (8, p. 90). Rokeach's findings in various studies support the construct validity of the scale (8).

This instrument was chosen for three reasons. First, the Dogmatism Scale has been demonstrated to possess discriminatory properties in a wide range of situations (8). Second, Rokeach theorizes a relationship between the internal-external dimension and the belief-disbelief continuum (8, p. 58). Lamb (4) has demonstrated a relationship, significant at the .05 level, between internal orientation and
openness, and external orientation and dogmatism. Thus, the Dogmatism Scale should prove a sensitive measure of change along the internal-external continuum. Third, from a theoretical position, it is assumed that openness to experience described by Rogers (7) as characteristic of clients engaged in successful counseling is similar to Rokeach's construct of open mindedness. If this assumption is valid, the Dogmatism Scale should prove an adequate measure of change occurring in counseling.

The Tennessee Self Concept Scale, Counseling Form

Work on the Tennessee Self Concept Scale was initiated by Pitts in 1955 (1). Pitts first compiled a large pool of self descriptive items from a number of other self concept measures and from patient and non-patient populations. A descriptive system was then defined for the purpose of classifying items on the basis of content. After item editing, seven clinical psychologists served as judges to classify the items and determine the positive or negative content of each item. The only items utilized in the final scale are those where there was perfect agreement by the judges (1, p. 1).

The Counseling Form contains 100 items measuring eight aspects of the self concept. (See Appendix C.) The scale yields an aggregate score which is a multidimensional view of the self image. This aggregate score is a composite of
several aspects of the self concept: (1) Self-Identity; (2) Self-Satisfaction; (3) Behavior; (4) Physical Self; (5) Moral-Ethical Self; (6) Personal Self; (7) Family Self; and (8) Social Self. Reliability on the composite score is reported by Fitts at .92 (1, p. 14). Fitts found the content validity to be high. Additional evidence of the scale's validity has come from several studies by Fitts (1). Responses are made on a five point numbered scale, the value given any response being determined by the degree the individual feels an item describes or does not describe his feelings of himself.

This instrument was chosen for five reasons. First, the normative data were most impressive when considered in conjunction with other measures of self concept. Second, the counseling form of the scale is economical in administration, scoring, and interpretation. Third, the instrument yields a quantitative composite score which is definitive of a broad self concept. Fourth, this scale was assumed to be sensitive enough to measure the positive self concept change that has been found to accompany successful counseling (6, 5, 11). Fifth, Lamb has demonstrated a correlation between internal orientation and strong self concept significant at the .01 level of probability (4). Thus, an adequate self concept measure should be sensitive enough to measure any change occurring as a result of counseling.
The Personal Orientation Inventory

The Personal Orientation Inventory, developed by Shostrom (10), is based on Maslow's concept of self-actualization. (See Appendix D.) The self-actualizing individual is described by Shostrom as "... a person who is more fully functioning and lives a more enriched life than does the average person" (10, p. 5). The self-actualizer develops all of his unique potentialities and is relatively free of the emotional turmoil of those less self-actualized. The Inventory is considered to be a measure of the individual's present level of mental health.

The Inventory is comprised of 150 non-threatening items, based on significant problems of value judgments seen by several therapists over a five year period. These therapists were in private practice. "The items also were agreed to be related to the research and theoretical formulations of many writers in Humanistic, Existential, or Gestalt Therapy," including Maslow, Reisman, May, and Perl (10, p. 25). Each item is a two-choice comparative value and behavior judgment. Individuals taking the test indicate only those items they feel to be true or mostly true of themselves. Items that are not descriptive of the individual are left blank.

The Inventory offers two composite scores, the support score and the time score, which cover two major areas important in personal development and interpersonal interaction. The support scale measures whether the individual's
mode of reaction is characteristically "self" or "other" oriented. "Inner, or self, directed individuals are guided primarily by internalized principles and motivations while other directed persons are to a great extent influenced by their peer group or other external forces" (10, p. 5). The time scale measures the degree to which the individual lives in the present. The individual described by this measure lives in the present with "contact and full feeling reactivity while the time incompetent person lives primarily in the past, with guilt, regrets, and resentments, and/or in the future, with idealized goals, plans, expectations, predictions and fears" (10, p. 5).

There are ten subscales yielding scores which reflect the two composite scores: (1) Self-Actualizing Value, (2) Existentiality, (3) Feeling Reactivity, (4) Spontaneity, (5) Self Regard, (6) Self Acceptance, (7) Nature of Man, (8) Synergy, (9) Acceptance of Aggression, and (10) Capacity for Intimate Contact. Shostrom notes that the utilization of the composite constructs is desirable for research (10, p. 7).

Test-retest reliability has been established at .84 for the Support Ratio and .71 for the Time Ratio. Various studies reported by Shostrom indicate the Inventory to have good discriminant and concurrent validity. Of particular interest is the reported finding that the Personal Orientation Inventory was able to discriminate at the .01 level of
significance between the mental health levels of beginning therapy and advanced therapy groups (10, p. 27).

This instrument was chosen for four reasons. First, several theorists have suggested movement toward self-actualization to be a legitimate goal of the therapeutic process (10, p. 5). Second the normative data suggest that the Inventory is a comprehensive measure of values and behavior traditionally considered of importance in the development of self-actualization. Third, the Inventory provides an objective delineation of the level of positive mental health, thereby enabling a quantitative measurement to be obtained of any change in the level and direction of mental health that might accompany counseling. Fourth, the Personal Orientation Inventory has demonstrated an ability to differentiate between groups in different stages of therapy.

Treatment of the Data

The research hypotheses were converted to null hypotheses and statistical analyses were made of the null hypotheses.

The experimental design was a 2 X 2 factorial analysis of variance. The two main treatments were Demonstrated Internal-External Reward Postures, and Directive and Client-Centered Group Counseling. Data analyzed were pre-test and post-test difference scores on each of the following: the Dogmatism Scale, Form E, the aggregate score of the Tennessee
Self Concept Scale, Counseling Form, and the two composite constructs of the Personal Orientation Inventory. For reasons of economy, Rokeach's scoring system was not used. In the present study, the mean value of each subject's Dogmatism Scale was obtained. A constant of sixty was added to each pre- and post-test mean value to alleviate negative scores. Main effects were yielded by the F test. When indicated, further analyses of the data were accomplished by Fisher's t technique. A significance level of .05 was required for rejection of the null hypotheses for both F and t tests. Graphic representation of the results was drawn to facilitate interpretation.
CHAPTER BIBLIOGRAPHY


2. James, William H., "Internal Versus External Control of Reinforcement as a Basic Variable in Learning Theory," unpublished doctoral dissertation, Department of Psychology, Ohio State University, Columbus, Ohio, 1957.


CHAPTER III

RESULTS AND DISCUSSION

The experimental schema was a 2 X 2 factorial analysis of variance. Data analyzed were pre-test and post-test difference scores on the criterion measures. The F ratio yielded main effects scores. Further analysis of the data was accomplished by Fisher's t technique when indicated by a significant F ratio. Statistical analyses of the data were made in terms of the null hypotheses.

Hypotheses I and II

Null Hypothesis I was In directive group counseling situations, there will be no significant difference in degree of change as measured by the Tennessee Self Concept Scale and the Personal Orientation Inventory in groups comprised of individuals demonstrating an external reward posture and groups comprised of individuals demonstrating an internal reward posture.

Null Hypothesis II was In client-centered group counseling situations, there will be no significant difference in degree of change as measured by the Tennessee Self Concept Scale and the Personal Orientation Inventory in groups comprised of individuals demonstrating an external reward posture and groups comprised of individuals demonstrating an internal reward posture.
A summary of the analysis of variance among the groups on the Personal Orientation Inventory Time Ratio pre- to post-test difference scores is presented in Table I.

TABLE I

ANALYSIS OF VARIANCE OF PRE- TO POST-TEST DIFFERENCE SCORES ON THE PERSONAL ORIENTATION INVENTORY TIME RATIO

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>10.0</td>
<td>1</td>
<td>10.0</td>
<td>1.59</td>
</tr>
<tr>
<td>Within</td>
<td>226.60</td>
<td>36</td>
<td>6.29</td>
<td>.</td>
</tr>
<tr>
<td>Total</td>
<td>245.50</td>
<td>39</td>
<td></td>
<td>.</td>
</tr>
</tbody>
</table>

Comparison of the F value in Table I with tabled values for significance at the .05 level revealed no significant variations in mean difference scores according to the Time Ratio of the Personal Orientation Inventory.

With thirty-nine degrees of freedom, one degree of freedom between the groups and thirty-six degrees of freedom within the groups, the F ratio significant at the .05 level is 4.13. The F value for the Time Ratio was 1.59, which was not significant at the .05 level.

While no significant change as measured by the Time Ratio occurred, further analysis of the data was considered appropriate. To facilitate further analysis of the data, means and standard deviations of changes as measured by the Personal Orientation Inventory Time Ratio are presented in Table II.
### TABLE II

**Means and Standard Deviations of Time Ratio Scores**

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
</tr>
<tr>
<td>Directive Internals</td>
<td>18.10</td>
<td>18.20</td>
</tr>
<tr>
<td>Client-Centered Internals</td>
<td>16.40</td>
<td>17.00</td>
</tr>
<tr>
<td>Directive Externals</td>
<td>16.10</td>
<td>16.50</td>
</tr>
<tr>
<td>Client-Centered Externals</td>
<td>16.50</td>
<td>18.50</td>
</tr>
</tbody>
</table>

The standard deviations for the groups were small, indicating that no large differences existed within the groups on the pre- or post-test of the Time Ratio. The internally oriented and the externally oriented groups under directive group counseling tended to become slightly more heterogeneous as groups. This was evidenced by pre- and post-test standard deviation changes of 2.2561 to 2.3213 and 2.3430 to 2.8372, respectively. The externally and internally oriented groups under client-centered group counseling tended to become slightly more homogeneous as groups. This was evidenced by pre- and post-test standard deviation changes of 2.8722 to 1.9621 and 3.0066 to 2.6832, respectively.

The mean score on the initial testing of the Time Ratio for the internally oriented group under directive group counseling was 18.10. The internally directed group under client-centered counseling demonstrated a mean of 16.40. The mean pre-test score for the externally oriented under
Directive group counseling was 16.10, while the externally oriented group under client-centered counseling attained a mean score of 16.50. There seems to be little difference between the groups in the initial level of adjustment measured by the Time Ratio of the Personal Orientation Inventory.

Examination of post-test mean scores by groups on the Time Ratio revealed a mean of 18.20 for the internally oriented under directive group counseling, 17.0 for the internally oriented under client-centered group counseling, 16.50 for the externally oriented under directive group counseling, and 18.50 for the externally directed under client-centered group counseling. There appears to be little difference between the groups in the post-test mean scores. To facilitate interpretation of the data, graphic representation of the pre- and post-test mean scores on the Time Ratio is presented in Figure 1.

All four groups experienced positive change as measured by the Time Ratio. Mean scores of the groups under client-centered counseling witness larger gains than did the groups under directive counseling, with the largest gain occurring in the client-centered group characterized by external reward posture. The changes measured by the Time Ratio were so small that no trend could be established.
A summary of the analysis of variance among the groups on the Personal Orientation Inventory Support Ratio pre- to post-test difference scores is presented in Table III.

TABLE III

ANALYSIS OF VARIANCE OF PRE- TO POST-TEST DIFFERENCE
SCORES ON THE PERSONAL ORIENTATION INVENTORY
SUPPORT RATIO

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>9.03</td>
<td>1</td>
<td>9.03</td>
<td>.188</td>
</tr>
<tr>
<td>Within</td>
<td>1722.10</td>
<td>36</td>
<td>47.84</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1796.38</td>
<td>39</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comparison of the F value in Table III with tabled values for significance at the .05 level revealed no
significant variation in mean difference scores according to the Support Ratio of the Personal Orientation Inventory.

With thirty-nine degrees of freedom, one degree of freedom between the groups and thirty-six degrees of freedom within the groups, the F ratio significant at the .05 level is 4.13. The F value for the Support Ratio was .188, which was not significant at the .05 level. The possibility of a significant F ratio was lessened by the magnitude of the Within Sum of Squares. There is the indication that the differences measured by the Support Ratio were within rather than between the groups.

While no significant change as measured by the Support Ratio occurred, further analysis of the data was considered appropriate. To facilitate further analysis of the data, means and standard deviations of changes measured by the Personal Orientation Inventory Support Ratio are presented in Table IV.

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directive Internals</td>
<td>79.80</td>
<td>6.7941</td>
</tr>
<tr>
<td>Client-Centered Internals</td>
<td>81.30</td>
<td>9.4873</td>
</tr>
<tr>
<td>Directive Externals</td>
<td>83.70</td>
<td>6.4660</td>
</tr>
<tr>
<td>Client-Centered Externals</td>
<td>82.90</td>
<td>12.1774</td>
</tr>
</tbody>
</table>
The standard deviations for the groups would tend to indicate that differences existed within the groups on the pre- and post-tests of the Support Ratio. The internally and externally oriented groups under directive group counseling tended to become slightly more heterogeneous. This was evidenced by pre- and post-test standard deviation changes of 6.7941 to 7.8236 and 6.4660 to 8.8119, respectively. The internally and externally oriented groups under client-centered group counseling tended to become slightly more homogenous. This was evidenced by pre- and post-test standard deviation changes of 9.4873 to 9.30 and 12.1774 to 11.8494, respectively.

The mean score on the initial testing of the Support Ratio for the internally oriented group under directive group counseling was 79.80. The internally directed group under client-centered counseling demonstrated a mean of 81.30. The mean pre-test score for the externally oriented under directive group counseling was 83.70, while the externally directed group under client-centered counseling attained a mean score of 82.90. There seems to be little difference between the groups in the initial level of adjustment measured by the Support Ratio of the Personal Orientation Inventory.

Examination of post-test mean scores by groups on the Support Ratio revealed a mean of 83.30 for the internally oriented under directive group counseling, 84.10 for the
internally oriented under client-centered group counseling, 87.50 for the externally directed under directive group counseling, and 89.30 for the externally oriented under client-centered group counseling. There appears to be little difference between the groups on the post-test mean scores. To facilitate interpretation of the data, graphic representation of the pre- and post-test mean scores on the Support Ratio is presented in Figure 2.

All four groups experienced positive change as measured by the Support Ratio. The largest gain was witnessed in the externally oriented group under client-centered counseling. The changes measured by the Support Ratio were so small that no trend could be established.
It would seem that significant change in level of self-actualization as measured by the Personal Orientation Inventory did not occur in externally or internally oriented groups under directive or client-centered group counseling.

A summary of the analysis of variance among the groups on the Tennessee Self Concept Scale pre- to post-test difference scores is presented in Table V.

**TABLE V**

**ANALYSIS OF VARIANCE OF PRE- TO POST-TEST DIFFERENCE SCORES ON THE TENNESSEE SELF CONCEPT SCALE**

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>1380.63</td>
<td>1</td>
<td>1380.63</td>
<td>5.26</td>
</tr>
<tr>
<td>Within</td>
<td>9457.50</td>
<td>36</td>
<td>262.71</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11522.76</td>
<td>39</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comparison of the F value of 5.26 in Table V with tabled values for significance at the .05 level revealed a significant variation in mean difference scores according to the Tennessee Self Concept Scale. It would seem that change in self concept, as herein measured, did occur.

Since the F ratio for the Tennessee Self Concept Scale was significant, further analysis of the data was warranted to ascertain the significance and direction of the findings. The significance of the mean difference scores is presented in Table VI.
TABLE VI

SIGNIFICANCE OF THE RELATIONSHIP BETWEEN PRE- TO POST-TEST DIFFERENCE SCORES ON THE TENNESSEE SELF CONCEPT SCALE IN INTERNALLY-EXTERNALLY ORIENTED GROUPS IN DIRECTIVE AND CLIENT-CENTERED GROUP COUNSELING

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean Score Difference</th>
<th>S.D.</th>
<th>Group</th>
<th>Mean Score Difference</th>
<th>S.D.</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directive Internals</td>
<td>-3.1</td>
<td>18.84</td>
<td>Directive Externals</td>
<td>-3.3</td>
<td>11.72</td>
<td>.0275</td>
</tr>
<tr>
<td>Client-Centered Internals</td>
<td>2.7</td>
<td>11.21</td>
<td>Client-Centered Externals</td>
<td>14.4</td>
<td>18.1</td>
<td>1.6141</td>
</tr>
<tr>
<td>Directive Internals</td>
<td>-3.1</td>
<td>18.84</td>
<td>Client-Centered Internals</td>
<td>2.7</td>
<td>11.21</td>
<td>-.8001</td>
</tr>
<tr>
<td>Directive Externals</td>
<td>-3.3</td>
<td>11.72</td>
<td>Client-Centered Externals</td>
<td>14.4</td>
<td>18.1</td>
<td>2.4418</td>
</tr>
</tbody>
</table>

Mean self concept change in the internally oriented and externally oriented groups under directive group counseling treatment yielded a Fisher's $t$ of .0275, which was not significant at the .05 level. Mean self concept change in the internally oriented and externally oriented groups under client-centered group counseling treatment yielded a Fisher's $t$ of 1.6141, which was not significant at the .05 level. While not statistically significant at the .05 level, a $t$ of 1.6414 with eighteen degrees of freedom is significant at the .07 level. Thus a trend toward self concept change in a
positive direction seems indicated. Mean self concept change in the internally oriented groups under directive and client-centered group counseling treatment yielded a $t$ score of $-0.8001$, which was not statistically significant. Mean self concept change in the externally oriented groups under directive and client-centered group counseling treatment yielded a $t$ of $2.4418$, which was significant at the .05 level. The mean change of self concept for the externally oriented client-centered group indicated a change of self concept in a positive direction. For all of the groups, the large standard deviations indicated that mean score differences were greater within the groups than between the groups. Had these standard deviations been smaller, the $t$ scores would have been larger. There is the implication that with smaller standard deviations, $t$ scores might have approached or fallen within the .05 level of significance.

Negative values of mean score differences were indicative of self concept change in a negative direction; that is, the group's mean change in self concept represented deterioration in concept of self. Positive values of mean score differences were indicative of self concept change in a positive direction; that is, the group's mean change in self concept represented an improvement in concept of self.

Under directive group counseling, the pre- to post-test mean difference score for the internally oriented group was $-3.1$. Under directive group counseling, the pre- to
post-test difference score for the externally oriented group was -3.3. It would thus appear that the self concept of both the internally and externally oriented groups deteriorated under directive group counseling. Under client-centered group counseling, the mean pre- to post-test difference score for the internally oriented group was 2.7, which is indicative of some degree of positive self concept change. Under client-centered group counseling, the mean pre- to post-test difference score for the externally oriented group was 14.4, which is indicative of dramatic positive self concept change. It would thus appear that the self concept of both the internally and externally oriented groups improved under client-centered group counseling. Graphic representation of the mean self concept difference scores is presented in Figure 3 to facilitate interpretation of these trends.

There was a definite trend for groups under client-centered group counseling to witness a positive self concept change regardless of reward posture. There was also a trend for groups under directive group counseling to witness a slight negative self concept change regardless of reward posture.

Null Hypothesis I was accepted. Failure to reject the null hypothesis necessitated rejection of the working hypothesis which predicted that in directive group counseling situations externally oriented individuals would experience more positive change than would internally oriented individuals.
Null Hypothesis I was accepted. Failure to reject the null hypothesis necessitated rejection of the working hypothesis which predicted that in client-centered group
counseling situations internally oriented individuals would experience more positive change than would externally oriented individuals as measured by the Tennessee Self Concept Scale and the Personal Orientation Inventory. A trend of positive change in self concept was noted in the internally and externally oriented client-centered groups.

Hypotheses III and IV

Null Hypothesis III was In directive group counseling situations there will be no significant difference in dogmatic attitude as measured by the Dogmatism Scale in groups comprised of individuals demonstrating an external reward posture and groups comprised of individuals demonstrating an internal reward posture.

Null Hypothesis IV was In client-centered group counseling situations, there will be no significant difference in dogmatic attitude as measured by the Dogmatism Scale in groups comprised of individuals demonstrating an external reward posture and groups comprised of individuals demonstrating an internal reward posture.

A summary of the analysis of variance among the groups on the Dogmatism Scale pre- to post-test difference scores is presented in Table VII.

Comparison of the F value in Table VII with values for significance at the .05 level revealed no significant variations in mean difference scores according to the Dogmatism Scale.
TABLE VII

ANALYSIS OF VARIANCE OF PRE- TO POST-TEST DIFFERENCE
SCORES ON THE DOGMATISM SCALE

<table>
<thead>
<tr>
<th>Source</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>819.03</td>
<td>1</td>
<td>819.03</td>
<td>3.47</td>
</tr>
<tr>
<td>Within</td>
<td>8489.7</td>
<td>36</td>
<td>235.83</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>9597.98</td>
<td>39</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

With thirty-nine degrees of freedom, one degree of freedom between the groups and thirty-six degrees of freedom within the groups, the F ratio significant at the .05 level is 4.13. The F value for the Dogmatism Scale was 3.47, which was not significant at the .05 level.

While no significant change as measured by the Dogmatism Scale occurred, further analysis of the data was considered appropriate. To facilitate further analysis of the data, means and standard deviations of changes as measured by the Dogmatism Scale are presented in Table VIII.

TABLE VIII

MEANS AND STANDARD DEVIATIONS OF DOGMATISM SCALE SCORES

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean Pre-test</th>
<th>Mean Post-test</th>
<th>S.D. Pre-test</th>
<th>S.D. Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directive Internals</td>
<td>58.70</td>
<td>65.40</td>
<td>21.2605</td>
<td>18.9589</td>
</tr>
<tr>
<td>Client-Centered Internals</td>
<td>50.70</td>
<td>43.30</td>
<td>21.7349</td>
<td>18.4285</td>
</tr>
<tr>
<td>Directive Externals</td>
<td>51.70</td>
<td>51.50</td>
<td>17.8776</td>
<td>16.9779</td>
</tr>
<tr>
<td>Client-Centered Externals</td>
<td>45.50</td>
<td>40.70</td>
<td>26.0585</td>
<td>27.1773</td>
</tr>
</tbody>
</table>
The standard deviations for the groups were fairly large, indicating that differences existed within the groups on the pre- and post-test of the Dogmatism Scale. The internally and externally oriented groups under directive group counseling tended to become slightly more homogeneous. This was evidenced by pre- and post-test standard deviation changes of 21.2605 to 18.9589 and 17.8776 to 16.9779, respectively. The internally oriented group under client-centered counseling tended also to become slightly more homogeneous as evidenced by a pre- and post-test standard deviation change of 21.7349 to 18.4285, while the externally directed under client-centered counseling tended to become slightly more heterogeneous as evidenced by a standard deviation change from 26.0585 to 27.1773. The changes in standard deviations for all the groups were too slight to be indicative of trends.

The mean score on the initial testing of the Dogmatism Scale for the internally oriented group under directive group counseling was 58.70. The internally directed group under client-centered counseling demonstrated a mean of 50.50. The mean pre-test score for the externally oriented under directive group counseling was 51.70, while the externally oriented group under client-centered counseling attained a mean score of 45.50. There seems to be some small degree of difference between the groups in the initial level of adjustment measured by the Dogmatism Scale.
Examination of the post-test mean scores by groups on the Dogmatism Scale revealed a mean of 65.40 for the internally oriented under directive group counseling, 43.30 for the internally oriented under client-centered group counseling, 51.50 for the externally oriented under directive group counseling, and 40.70 for the externally directed under client-centered group counseling. There appears to be some degree of difference between the groups in the post-test mean scores. To facilitate interpretation of the data, graphic representation of the pre- and post-test mean scores on the Dogmatism Scale is presented in Figure 4.

![Dogmatism Scale Graph](image)

Fig. 4--Pre- and post-test mean Dogmatism Scale scores for the four groups.
On the Dogmatism Scale high scores are indicative of dogmatism and low scores are indicative of openness to experience. Thus, all of the groups became less dogmatic with counseling except the internally oriented under directive group counseling who became more dogmatic. The directive internals became more dogmatic by a value of 6.7, while the client-centered internals became less dogmatic by a value of 7.4. The directional change of the directive externals was so small as to be almost meaningless, a value of 2.0. The externally oriented under client-centered group counseling became less dogmatic by a value of 4.8. It would appear that a nonsignificant trend was operating in these groups: under client-centered group counseling, groups tended to become less dogmatic and more open to experience, whereas self-directed individuals under directive group counseling tended to become more dogmatic.

It would appear that significant change in degree of dogmatism as measured by the Dogmatism Scale did not occur in externally and internally oriented groups under directive or client-centered group counseling.

Failure to reject null Hypothesis III necessitated rejection of the working hypothesis which predicted that under conditions of directive group counseling, externally oriented individuals would become less dogmatic than internally oriented individuals.
Failure to reject null Hypothesis IV necessitated rejection of the working hypothesis which predicted that under conditions of client-centered group counseling internally oriented individuals would become less dogmatic than externally oriented individuals.

Summarizing these results, the hypotheses that groups characterized by internal locus of control in client-centered group counseling would experience significantly more positive change in self concept, level of self-actualization, and degree of dogmatism than groups characterized by external locus of control in client-centered group counseling were rejected. The hypotheses that groups characterized by external locus of control in directive group counseling would experience significantly more positive change in self concept, level of self-actualization, and degree of dogmatism than groups characterized by internal locus of control in directive group counseling were rejected. The lone significant finding was that groups comprised of externally oriented individuals experienced more positive self concept change in client-centered group counseling than externally oriented individuals in directive group counseling. A nonsignificant trend toward positive self concept change under client-centered group counseling regardless of reward posture, and a nonsignificant trend toward negative self concept change under directive group counseling regardless of reward posture.
were noted. Also noted was a nonsignificant decreasing
dogmatic trend under client-centered group counseling,
regardless of reward posture.
CHAPTER IV

SUMMARY, CONCLUSIONS, INTERPRETATIONS,
AND RECOMMENDATIONS

This study was concerned with the investigation of the relationship between the concept of internal versus external locus of control and group counseling. The study was designed to determine the effect of directive and client-centered group counseling on groups comprised of individuals of internal orientation and groups of externally oriented individuals.

The Problem

The problem was the relationship of individuals with demonstrated differences in internal versus external control of reinforcement postures and directive, client-centered group counseling techniques.

The specific purposes investigated were

1. To determine the consequences of directive group counseling techniques used with individuals demonstrating an internal reward posture.

2. To determine the consequences of directive group counseling techniques used with individuals demonstrating an external reward posture.
3. To determine the consequences of client-centered group counseling techniques used with individuals demonstrating an internal reward posture.

4. To determine the consequences of client-centered group counseling techniques used with individuals demonstrating an external reward posture.

The Hypotheses

The following hypotheses were tested:

I. In directive group counseling situations, groups comprised of individuals characterized by an external reward posture will demonstrate more change in a positive direction as measured by the Personal Orientation Inventory and the Tennessee Self Concept Scale, Counseling Form than will groups comprised of individuals characterized by an internal reward posture.

II. In client-centered group counseling situations, groups comprised of individuals characterized by an internal reward posture will demonstrate more change in a positive direction as measured by the Personal Orientation Inventory and the Tennessee Self Concept Scale, Counseling Form than will groups comprised of individuals characterized by an external reward posture.

III. In directive group counseling situations, groups comprised of individuals characterized by an external reward posture will become less dogmatic as measured by the Dogmatism
Scale, Form E than will groups comprised of individuals characterized by an internal reward posture.

IV. In client-centered group counseling situations, groups comprised of individuals characterized by an internal reward posture will become less dogmatic as measured by the Dogmatism Scale, Form E than will groups comprised of individuals characterized by an external reward posture.

The Method

Subjects, forty white students, were drawn from five Introductory Psychology classes during the Fall semester, 1967. All members of these classes were offered the opportunity to take a battery of tests and receive interpretation of the results. The students were told that the tests were of a vocational nature. Volunteers were accepted.

All volunteers were administered the Kuder Preference Record, Occupational, Form D, the Guilford-Zimmerman Temperament Survey, the General Aptitude Test Battery, Form B, the Otis Quick-Scoring Mental Ability Test, and the I-E Scale. The criterion measures, the Tennessee Self Concept Scale, Counseling Form, the Personal Orientation Inventory, and the Dogmatism Scale, Form E, were also administered.

On the basis of age, the I-E Scale, the Otis Quick-Scoring Mental Ability Test, and sex, the forty subjects were selected from the volunteers on a matching basis and
divided into four groups of ten members each. Each subject was matched with one other subject in every group within the limits of each category of the matching variables. Of the forty subjects, twenty demonstrated an external orientation and twenty demonstrated an internal orientation. Two of the four groups were comprised of individuals demonstrating internal posture and two groups were comprised of individuals demonstrating external posture.

Group I consisted of internally oriented individuals and Group II consisted of externally oriented individuals. Group I and Group II were placed in a directive group counseling setting. Group III was comprised of internally oriented individuals and Group IV consisted of externally oriented individuals. Group III and Group IV were placed in a client-centered group counseling setting.

Two weeks after the testing was completed, six counseling sessions were arranged with each of the four groups. A doctoral candidate in Counseling and Personnel Administration at North Texas State University served as counselor for the directive groups. Another such doctoral candidate served as counselor for the client-centered groups. Prior to the counseling sessions, both counselors were given general instructions for conducting the sessions.

The counseling sessions followed a general format in the directive and client-centered groups. The first session commenced with the subjects receiving their scores on the
General Aptitude Test Battery, the second with the subjects receiving their scores on the Otis Quick-Scoring Mental Abilities Test, the third with the subjects receiving their profiles on the Kuder Preference Record, and the fourth with the subjects receiving their scores on the Guilford-Zimmerman Temperament Survey. The fifth session was designed as a planning session in which the information from the previous sessions could be utilized to make plans in the academic realm. In the directive groups, the sessions were not allowed to deviate from this format and emphasis was placed on the subjects' understanding of the interpretation of the test results. In the client-centered groups, the sessions were allowed to take whatever direction the subjects wished. The sixth session in all four groups was devoted to readministration of the criterion measures.

The experimental schema was a 2 X 2 factorial analysis of variance in which the main treatments were Demonstrated Internal-External Reward Postures, and Directive and Client-Centered Group Counseling. Data analyzed were pre- to post-test difference scores on each of the criterion measures. Main effects were yielded by the F ratio. When indicated, further analyses were accomplished by Fisher's t technique. A significance level of .05 was required for the rejection of the null hypotheses.
Results

1. The hypothesis which predicted that in directive group counseling situations, groups of externally oriented individuals would experience more positive change as measured by the Tennessee Self Concept Scale and the Personal Orientation Inventory than would groups comprised of internally oriented individuals was rejected.

2. The hypothesis which predicted that in client-centered group counseling situations, groups of internally oriented individuals would experience more positive change as measured by the Tennessee Self Concept Scale and the Personal Orientation Inventory than would groups comprised of externally oriented individuals was rejected.

3. The hypothesis which predicted that in directive group counseling situations, groups of externally oriented individuals would become less dogmatic as measured by the Dogmatism Scale than would groups comprised of individuals characterized by an internal reward posture was rejected.

4. The hypothesis which predicted that in client-centered group counseling, groups of internally oriented individuals would become less dogmatic as measured by the Dogmatism Scale than would groups comprised of individuals characterized by an external reward posture was rejected.

5. The only statistically significant finding was that the group comprised of externally oriented individuals experienced more positive self-concept change in
client-centered group counseling than the externally oriented group in directive group counseling.

6. A nonsignificant trend toward positive self concept change was noted in groups under client-centered group counseling, regardless of reward posture.

7. A nonsignificant trend from dogmatism toward openness of experience was noted in groups under client-centered group counseling, regardless of reward posture.

Conclusions

The results of this study suggest

1. That directive group counseling as herein conceived is ineffective in facilitating significant behavioral change as measured by the Tennessee Self Concept Scale, Counseling Form, the Personal Orientation Inventory, and the Dogmatism Scale, Form E in groups comprised of externally and internally oriented individuals.

2. That client-centered group counseling as herein conceived is ineffective in facilitating significant behavioral change as measured by the Personal Orientation Inventory and the Dogmatism Scale, Form E in groups comprised of externally and internally oriented individuals.

3. That client-centered group counseling as herein conceived is effective in facilitating significant behavioral change as measured by the Tennessee Self Concept Scale in groups comprised of internally oriented individuals.
4. That, within the limitations of this study, client-centered group counseling is more effective in facilitating positive self concept change than is directive group counseling, regardless of reward posture.

5. The concept of internal-external locus of control is not a variable to be considered in the group counseling process.

6. Re-examination of the theoretical background as a basis for this study suggests no weaknesses. Perhaps the lack of more significant results warrants re-evaluation and possible modification of the present study's procedures.

Interpretation

Rotter's social learning theory (6) holds that a basic variable of behavior is the individual's belief in whether he exercises control over the outcomes of his behavior or whether external forces control his behavioral outcomes. This generalized expectancy of internal versus external locus of control has been demonstrated to be a basic variable in personality (1) and learning (4). As a basic variable in behavior it would logically follow that internal-external locus of control might be a basic variable in group counseling.

The present study suggests that client-centered group counseling is more effective in facilitating positive self concept change than is directive group counseling, regardless
of reward posture. The externally oriented group in client-centered counseling experienced significantly more positive self concept change than did the externally oriented group in directive group counseling. The findings also indicate a nonsignificant trend toward positive self concept change in the internally and externally oriented groups under client-centered counseling and a nonsignificant trend toward decreasing dogmatism under client-centered group counseling. Neither directive nor client-centered group counseling in this study was able to facilitate significant change in level of self-actualization or degree of dogmatism.

In connection with the findings of this study there are several explanatory possibilities worthy of discussion. Listed, these are

1. Ensuring a dichotomy between the directive and client-centered approaches was considered imperative to this study. If the two approaches were similar, no significant results in terms of type of technique employed could be expected. If the two approaches were distinctly different, the results of the study could more readily be explained in terms of differing techniques. By audio-taping each counseling session, it was possible to ascertain that the directive and client-centered techniques employed in the counseling sessions approached discrete entities.

2. It is possible that the number of counseling sessions was insufficient to produce significant self concept change
in the internally oriented group in client-centered group counseling. Though possible, this seems unlikely when consideration is given to the significant self concept change experienced in the externally oriented group in client-centered group counseling. Other research has indicated that positive self concept change can occur after brief counseling (7).

3. It is interesting to note that the significant change that occurred in conjunction with group counseling was change in self concept, rather than change in level of self-actualization as measured by the Personal Orientation Inventory or dogmatism as measured by the Dogmatism Scale. A nonsignificant trend was noted in the client-centered groups of moving from dogmatism to openness toward new experience. It is assumed, however, that self concept change must occur before it is possible for change to take place in the individual's attitudes toward belief-disbelief or his level of self-actualization. The implication of this assumption is that with more counseling sessions, self-actualization and dogmatism changes in a positive direction could have been witnessed in the externally oriented individuals in client-centered group counseling, and possibly in the internally oriented individuals in client-centered group counseling.

4. The individual characterized by internal locus of control is self directed. To have the courage and strength
to be self directed implies strength of self concept. The relationship between self concept strength and internal locus of control has been demonstrated by Lamb (2) to be significant at the .01 level of statistical significance. It is not illogical to assume that some degree of self understanding and self exploration is requisite to a strong self concept. Thus, perhaps the internally oriented individual has some experience in exploration of self, resulting in self-awareness and positive feelings toward self. It would also seem that the more positive the individual's self concept is at the onset of counseling, the less dramatic, or significant, the positive change of feelings about self will be after counseling.

5. It has been demonstrated that there is a significant relationship between negative self concept and external orientation (2). It is assumed that the individual with a weak self concept does not possess insight into his behavior. This seems to be indicated by the externally oriented individual whose behavior is not self directed and feels that fate or luck or powerful others are responsible for the outcome of his actions. Perhaps the free atmosphere characteristic of client-centered group counseling provides the opportunity for realistic and non-threatening examination of self. It is conceivable that in this type of atmosphere, the individual operating from an external locus of control could learn to take responsibility for his...
Consistent with Raskin (5), perhaps the significant self concept change in a positive direction by the external group in client-centered group counseling is a reflection of this movement toward an internal locus of control.

6. Social learning theory (6, pp. 97-102) holds that the infant is entirely dependent upon adults for the gratification of basic physiological needs. Those who gratify these basic tissue needs become powerful, influential others to the infant. In the process of this basic tissue need gratification, the infant comes to rely upon those who satisfy his needs for the gratification of developing psychological needs of love, attention, protection and recognition. As the child grows, the development of behavioral expectancies is largely concerned with his relationship to other people, particularly in the rewards and punishments meted out by influential adults. Thus the child is taught by influential others (those individuals powerful enough to offer or withhold rewards for behavior) to expect that effort on his own behalf may or may not affect the outcome of his behavior. Ultimately these learned expectancies come to describe a generalized belief system in the degree to which the individual orders his destiny or to which the individual's destiny is ordered by forces outside his control.

Self theory would hold that this generalized expectancy has ultimately to do with the degree to which the individual is self-directed, or self-actualized. The internally directed
person may be considered to be an individual who accepts personal responsibility for his actions and is, to varying degrees, self-actualized. Conversely, the externally oriented individual may be considered one who fails to accept personal responsibility for behavior because he expects that external forces control the outcomes of his behavior. The externally directed person may be considered to be an individual whose self-actualizing tendency has been blocked through previous learnings.

Rogers' self theory holds that the goal of counseling is the removal of barriers to self-actualization. These barriers are the result of threat to the self and can only be removed in a nonthreatening and psychologically safe atmosphere. Perhaps herein lies an explanation of the dramatic self concept change witnessed in the externally oriented group in client-centered group counseling. It is possible that the free atmosphere characteristic of client-centered counseling afforded the opportunity for the externally directed group to experience the self-examination necessary to self concept growth. It is possible that this new experience presented the chance for new learnings to occur, thereby modifying behavioral expectancies. Perhaps one of the learnings of the client-centered group characterized by external reward posture was that self-directed behavior is in itself rewarding.
7. The findings indicate that the technique of client-centered group counseling is sufficient to explain positive self concept change. However, it is suggested that it is the atmosphere fostered by the client-centered philosophy that is important, rather than technique per se. In client-centered counseling, the counselor makes few decisions and bears little responsibility for counseling activities. The counselor is more concerned with establishing meaningful interpersonal relationships and with experiencing and feeling with the client. Evidently such a counseling atmosphere is conducive to self concept growth.

8. Positive self concept change is indicative of the occurrence of something meaningful within the individual, insight. A necessary condition for the occurrence of deep insight that makes self concept change possible is emotional involvement. The directive counselor teaches the client. In a teaching-learning situation, there is a minimum of emotional involvement. Thus, there is little opportunity for emotional insight. The client-centered counselor aid the client in learning about himself through the process of self-discovery. In a learning through self-discovery situation, emotional involvement is facilitated. Hence, there is ample opportunity for insight of emotional quality. It appears that the counseling atmosphere created by client-centered group counseling is of primary importance in aiding the process of insight and thus self.
9. The concept that internally oriented individuals become personally involved in situations whereas externally oriented individuals tend to withdraw from situations (3) appears to be borne out in the subjective reports of the directive and client-centered counselors of the present study. The directive counselor noted that the internally oriented group was more talkative, more involved in the counseling sessions, and asked more relevant questions than the externally oriented group. The client-centered counselor indicated that the internally oriented group was more deeply involved in counseling, dealt with deeper feelings, and expressed more regret at the termination of the counseling sessions than did the externally oriented group. Those individuals characterized by external posture in client-centered group counseling were reported as being uncomfortable at first when the counseling sessions were not directed, though this condition abated somewhat as the sessions progressed. The client-centered counselor also noted a reluctance on the part of the external group to become openly involved in the counseling situation. The concept that externals tend to withdraw and internals tend to become involved in situations is based upon performance of tasks. Task performance can be threatening to the individual who is insecure. However, in a non-threatening situation, the insecure individual evidently responds differently. The finding that the externally oriented group under client-centered group counseling
experienced dramatic positive self concept change would seem to indicate involvement, perhaps covert. Further indication of involvement would appear to stem from a consideration of Raskin's finding that individuals in client-centered counseling tend to move toward an internal locus of control (5).

10. In summary, the findings indicate that client-centered group counseling is more effective in facilitating positive self concept change than is directive group counseling. It appears that client-centered group counseling permits the helping, open atmosphere of self growth and self purpose that seem conducive to positive self concept change more than directive group counseling, particularly with externally oriented individuals.

Recommendations

On the basis of the findings of this investigation, it is recommended

1. That further research into this area might extend the number of group counseling sessions to ascertain if significant behavioral change as measured by the Tennessee Self Concept Scale, Counseling Form, will occur in internally oriented groups in client-centered group counseling.

2. That further research into this area might extend the number of group counseling sessions to ascertain if significant behavioral change as measured by the Personal Orientation Inventory and the Dogmatism Scale will occur in
internally and externally oriented groups in client-centered group counseling.

3. That an investigation of the relationship between internal-external locus of control, and directive and client-centered individual counseling be conducted.

4. That counselors working with groups of individuals be aware that positive self concept change may be facilitated through client-centered group counseling.
CHAPTER BIBLIOGRAPHY

1. James, William H., "Internal Versus External Control of Reinforcement as a Basic Variable in Learning Theory," unpublished doctoral dissertation, Department of Psychology, Ohio State University, Columbus, Ohio, 1957.


APPENDIX A

THE I. E. SCALE

Instructions:

This is a questionnaire to find out the way in which certain important events in our society affect different people. Each item consists of a pair of alternatives lettered a or b. Please select the one statement of each pair (and only one) which you more strongly believe to be the case as far as you're concerned. Be sure to select the one you actually believe to be more true rather than the one you think you should choose or the one you would like to be true. This is a measure of personal belief; obviously there are no right or wrong answers.

Please answer these items carefully but do not spend too much time on any one item. Be sure to find an answer for every choice.

In some instances you may discover that you believe both statements or neither one. In such cases, be sure to select the one you more strongly believe to be the case as far as you're concerned. Also try to respond to each item independently when making your choice; do not be influenced by your previous choice.

1. a. Children get into trouble because their parents punish them too much.
   b. The trouble with most children nowadays is that their parents are too easy with them.

2. a. Many of the unhappy things in people's lives are partly due to bad luck.
   b. People's misfortunes result from the mistakes they make.

3. a. One of the major reasons why we have wars is because people don't take enough interest in politics.
   b. There will always be wars, no matter how hard people try to prevent them.

4. a. In the long run people get the respect they deserve in this world.
   b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.

5. a. The idea that teachers are unfair to students is nonsense.
b. Most students don't realize the extent to which their grades are influenced by accidental happenings.

6. a. Without the right breaks one cannot be an effective leader.
   b. Capable people who fail to become leaders have not taken advantage of their opportunities.

7. a. No matter how hard you try some people just don't like you.
    b. People who can't get others to like them don't understand how to get along with others.

8. a. Heredity plays the major role in determining one's personality.
    b. It is one's experiences in life which determine what they're like.

9. a. I have often found that what is going to happen will happen.
    b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

10. a. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
    b. Many times exam questions tend to be so unrelated to course work that studying is really useless.

11. a. Becoming a success is a matter of hard work, luck has little or nothing to do with it.
    b. Getting a good job depends mainly on being in the right place at the right time.

12. a. The average citizen can have an influence in government decisions.
    b. This world is run by the few people in power, and there is not much the little guy can do about it.

13. a. When I make plans, I am almost certain that I can make them work.
    b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.

14. a. There are certain people who are just no good.
    b. There is some good in everybody.

15. a. In my case getting what I want has little or nothing to do with luck.
    b. Many times we might just as well decide what to do by flipping a coin.

16. a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
    b. Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.
17. a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
   b. By taking an active part in political and social affairs the people can control world events.

18. a. Most people don't realize the extent to which their lives are controlled by accidental happenings.
   b. There really is no such thing as luck.

19. a. One should always be willing to admit mistakes.
   b. It is usually best to cover up one's mistakes.

20. a. It is hard to know whether or not a person really likes you.
   b. How many friends you have depends upon how nice a person you are.

21. a. In the long run the bad things that happen to us are balanced by the good ones.
   b. Most misfortunes are the result of lack of ability, ignorance, laziness or all three.

22. a. With enough effort we can wipe out political corruption.
   b. It is difficult for people to have much control over the things politicians do in office.

23. a. Sometimes I can't understand how teachers arrive at the grades they give.
   b. There is a direct connection between how hard I study and the grades I get.

24. a. A good leader expects people to decide for themselves what they should do.
   b. A good leader makes it clear to everybody what their jobs are.

25. a. Many times I feel that I have little influence over the things that happen to me.
   b. It is impossible for me to believe that chance or luck plays an important role in my life.

26. a. People are lonely because they don't try to be friendly.
   b. There's not much use in trying too hard to please people, if they like you, they like you.

27. a. There is too much emphasis on athletics in high school.
   b. Team sports are an excellent way to build character.

28. a. What happens to me is my own doing.
   b. Sometimes I feel that I don't have enough control over the direction my life is taking.

29. a. Most of the time I can't understand why politicians behave the way they do.
   b. In the long run the people are responsible for bad government on a national as well as a local level.
APPENDIX B

DOGMATISM SCALE

The following is a study of what the general public thinks and feels about a number of important social and personal questions. The best answer to each statement below is your personal opinion. We have tried to cover many different and opposing points of view; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others; whether you agree or disagree with any statement, you can be sure that many people feel the same as you do.

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one.

Write +1, +2, +3, or -1, -2, -3, depending on how you feel in each case.

+1: I AGREE A LITTLE  -1: I DISAGREE A LITTLE
+2: I AGREE ON THE WHOLE  -2: I DISAGREE ON THE WHOLE
+3: I AGREE VERY MUCH  -3: I DISAGREE VERY MUCH

1. The United States and Russia have just about nothing in common.

2. The highest form of government is a democracy and the highest form of democracy is a government run by those who are most intelligent.

3. Even though freedom of speech for all groups is a worthwhile goal, it is unfortunately necessary to restrict the freedom of certain political groups.

4. It is only natural that a person would have a much better acquaintance with ideas he believes in than with ideas he opposes.

5. Man on his own is a helpless and miserable creature.

6. Fundamentally, the world we live in is a pretty lonesome place.

7. Most people just don't give a "damn" for others.
8. I'd like it if I could find someone who would tell me how to solve my personal problems.

9. It is only natural for a person to be rather fearful of the future.

10. There is so much to be done and so little time to do it in.

11. Once I get wound up in a heated discussion I just can't stop.

12. In a discussion I often find it necessary to repeat myself several times to make sure I am being understood.

13. In a heated discussion I generally become so absorbed in what I am going to say that I forget to listen to what the others are saying.

14. It is better to be a dead hero than to be a live coward.

15. While I don't like to admit this even to myself, my secret ambition is to become a great man, like Einstein, or Beethoven, or Shakespeare.

16. The main thing in life is for a person to want to do something important.

17. If given the chance, I would do something of great benefit to the world.

18. In the history of mankind there have probably been just a handful of really great thinkers.

19. There are a number of people I have come to hate because of the things they stand for.

20. A man who does not believe in some great cause has not really lived.

21. It is only when a person devotes himself to an ideal or cause that life becomes meaningful.

22. Of all the different philosophies which exist in this world there is probably only one which is correct.

23. A person who gets enthusiastic about too many causes is likely to be a pretty "wishy-washy" sort of person.

24. To compromise with our political opponents is dangerous because it usually leads to the betrayal of our own side.
25. When it comes to differences of opinion in religion we must be careful not to compromise with those who believe differently from the way we do.

26. In times like these, a person must be pretty selfish if he considers primarily his own happiness.

27. The worst crime a person could commit is to attack publicly the people who believe in the same thing he does.

28. In times like these it is often necessary to be more on guard against ideas put out by people or groups in one's own camp than by those in the opposing camps.

29. A group which tolerates too much difference of opinion among its own members cannot exist for long.

30. There are two kinds of people in this world: those who are for the truth and those who are against the truth.

31. My blood boils whenever a person stubbornly refuses to admit he's wrong.

32. A person who thinks primarily of his own happiness is beneath contempt.

33. Most of the ideas which get printed nowadays aren't worth the paper they are printed on.

34. In this complicated world of ours the only way we can know what's going on is to rely on leaders or experts who can be trusted.

35. It is often desirable to reserve judgment about what's going on until one has had a chance to hear the opinions of those one respects.

36. In the long run the best way to live is to pick friends and associates whose tastes and beliefs are the same as one's own.

37. The present is all too often full of unhappiness. It is only the future that counts.

38. If a man is to accomplish his mission in life it is sometimes necessary to gamble "all or nothing at all."

39. Unfortunately, a good many people with whom I have discussed important social and moral problems don't really understand what's going on.
40. Most people just don't know what's good for them.
TENNESSEE
(Department of Mental Health)
APPENDIX C
SELF CONCEPT SCALE

by

William H. Fitts, PhD.

Published by
Counselor Recordings and Tests
Box 6184 - Acklen Station Nashville, Tennessee 37212
INSTRUCTIONS

On the top line of the separate answer sheet, fill in your name and the other information except for the time information in the last three boxes. You will fill these boxes in later. Write only on the answer sheet. Do not put any marks in this booklet.

The statements in this booklet are to help you describe yourself as you see yourself. Please respond to them as if you were describing yourself to yourself. Do not omit any item! Read each statement carefully; then select one of the five responses listed below. On your answer sheet, put a circle around the response you chose. If you want to change an answer after you have circled it, do not erase it but put an X mark through the response and then circle the response you want.

When you are ready to start, find the box on your answer sheet marked time started and record the time. When you are finished, record the time finished in the box on your answer sheet marked time finished.

As you start, be sure that your answer sheet and this booklet are lined up evenly so that the item numbers match each other.

Remember, put a circle around the response number you have chosen for each statement.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Completely false</th>
<th>Mostly false</th>
<th>Partly false</th>
<th>Mostly true</th>
<th>Completely true</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

You will find these response numbers repeated at the bottom of each page to help you remember them.

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<table>
<thead>
<tr>
<th>Item No.</th>
<th>Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I have a healthy body</td>
</tr>
<tr>
<td>3</td>
<td>I am an attractive person</td>
</tr>
<tr>
<td>5</td>
<td>I consider myself a sloppy person</td>
</tr>
<tr>
<td>19</td>
<td>I am a decent sort of person</td>
</tr>
<tr>
<td>21</td>
<td>I am an honest person</td>
</tr>
<tr>
<td>23</td>
<td>I am a bad person</td>
</tr>
<tr>
<td>37</td>
<td>I am a cheerful person</td>
</tr>
<tr>
<td>39</td>
<td>I am a calm and easy going person</td>
</tr>
<tr>
<td>41</td>
<td>I am a nobody</td>
</tr>
<tr>
<td>55</td>
<td>I have a family that would always help me in any kind of trouble</td>
</tr>
<tr>
<td>57</td>
<td>I am a member of a happy family</td>
</tr>
<tr>
<td>59</td>
<td>My friends have no confidence in me</td>
</tr>
<tr>
<td>73</td>
<td>I am a friendly person</td>
</tr>
<tr>
<td>75</td>
<td>I am popular with men</td>
</tr>
<tr>
<td>77</td>
<td>I am not interested in what other people do</td>
</tr>
<tr>
<td>91</td>
<td>I do not always tell the truth</td>
</tr>
<tr>
<td>93</td>
<td>I get angry sometimes</td>
</tr>
</tbody>
</table>

Responses:

- Completely false
- Mostly false
- Partly false and partly true
- Mostly true
- Completely true
2. I like to look nice and neat all the time ........................................... 2
4. I am full of aches and pains ......................................................... 4
6. I am a sick person ........................................................................ 6
20. I am a religious person ............................................................... 20
22. I am a moral failure .................................................................... 22
24. I am a morally weak person ....................................................... 24
38. I have a lot of self-control ......................................................... 38
40. I am a hateful person .................................................................. 40
42. I am losing my mind .................................................................... 42
56. I am an important person to my friends and family .................... 56
58. I am not loved by my family ....................................................... 58
60. I feel that my family doesn't trust me ........................................ 60
74. I am popular with women ........................................................... 74
76. I am mad at the whole world ...................................................... 76
78. I am hard to be friendly with ....................................................... 78
92. Once in a while I think of things too bad to talk about ................. 92
94. Sometimes, when I am not feeling well, I am cross .................... 94

Responses - Completely false     Mostly false     Partly false and partly true     Mostly true     Completely true
1       2       3       4       5
7. I am neither too fat nor too thin ..................................................

9. I like my looks just the way they are ..........................................

11. I would like to change some parts of my body .............................

25. I am satisfied with my moral behavior ......................................

27. I am satisfied with my relationship to God .................................

29. I ought to go to church more ..................................................

43. I am satisfied to be just what I am .......................................... 43

45. I am just as nice as I should be ..............................................

47. I despise myself .................................................................

61. I am satisfied with my family relationships ................................

63. I understand my family as well as I should ..............................

65. I should trust my family more .................................................

79. I am as sociable as I want to be ..............................................

81. I try to please others, but I don't overdo it ............................... 81

83. I am no good at all from a social standpoint ............................. 83

95. I do not like everyone I know ................................................

97. Once in a while, I laugh at a dirty joke ...................................

Responses- Completely false Mostly false Partly false Mostly true Completely true

partly true
8. I am neither too tall nor too short ........................................ 8

10. I don't feel as well as I should ......................................... 10

12. I should have more sex appeal ......................................... 12

26. I am as religious as I want to be ..................................... 26

28. I wish I could be more trustworthy ................................... 28

30. I shouldn't tell so many lies ........................................... 30

44. I am as smart as I want to be ......................................... 44

46. I am not the person I would like to be ............................... 46

48. I wish I didn't give up as easily as I do ............................... 48

62. I treat my parents as well as I should (Use past tense if parents are not living). 62

64. I am too sensitive to things my family say .......................... 64

66. I should love my family more ......................................... 66

80. I am satisfied with the way I treat other people .................. 80

82. I should be more polite to others ..................................... 82

84. I ought to get along better with other people ..................... 84

96. I gossip a little at times ................................................ 96

98. At times I feel like swearing .......................................... 98
13. I take good care of myself physically...........................................
15. I try to be careful about my appearance....................................
17. I often act like I am "all thumbs"..............................................
31. I am true to my religion in my everyday life............................
33. I try to change when I know I'm doing things that are wrong........
35. I sometimes do very bad things..............................................
49. I can always take care of myself in any situation......................
51. I take the blame for things without getting mad......................
53. I do things without thinking about them first..........................
67. I try to play fair with my friends and family..........................
69. I take a real interest in my family.........................................
71. I give in to my parents. (Use past tense if parents are not living)...
85. I try to understand the other fellow's point of view..................
87. I get along well with other people........................................
89. I do not forgive others easily..............................................
99. I would rather win than lose in a game..................................

Responses - Completely false  Mostly false  Partly false and partly true  Mostly true  Completely true
<table>
<thead>
<tr>
<th>Item No.</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>I feel good most of the time</td>
</tr>
<tr>
<td>16</td>
<td>I do poorly in sports and games</td>
</tr>
<tr>
<td>18</td>
<td>I am a poor sleeper</td>
</tr>
<tr>
<td>32</td>
<td>I do what is right most of the time</td>
</tr>
<tr>
<td>34</td>
<td>I sometimes use unfair means to get ahead</td>
</tr>
<tr>
<td>36</td>
<td>I have trouble doing the things that are right</td>
</tr>
<tr>
<td>50</td>
<td>I solve my problems quite easily</td>
</tr>
<tr>
<td>52</td>
<td>I change my mind a lot</td>
</tr>
<tr>
<td>54</td>
<td>I try to run away from my problems</td>
</tr>
<tr>
<td>68</td>
<td>I do my share of work at home</td>
</tr>
<tr>
<td>70</td>
<td>I quarrel with my family</td>
</tr>
<tr>
<td>72</td>
<td>I do not act like my family thinks I should</td>
</tr>
<tr>
<td>86</td>
<td>I see good points in all the people I meet</td>
</tr>
<tr>
<td>88</td>
<td>I do not feel at ease with other people</td>
</tr>
<tr>
<td>90</td>
<td>I find it hard to talk with strangers</td>
</tr>
<tr>
<td>100</td>
<td>Once in a while I put off until tomorrow what I ought to do today</td>
</tr>
</tbody>
</table>

Responses: Completely false, Mostly false, Partly false and partly true, Mostly true, Completely true
PERSONAL ORIENTATION INVENTORY

APPENDIX D

EVERETT L. SHOSTROM, Ph.D.

DIRECTIONS

This inventory consists of pairs of numbered statements. Read each statement and decide which of the two paired statements most consistently applies to you.

You are to mark your answers on the answer sheet you have. Look at the example of the answer sheet shown at the right. If the first statement of the pair is TRUE or MOSTLY TRUE as applied to you, blacken between the lines in the column headed "a". (See Example Item 1 at right.) If the second statement of the pair is TRUE or MOSTLY TRUE as applied to you, blacken between the lines in the column headed "b". (See Example Item 2 at right.) If neither statement applies to you, or if they refer to something you don't know about, make no answer on the answer sheet. Remember to give YOUR OWN opinion of yourself and do not leave any blank spaces if you can avoid it.

In marking your answers on the answer sheet, be sure that the number of the statement agrees with the number on the answer sheet. Make your marks heavy and black. Erase completely any answer you wish to change. Do not make any marks in this booklet.

Remember, try to make some answer to every statement.

Before you begin the inventory, be sure you put your name, your sex, your age, and the other information called for in the space provided on the answer sheet.

NOW OPEN THE BOOKLET AND START WITH QUESTION 1.
1. a. I am bound by the principle of fairness.
   b. I am not absolutely bound by the principle of fairness.

2. a. When a friend does me a favor, I feel that I must return it.
   b. When a friend does me a favor, I do not feel that I must return it.

3. a. I feel I must always tell the truth.
   b. I do not always tell the truth.

4. a. No matter how hard I try, my feelings are often hurt.
   b. If I manage the situation right, I can avoid being hurt.

5. a. I feel that I must strive for perfection in everything that I undertake.
   b. I do not feel that I must strive for perfection in everything that I undertake.

6. a. I often make my decisions spontaneously.
   b. I seldom make my decisions spontaneously.

7. a. I am afraid to be myself.
   b. I am not afraid to be myself.

8. a. I feel obligated when a stranger does me a favor.
   b. I do not feel obligated when a stranger does me a favor.

9. a. I feel that I have a right to expect others to do what I want of them.
   b. I do not feel that I have a right to expect others to do what I want of them.

10. a. I live by values which are in agreement with others.
    b. I live by values which are primarily based on my own feelings.

11. a. I am concerned with self-improvement at all times.
    b. I am not concerned with self-improvement at all times.

12. a. I feel guilty when I am selfish.
    b. I don't feel guilty when I am selfish.

13. a. I have no objection to getting angry.
    b. Anger is something I try to avoid.

14. a. For me, anything is possible if I believe in myself.
    b. I have a lot of natural limitations even though I believe in myself.

15. a. I put others' interests before my own.
    b. I do not put others' interests before my own.

16. a. I sometimes feel embarrassed by compliments.
    b. I am not embarrassed by compliments.

17. a. I believe it is important to accept others as they are.
    b. I believe it is important to understand why others are as they are.

18. a. I can put off until tomorrow what I ought to do today.
    b. I don't put off until tomorrow what I ought to do today.

19. a. I can give without requiring the other person to appreciate what I give.
    b. I have a right to expect the other person to appreciate what I give.

20. a. My moral values are dictated by society.
    b. My moral values are self-determined.

21. a. I do what others expect of me.
    b. I feel free to not do what others expect of me.

22. a. I accept my weaknesses.
    b. I don't accept my weaknesses.

23. a. In order to grow emotionally, it is necessary to know why I act as I do.
    b. In order to grow emotionally, it is not necessary to know why I act as I do.

24. a. Sometimes I am cross when I am not feeling well.
    b. I am hardly ever cross.
25. a. It is necessary that others approve of what I do.
   b. It is not always necessary that others approve of what I do.

26. a. I am afraid of making mistakes.
   b. I am not afraid of making mistakes.

27. a. I trust the decisions I make spontaneously.
   b. I do not trust the decisions I make spontaneously.

   b. My feelings of self-worth do not depend on how much I accomplish.

29. a. I fear failure.
   b. I don't fear failure.

30. a. My moral values are determined, for the most part, by the thoughts, feelings and decisions of others.
   b. My moral values are not determined, for the most part, by the thoughts, feelings and decisions of others.

31. a. It is possible to live life in terms of what I want to do.
   b. It is not possible to live life in terms of what I want to do.

32. a. I can cope with the ups and downs of life.
   b. I cannot cope with the ups and downs of life.

33. a. I believe in saying what I feel in dealing with others.
   b. I do not believe in saying what I feel in dealing with others.

34. a. Children should realize that they do not have the same rights and privileges as adults.
   b. It is not important to make an issue of rights and privileges.

35. a. I can "stick my neck out" in my relations with others.
   b. I avoid "sticking my neck out" in my relations with others.

36. a. I believe the pursuit of self-interest is opposed to interest in others.
   b. I believe the pursuit of self-interest is not opposed to interest in others.

37. a. I find that I have rejected many of the moral values I was taught.
   b. I have not rejected any of the moral values I was taught.

38. a. I live in terms of my wants, likes, dislikes and values.
   b. I do not live in terms of my wants, likes, dislikes and values.

39. a. I trust my ability to size up a situation.
   b. I do not trust my ability to size up a situation.

40. a. I believe I have an innate capacity to cope with life.
   b. I do not believe I have an innate capacity to cope with life.

41. a. I must justify my actions in the pursuit of my own interests.
   b. I need not justify my actions in the pursuit of my own interests.

42. a. I am bothered by fears of being inadequate.
   b. I am not bothered by fears of being inadequate.

43. a. I believe that man is essentially good and can be trusted.
   b. I believe that man is essentially evil and cannot be trusted.

44. a. I live by the rules and standards of society.
   b. I do not always need to live by the rules and standards of society.

45. a. I am bound by my duties and obligations to others.
   b. I am not bound by my duties and obligations to others.

46. a. Reasons are needed to justify my feelings.
   b. Reasons are not needed to justify my feelings.
47. a. There are times when just being silent is the best way I can express my feelings.
   b. I find it difficult to express my feelings by just being silent.

48. a. I often feel it necessary to defend my past actions.
   b. I do not feel it necessary to defend my past actions.

49. a. I like everyone I know.
   b. I do not like everyone I know.

50. a. Criticism threatens my self-esteem.
   b. Criticism does not threaten my self-esteem.

51. a. I believe that knowledge of what is right makes people act right.
   b. I do not believe that knowledge of what is right necessarily makes people act right.

52. a. I am afraid to be angry at those I love.
   b. I feel free to be angry at those I love.

53. a. My basic responsibility is to be aware of my own needs.
   b. My basic responsibility is to be aware of others' needs.

54. a. Impressing others is most important.
   b. Expressing myself is most important.

55. a. To feel right, I need always to please others.
   b. I can feel right without always having to please others.

56. a. I will risk a friendship in order to say or do what I believe is right.
   b. I will not risk a friendship just to say or do what is right.

57. a. I feel bound to keep the promises I make.
   b. I do not always feel bound to keep the promises I make.

58. a. I must avoid sorrow at all costs.
   b. It is not necessary for me to avoid sorrow.

59. a. I strive always to predict what will happen in the future.
   b. I do not feel it necessary always to predict what will happen in the future.

60. a. It is important that others accept my point of view.
   b. It is not necessary for others to accept my point of view.

61. a. I only feel free to express warm feelings to my friends.
   b. I feel free to express both warm and hostile feelings to my friends.

62. a. There are many times when it is more important to express feelings than to carefully evaluate the situation.
   b. There are very few times when it is more important to express feelings than to carefully evaluate the situation.

63. a. I welcome criticism as an opportunity for growth.
   b. I do not welcome criticism as an opportunity for growth.

64. a. Appearances are all-important.
   b. Appearances are not terribly important.

65. a. I hardly ever gossip.
   b. I gossip a little at times.

66. a. I feel free to reveal my weaknesses among friends.
   b. I do not feel free to reveal my weaknesses among friends.

67. a. I should always assume responsibility for other people's feelings.
   b. I need not always assume responsibility for other people's feelings.

68. a. I feel free to be myself and bear the consequences.
   b. I do not feel free to be myself and bear the consequences.
69. a. I already know all I need to know about my feelings.
   b. As life goes on, I continue to know more and more about my feelings.

70. a. I hesitate to show my weaknesses among strangers.
   b. I do not hesitate to show my weaknesses among strangers.

71. a. I will continue to grow only by setting my sights on a high-level, socially approved goal.
   b. I will continue to grow best by being myself.

72. a. I accept inconsistencies within myself.
   b. I cannot accept inconsistencies within myself.

73. a. Man is naturally cooperative.
   b. Man is naturally antagonistic.

74. a. I don’t mind laughing at a dirty joke.
   b. I hardly ever laugh at a dirty joke.

75. a. Happiness is a by-product in human relationships.
   b. Happiness is an end in human relationships.

76. a. I only feel free to show friendly feelings to strangers.
   b. I feel free to show both friendly and unfriendly feelings to strangers.

77. a. I try to be sincere but I sometimes fail.
   b. I try to be sincere and I am sincere.

78. a. Self-interest is natural.
   b. Self-interest is unnatural.

79. a. A neutral party can measure a happy relationship by observation.
   b. A neutral party cannot measure a happy relationship by observation.

80. a. For me, work and play are the same.
   b. For me, work and play are opposites.

81. a. Two people will get along best if each concentrates on pleasing the other.
   b. Two people can get along best if each person feels free to express himself.

82. a. I have feelings of resentment about things that are past.
   b. I do not have feelings of resentment about things that are past.

83. a. I like only masculine men and feminine women.
   b. I like men and women who show masculinity as well as femininity.

84. a. I actively attempt to avoid embarrassment whenever I can.
   b. I do not actively attempt to avoid embarrassment.

85. a. I blame my parents for a lot of my troubles.
   b. I do not blame my parents for my troubles.

86. a. I feel that a person should be silly only at the right time and place.
   b. I can be silly when I feel like it.

87. a. People should always repent their wrong-doings.
   b. People need not always repent their wrong-doings.

88. a. I worry about the future.
   b. I do not worry about the future.

89. a. Kindness and ruthlessness must be opposites.
   b. Kindness and ruthlessness need not be opposites.

90. a. I prefer to save good things for future use.
   b. I prefer to use good things now.

91. a. People should always control their anger.
   b. People should express honestly-felt anger.
118
92. a. The truly spiritual man is sometimes sensual.
    b. The truly spiritual man is never sensual.
93. a. I am able to express my feelings even when they sometimes result in undesirable consequences.
    b. I am unable to express my feelings if they are likely to result in undesirable consequences.
94. a. I am often ashamed of some of the emotions that I feel bubbling up within me.
    b. I do not feel ashamed of my emotions.
95. a. I have had mysterious or ecstatic experiences.
    b. I have never had mysterious or ecstatic experiences.
96. a. I am orthodoxly religious.
    b. I am not orthodoxly religious.
97. a. I am completely free of guilt.
    b. I am not free of guilt.
98. a. I have a problem in fusing sex and love.
    b. I have no problem in fusing sex and love.
99. a. I enjoy detachment and privacy.
    b. I do not enjoy detachment and privacy.
100. a. I feel dedicated to my work.
    b. I do not feel dedicated to my work.
101. a. I can express affection regardless of whether it is returned.
    b. I cannot express affection unless I am sure it will be returned.
102. a. Living for the future is as important as living for the moment.
    b. Only living for the moment is important.
103. a. It is better to be yourself.
    b. It is better to be popular.
104. a. Wishing and imagining can be bad.
    b. Wishing and imagining are always good.
105. a. I spend more time preparing to live.
    b. I spend more time actually living.
106. a. I am loved because I give love.
    b. I am loved because I am lovable.
107. a. When I really love myself, everybody will love me.
    b. When I really love myself, there will still be those who won't love me.
108. a. I can let other people control me.
    b. I can let other people control me if I am sure they will not continue to control me.
109. a. As they are, people sometimes annoy me.
    b. As they are, people do not annoy me.
110. a. Living for the future gives my life its primary meaning.
    b. Only when living for the future ties into living for the present does my life have meaning.
111. a. I follow diligently the motto, "Don't waste your time."
    b. I do not feel bound by the motto, "Don't waste your time."
112. a. What I have been in the past dictates the kind of person I will be.
    b. What I have been in the past does not necessarily dictate the kind of person I will be.
113. a. It is important to me how I live in the here and now.
    b. It is of little importance to me how I live in the here and now.
114. a. I have had an experience where life seemed just perfect.
    b. I have never had an experience where life seemed just perfect.
115. a. Evil is the result of frustration in trying to be good.
    b. Evil is an intrinsic part of human nature which fights good.

GO ON TO THE NEXT PAGE
116. a. A person can completely change his essential nature.
   b. A person can never change his essential nature.

117. a. I am afraid to be tender.
   b. I am not afraid to be tender.

118. a. I am assertive and affirming.
   b. I am not assertive and affirming.

119. a. Women should be trusting and yielding.
   b. Women should not be trusting and yielding.

120. a. I see myself as others see me.
   b. I do not see myself as others see me.

121. a. It is a good idea to think about your greatest potential.
   b. A person who thinks about his greatest potential gets conceited.

122. a. Men should be assertive and affirming.
   b. Men should not be assertive and affirming.

123. a. I am able to risk being myself.
   b. I am not able to risk being myself.

124. a. I feel the need to be doing something significant all of the time.
   b. I do not feel the need to be doing something significant all of the time.

125. a. I suffer from memories.
   b. I do not suffer from memories.

126. a. Men and women must be both yielding and assertive.
   b. Men and women must not be both yielding and assertive.

127. a. I like to participate actively in intense discussions.
   b. I do not like to participate actively in intense discussions.

128. a. I am self-sufficient.
   b. I am not self-sufficient.

129. a. I like to withdraw from others for extended periods of time.
   b. I do not like to withdraw from others for extended periods of time.

130. a. I always play fair.
   b. Sometimes I cheat a little.

131. a. Sometimes I feel so angry I want to destroy or hurt others.
   b. I never feel so angry that I want to destroy or hurt others.

132. a. I feel certain and secure in my relationships with others.
   b. I feel uncertain and insecure in my relationships with others.

133. a. I like to withdraw temporarily from others.
   b. I do not like to withdraw temporarily from others.

134. a. I can accept my mistakes.
   b. I cannot accept my mistakes.

135. a. I find some people who are stupid and uninteresting.
   b. I never find any people who are stupid and uninteresting.

136. a. I regret my past.
   b. I do not regret my past.

137. a. Being myself is helpful to others.
   b. Just being myself is not helpful to others.

138. a. I have had moments of intense happiness when I felt like I was experiencing a kind of ecstasy or bliss.
   b. I have not had moments of intense happiness when I felt like I was experiencing a kind of bliss.
139. a. People have an instinct for evil.
   b. People do not have an instinct for evil.

140. a. For me, the future usually seems hopeful.
   b. For me, the future often seems hopeless.

141. a. People are both good and evil.
   b. People are not both good and evil.

142. a. My past is a stepping stone for the future.
   b. My past is a handicap to my future.

143. a. "Killing time" is a problem for me.
   b. "Killing time" is not a problem for me.

144. a. For me, past, present and future is in meaningful continuity.
   b. For me, the present is an island, unrelated to the past and future.

145. a. My hope for the future depends on having friends.
   b. My hope for the future does not depend on having friends.

146. a. I can like people without having to approve of them.
   b. I cannot like people unless I also approve of them.

147. a. People are basically good.
   b. People are not basically good.

148. a. Honesty is always the best policy.
   b. There are times when honesty is not the best policy.

149. a. I can feel comfortable with less than a perfect performance.
   b. I feel uncomfortable with anything less than a perfect performance.

150. a. I can overcome any obstacles as long as I believe in myself.
   b. I cannot overcome every obstacle even if I believe in myself.
BIBLIOGRAPHY

Books

Coleman, James, Personality Dynamics and Effective Behavior, Chicago, Scott, Foresman and Company, 1960.


Articles


Unpublished Materials


Efran, Jay Steven, "Some Personality Determinants of Memory for Success and Failure," unpublished doctoral dissertation, Department of Psychology, Ohio State University, Columbus, Ohio, 1963.


Getter, Herbert, "Variables Affecting the Value of Reinforcement in Verbal Conditioning," unpublished doctoral dissertation, Department of Psychology, Ohio State University, Columbus, Ohio, 1962.

Gore, Pearl Mayo, "Individual Differences in the Prediction of Subject Compliance to Experimenter Bias," unpublished doctoral dissertation, Department of Psychology, Ohio State University, Columbus, Ohio, 1963.
James, William H., "Internal Versus External Control of Reinforcement as a Basic Variable in Learning Theory," unpublished doctoral dissertation, Department of Psychology, Ohio State University, Columbus, Ohio, 1957.
