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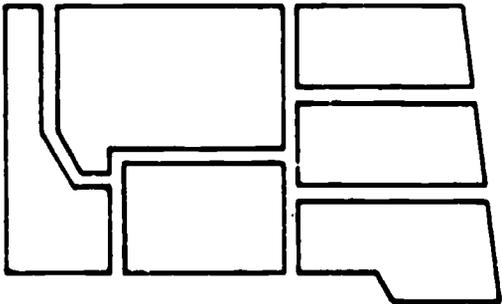
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ABSTRACT

The study examines the effectiveness of theme-centered group counseling conducted by experienced professional counselors in impacting the self-confidence of disadvantaged adults and also the development of interpersonal and intrapersonal sensitivity. Major questions focused on ascertaining if: (1) self-concept developments of a sample of entering students were less favorable than those of the general population, (2) self-concept could be improved through the group counseling technique employed, and (3) improvement in self-concept differed between an eclectic cognitive cycle and two reference groups. Secondary questions regarding the effect of treatment on interpersonal and intrapersonal facility were also addressed. Subjects were drawn from students in the program and were assigned to various group counseling situations. Results are discussed in terms of differences between experimental subjects' entry scores and TSCS norms, differences between pre- and post-treatment TSCS scores and selected POI scales, comparison between treatment and reference groups on indicators of self-concept development, development of interpersonal and intrapersonal facility, and comparison between groups on these variables. Overall conclusions are that experimental subjects experience subnormal self-concept development at initiation of treatment, that counseling treatment positively impacts self-perception, and that the strongest impact is found in the theory focused group. (Author/SA)



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**AN AFFECTIVE EVALUATION REPORT**  
**COUNSELING SERVICES REPORT #20**

**Effects Of A Group Counseling Model  
On Self-concept And Related Variables  
With Adult Members Of Disadvantaged Families**

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
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PROGRAM INC.

ED103572

**EFFECTS OF A GROUP COUNSELING MODEL ON  
SELF-CONCEPT AND RELATED VARIABLES  
WITH ADULT MEMBERS OF DISADVANTAGED FAMILIES**

**AN AFFECTIVE EVALUATION STUDY  
COUNSELING SERVICES REPORT NO. 20  
(IR-5-IV-001)**

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**This Study is a Product of the  
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6a.

## CHAPTER I

## THE PROBLEM

Identity is the integrating concept of self theories and the core of self-concept (Rappoport, 1972). Self-concept/self-confidence has been observed as a (and perhaps the) major problem with rural disadvantaged families in the Mountain-Plains Career Education Program. Trait ratings suggesting inappropriate resolution of developmental stage crises strengthens the case for and understanding of the central role of the self-concept as a problem with the rural disadvantaged population under study (Conrad, 1974a). The key role of self-concept with urban disadvantaged adults has also been documented by Miskimins and Baker (1973).

Counseling objectives for the Mountain-Plains Program have come to focus on appropriate resolution of developmental crises, especially identity and intimacy stages (Erickson, 1963), as an organizing principle. A related counseling objective is increased intrapersonal and interpersonal sensitivity. At Mountain-Plains, group counseling is heavily used to impact these objectives. However, there is currently no literature documenting the effectiveness of various group techniques and exercises in counseling disadvantaged families except reports by Lodge (1973) and Seeley (1974). The merits of group approaches are alternatively "touted and doubted" in the professional community as regards their effect (e.g. Lieberman, et.al., 1973). Thus there is a general need to document the effects of various group models and techniques in developmental counseling and a particular need to document effects with disadvantaged populations.

The current study examines the effectiveness of theme-centered group counseling conducted by experienced professional counselors in impacting the self-concept of disadvantaged adults. A secondary question involves development of interpersonal and intrapersonal sensitivity. Specifically the following questions are addressed:

1. Is the Experimental Subject sample (ES) indicated to have a less favorable self-concept<sup>1</sup> than is normal for adults as measured by the Tennessee Self-Concept Scale (TSCS) counseling form trait scales less favorable than the norming sample for the instrument?
2. Does the Mountain-Plains eclectic cognitive group cycle improve self-concept as measured by the TSCS and selected scales from the POI?
3. Does the eclectic "cognitive cycle" treatment routinely employed by the Mountain-Plains counselors affect self-concept/identity formation differently than a group (RSF) using a Rational Behavioral (RBT) approach as measured by the Personal Orientation Inventory (POI), Time Competence (Tc), Inner Directed (I), Existentiality (Ex), Self-Regard (Sr), and Self-Acceptance (Sa) scales?
4. Do subjects treated in the cognitive group cycle show higher levels of development of self-concept as measured by the POI, Tc, I, Ex, Sr, and Sa scales than an equivalent group (RST) which experienced no treatment?

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<sup>1</sup> A major problem with theory and research in the self variable area is the quantity of terms and subsequent confusion as to meaning (Thoresen, 1969). Erickson elaborated the concept of identity and influenced its study in contemporary personality theories. However, as noted by Rappoport (1972, p. 307) Erickson did not offer an easy definition of identity. Rappoport defines identity as a continuing sense of who and what one is. However, the following terms are often used indiscriminately and appear to refer either to the same thing as the Rappoport/Erickson definition(s) of identity or to an aspect of it: self-esteem, self-worth, self-regard, self-acceptance, self-satisfaction, self-concept. In this study, self-concept will generally refer to how one feels about one's perceived identity, and measures defined under other self headings will be used as indicators. Conrad and Pollack's (1974) third factor, "integration" seems to parallel the self-concept/identity and has been used as a key for scale indicator selection.

5. Do ES's scores indicate increased interpersonal facility at the end of the group cycle as measured by the POI Acceptance of Aggression (A) and Capacity for Intimate Contact (C) scales?
6. Do ES's scores indicate increased intrapersonal facility at the end of group counseling as indicated by the POI Feeling Reactivity (Fr) scale.
7. Do changes in intrapersonal and interpersonal facility differ between groups of students treated with the eclectic "cognitive cycle" and Rational Behavioral Therapy as measured by the POI, Fr, A, and C scales.
8. Do subjects who experienced the eclectic group cycle show higher interpersonal and intrapersonal facility than an equivalent group experiencing no treatment?

## CHAPTER II

### REVIEW OF THE LITERATURE

#### Effects of Poverty on Disadvantaged

Surveying the rather extensive literature on poverty and the disadvantaged leads to many conflicting and frustrating realizations. Perspectives, interpretation and data abound and still questions are unanswered. Rainwater (1970) lists five perspectives that are popular among those who write about the disadvantaged: moralizing, naturalizing, medicalizing, apothesizing, and normalizing. Each perspective differently approaches and interprets behaviors and treatment. Confusion is compounded by generalizing about the poor and their problems, not defining the specific population, often comparing the disadvantaged with the middle class using middle class standards, and not visualizing the problem as a complex of many influencing systems and factors (Allen, 1970). In this respect, poverty is best seen as a culture; a way of looking at reality (Harrington, 1969). Often health, economic, educational, personal and social factors intertwine and converge on the disadvantaged, trapping them in helplessness and increasing the likelihood of emotional disturbance. Since an individual tends to act like the sort of person he conceives himself to be, the more one experiences failure, the more one may tend to view "self" as worthless (Hamacheck, 1971). With this view, the self-fulfilling prophecy is likely to be maintained.

The effects of poverty on personality have been widely and inconclusively studied. Sarbin (1970) lists time perspectives, linguistic codes and locus of

control as variables distinguishing between the disadvantaged and "normal" populations. Allen (1970) reviews literature which contradicts Sarbin regarding the role of these characteristics in differentiating disadvantaged and normal populations. Still, sense of identity and self-concept are generally held to be problem areas for the disadvantaged. Allen questions poor methodology and control as characteristic of research leading to these conclusions. For example:

- 1) In a study of fifth grade slum area children, Keller (1965) found that 65% gave unfavorable self references, but he offered no control or reference group;
- and 2) Klausner (1953) found suggestive trends relating self-concept and social class in a study utilizing 60 self-concept statements but sample size was small (N = 27). To support his view that poverty is not necessarily associated with more negative self-concept, Allen reviews studies by Hill (1957) which found no consistent association between social class and self-acceptance, and by McDonald and Gynther (1965) who found that of over 400 high school seniors who described self and ideal self on a checklist measuring dominance versus cooperative qualities, the more negative self-rating expected from the lower socio-economic group did not result.

Allen's strongest complaint about the studies he reviewed is that *dimensions of self, so far examined, are inappropriate and the instruments employed are too gross and insensitive to detect social economic status differences*. A final problem with much of the research is that *it is done on children even though evidence points to stress factors in adulthood being more strongly related to current mental health risk than childhood stress factors* (Langner and Michael, 1963).

Two recent studies of greater methodological strength indicate that self-concept is a problem for disadvantaged people. Using the Miskimins Self-Goal-Other Discrepancy Scale (MSGO), Miskimins and Baker (1973) found self-concept to be a major problem with disadvantaged adults and successfully impacted the self-concepts of some clients in job counseling using 1:1 settings with paraprofessional counselors. Conrad and McMahon (1974) found that a rural disadvantaged population more closely resembled hospitalized psychiatric patients than normal adults on the dimensions of positive mental health measured by the POI. In another study with this population (Conrad, 1974a), Erickson's developmental stages were used as conceptual framework with trait indicator evidence supporting an interpretation of inappropriately resolved developmental stage crises for this population at each of the following stages: basic trust, autonomy, initiative, industry, identity, and intimacy.

In a series of monographs studying self-concept, Fitts and Associates (1969-72) have concluded that rehabilitation programs should provide training in personal and interpersonal skills. Tiffany et.al. (1969) compared a Work Inhibited Group (characterized by job-hopping, long periods of unemployment, work adjustment difficulties) with a Non-Work Inhibited Group (previous rehabilitation clients who are now stably employed). The Non-Work Inhibited Group showed a more positive and better integrated self-concept than the Work Inhibited Group as measured by the TSCS using both research and counseling scales. Statistically significant differences were found on 14 of 29 scales. The Work Inhibited Group was characterized by: lack of self-direction, poor interpersonal competency and low self-esteem. Fitts (1972) stated that improvement

in self-concept will result in improved behavior/functioning; however, both Fitts and the current author feel that more documentation is needed.

### Summary

The literature indicates strong correlation between disadvantaged status and certain unfavorable psychological descriptions. The fact that these descriptions are reported to be most easily observed in adults may be an indicator that poverty is more a cause than an effect of these descriptions. Recent studies by Conrad (1974a) and by Miskimins and Baker (1973) clearly document the unfavorable self variables descriptions in two disadvantaged groups and Tiffany et.al. (1969) earlier tied self-concept to employment stability.

Research is needed to document the specific effects of poverty on self variables and the kinds of treatment that may be effective in impacting negative effects on self. Research on the effects that various counseling efforts have in impacting negative self-concept in disadvantaged populations is seen to be of great potential value both from the perspective of the humanist who focuses upon the dehumanizing factors in poverty and the economist who focuses on the dollar costs to society.

### Effects of Group Counseling

In recent years group counseling has been used extensively in school and church settings, business organizations, military settings, and for the general public (e.g., Cartwright and Zander, 1968; Howard, 1970). Clientele, types of leadership employed, purposes of the groups, and types of groups vary

widely as do their effects (e.g., Cartwright and Zander, 1968; Tyler, 1969). Most of the literature deals with the theory and process of groups and little with effects (Thoresen, 1969). Problems include: definition of group counseling, types of groups, measurement of effects, endurance of effects, and attribution of effects to the treatment employed.

Caplan (1957) and Goldman (1962) view group counseling on a continuum ranging from group guidance, which mainly gives information, to group psychotherapy, which involves working with groups of emotionally disturbed individuals. Cohn et.al., (1963, pp. 355-6) views group counseling as:

A dynamic, interpersonal process through which individuals within the normal range of adjustment work within a peer group and with a professionally trained counselor, exploring problems and feelings in an attempt to modify their attitudes so that they are better able to deal with developmental problems.

Counseling groups have been described in three operational categories: programmed, process, and theme-centered. Conrad (1973) used this description, recommending use of theme-centered groups for counseling delivery. Theme-centered groups are structured using themes and exercises supplied by the leader. These groups may deal primarily with cognitive content or focus on affect. Control of the affective depth in the theme-centered approach rests with the professional counselor leading the groups.

Research on group counseling has indicated a wide variety of possible effects (e.g., Tyler, 1969; Lieberman, et.al., 1973). The value of group counseling includes: 1) identification that others have similar problems; 2) support and aid in working through a problem; 3) a basis for reality testing;

4) improved techniques of interpersonal relationship; and 5) insight and growth (National Training Laboratories Institute (NTL), 1968). Gibb (1971a) organized research on effects of human relations training under six major rubrics: 1) sensitivity (greater awareness of feelings and perceptions of others); 2) managing feelings (awareness and acceptance of feeling components of one's own actions); 3) managing motivations (e.g., clear communications of one's own motives to others); 4) functional attitudes toward self (self-acceptance, self-esteem); 5) functional attitudes toward others (e.g., decreased authoritarianism, prejudice, collaborative orientation); and 6) interdependent behavior (e.g., interpersonal competence, teamwork). The next question addressed is whether or not research documents the contentions that group members change in these directions.

Bunker (1965) studied a training group of 229 National Training Laboratory participants, 112 of whom were controls. Using perceptions of participants behavior changes (as judged by five to seven associates one year after training) he found that 40% of trainees and 20% of controls were seen as changed as regards: 1) overt operational behavior; 2) changes in insight; and 3) attitudes and global judgments, but not improved as regards leadership behavior. Zhe (1972) studied the effect upon self-acceptance, acceptance of others, and combined self and other acceptance in three types of groups: 1) self-initiated; 2) counselor-initiated; and 3) control. Each group was pre and post tested with the Berger Self Acceptance Scale (Berger, 1952). The two experimental groups attended eight two hour group counseling sessions in the intervening time.

The only group showing significant increase in acceptance of self and combined total acceptance was the "no treatment" control group.

Schwager (1973) randomly divided twenty-four student volunteers from General Psychology classes into treatment and control groups. Each group met for twelve two-hour sessions over an eighteen week period with a group facilitator. The treatment group was a personal growth group with the expressed purpose of expanded awareness and increased acceptance of self and others. The Tennessee Self-Concept Scale (Fitts, 1965) was used as a pretest measure for acceptance of self and results indicated equality between the groups on this measure. The Berger Self-Acceptance Scale (Berger, 1952) was used as a post test measure of group equality. Mean scores on the Berger indicate significant differences between treatment and control groups on both self and other acceptance, with the treatment group gaining more than controls in both areas. In another study by Schwager and Conrad (1974) the Minnesota Couples Communication Program (Miller, et.al., 1972) and the Basic Interpersonal Relationship Program (Human Relations Institute, 1969) were used with four counseling groups. Subjects were fifteen married couples and two divorced women enrolled in a residential Career Education Program for rural disadvantaged families. After sixteen 90-minute sessions led by an experienced professional counselor, subjects registered gains of approximately one and one-half standard deviations on self and other acceptance on the Berger Self-Acceptance Scale.

Conrad (1974c) reviewed research on college orientation programs and special counseling programs for college students with the conclusion that

appropriately designed and executed continuing orientation programs using peer led small groups were effective. He also criticized the research reviewed for weakness and for sparse program description which he contended did not allow interpretation of dissimilar findings. Conrad called particular attention to the fact that programs usually claimed developmental goals, but evaluated outcomes on other criteria--usually grade point average and/or persistence and/or participant satisfaction.

Recently, emphasis has been placed on encounter groups with regard to their potential for change, both constructive and destructive (e.g., Gibb, 1971b; Yalom and Lieberman, 1971). Two continuing research efforts using a variety of group approaches, a variety of pretests, and a variety of outcome evaluations were undertaken to help clarify the current contradictions. The Talent in Interpersonal Encounter Project (TIE) started in 1969 to measure the effects of encounter groups on participants (Bebout and Gordon, 1972). Group members were paying volunteers (cost average 30 cents per hour) from a university and surrounding community. Subjects were mostly young, white, single, and in the middle and upper socio-economic range. About half of these subjects had some previous encounter group experience. All groups met for ten, four-hour sessions plus a weekend semi-marathon for a total of at least sixty hours. Leaders were "non-professionals," selected and trained through the program. Theories of Rogers (1970) and Gibb (1970) on encounter groups were stressed and group members' initial expectations generally matched project expectations regarding what they wanted from the groups. Among findings to date:

1. As a pretest measure, a Q-Sort (Butler and Haigh, 1954) modified for the population under study was used. With a sample of 313 participants, median self-ideal correlation of +.35 was found with a range from -.65 to +.95. After groups post test Q-Sort median was +.51 and three to six months later the median was +.57 (follow-up N = 100). The authors reported less real self-ideal self discrepancy following groups.
2. Using the POI as a pre and post test with 65 women and 70 men, the authors found that post group scores were higher on inner direction, feeling reactivity, spontaneity, acceptance of aggression, and capacity for intimate contact (confidence levels ranging from .025 to .001).
3. Using a modified version of the Social Feeling Index (Bebout and Gordon, 1972) as a socio-emotional alienation measure with 272 participants, the pretest mean alienation score was 63.1 and post test score was 57.3 (difference significant,  $p \leq .01$ ).
4. Type of group and style of leadership make a difference in effects of groups. In general, those groups generating the most positive change and impact consist of active, self-initiating members and helpful but not overly intrusive leaders. (This would appear to support use of the theme-centered approach endorsed by Conrad; 1973a.)

The Lieberman, et.al. (1973) study is the second ongoing research effort documenting effects of encounter groups. The experimental subjects in this study were 209 Stanford undergraduates, mostly white males. There were 68 controls. Experienced professional group leaders were employed and they were encouraged to lead groups in their customary manner. Eighteen groups were formed with about ten participants per group. The following approaches were employed with two groups using each approach: 1) sensitivity training with NTL approach; 2) NTL - Rogerian (personal growth); 3) Synanon; 4) Transactional Analysis; 5) Gestalt; 6) Psychodrama; 7) Marathon; and 8) "Leaderless" groups using the Bell and Howell tapes for structure. One sensory awareness group patterned after an Esalen model and one psychoanalytically oriented

group were also included in the study. Findings over all groups using participant self reports were:

1. Immediately after groups, 78% thought experience was constructive, 61% thought they'd learned a great deal, 57% thought groups were positive, 29% neutral, and 14% negative, and six months later, of the 123 responding participants, 64% thought the experience was constructive, 57% thought they'd learned something, 46% thought groups were positive, 32% neutral, and 21% negative. Positive changes reported by participants included: increased openness and honesty in communication, increased intimacy and acceptance of others, increased awareness of self and others, and increased pro-activeness in interpersonal settings (spontaneity, confidence, talkativeness). These changes were reported about equally in 25% of respondents' statements. /
2. Using the Social Network Questionnaire (Lieberman, et.al., 1973) six months after completion of the groups, those individuals who knew the participants well, found: a) experimentals positively changed in at least one area 80% of the time and controls 83%, b) negative changes in at least one area were reported for 27% of experimentals and 14% controls, and c) social network net change scores found negligible differences between the two groups in net positive change.
3. Other findings include: a) leader reports noting positive change in 89% of participants with the most important and stable areas of change reported to be value structure becoming more change and growth oriented, self images moving toward perceiving self as more lenient, and an increased congruency between real and ideal self images; b) behavioral changes being less stable (although after six months participants did perceive their behavior as more interpersonally adequate), c) only 10% of participants showing no positive change at end of group showed signs of benefit at six month follow-up. (This was one factor from which Lieberman, et.al. (1973) concluded that "late blooming" is not a viable concept for explaining the utility of groups), and d) there is no best way or approach; although different groups lead to differing amounts of change, patterning of changes, and areas of functioning affected.

Overall, the authors concluded that Encounter Groups show modest positive impact; much less than portrayed by supporters and significantly less than participant's own view of change would lead one to assume. However, these results taken as a whole do not seem to indicate positive impact versus controls.

In fact, there seems to be more negative impact versus controls. The results are thus interpreted by the current author as not resolving conflicts as regards the effects of nor the role for groups in counseling.

### Summary

Group counseling is variously defined in the literature and many effects are attributed to it. Many studies indicate that group counseling does have effects on participants but confusion arises due to the use of varying and often weak outcome measures, spotty use of pretests, and inability to control other factors which may influence and/or account for changes attributed to groups. Participant self reports seem to indicate that groups can have positive effects upon members: especially in the areas of more congruency between real-self and ideal-self image and greater interpersonal awareness and functioning (e.g., Bebout and Gordon, 1972; Lieberman, et.al., 1973). Self-report changes were found to be fairly stable over a six month time span (Lieberman, et.al., 1973), but self-report is the weakest form of evaluation (Tyler, 1969). Both the TIE Project and Lieberman's study indicate that different group approaches may be leading to differing amounts and kinds of changes for subjects. However, all conclusions are tenuous due to many uncontrolled (and often undefined or unrecognized) variables; particularly leader/counselor skill, member motivation, and group focus. Caution is also indicated in attribution of effect as studies using social network reports and control groups indicate that change may be seen in controls as well (Bunker, 1954; Zhe, 1972; Lieberman, et.al., 1973). Likewise, groups seem to have focused too little on specific defined

objectives and subsequently to have followed a similar "shotgun" approach to evaluation. Thoresen (1969) and Conrad (1974b) have cited lack of specificity in outcomes as a general problem in counseling research. Those evaluating sensitivity/encounter groups seem to be especially subject to this criticism.

### CHAPTER III

#### DESIGN AND PROCEDURES

##### Overview

The Mountain-Plains Program is a residential-family centered program which provides comprehensive Family Career Education in an individualized competency based approach with heavy emphasis on affective development. All entering students spend seven days being oriented to the Mountain-Plains Program. A group orientation to the counseling program and psychological testing<sup>2</sup> are included in the orientation. On the last day of orientation each student meets with a professional counselor to discuss counseling needs and options (pre-intake). Options include both group and individual counseling in spouse together and spouse apart settings. Couples can choose one option or setting or a combination. Students have the choice of starting their counseling program immediately if they feel they have urgent problems, otherwise counseling begins after completion of other family core curriculum areas. Thus, after their fourth week in the program, students are usually scheduled into counseling as a further part of program participation.

Group counseling at Mountain-Plains follows a theme-centered approach with discussion/interaction theme and exercises provided by a skilled leader. Most students (about 3/4) choose an eclectic cognitive group cycle for initial

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<sup>2</sup> Tests administered to all students in the counseling area include the Personal Orientation Inventory (POI) used in this study.

treatment. These cycles run for 8 - 10 weeks. The focus of this option is on problem solving, strength identification, and goal setting. A brief summary of both the overall program and the Counseling Program appeared in National Model IV in June, 1974. A copy of this newsletter is included as Appendix A. Comprehensive descriptions of the general Mountain-Plains Program and the Mountain-Plains counseling program appear in the Proposal for Grant Continuance (Mountain-Plains, 1973a) and Counseling Services Report No. 10 (Conrad, 1973) respectively.

### Subjects

#### Experimental subjects (ES)

This group consists of students who chose a couples apart group during their pre-intake counseling interview. All Mountain-Plains students selecting this option are put on a "waiting list." As counselors, facilities, and sufficient pools of subjects become available, students are reassigned mechanical random fashion (groups of 7-10), and scheduled for treatment. Experimental Subjects (ES) and Reference Subjects for Treatment Focus (RSF) groups were assigned to treatment by this process with two treatment groups (ES1, ES2, RSF1, RSF2) per focus.

The ES1 group consisted of nine (9) young adult subjects (mean age of 24) of average aptitude (mean GATB G score of 106) including three married males, three married females, and three female single heads-of-household. One male deserted the program and did not complete treatment, reducing this group to eight subjects.

The ES2 group consisted of seven (7) young adult subjects (mean age of 24) of average aptitude (mean GATB G score of 105). There were three male and four female subjects all of whom were married upon entering treatment.

All treated groups attended ten, 90-minute sessions over a period of twelve weeks. Both experimental groups took the POI during orientation and the TSCS during the first group session (the pre-session). At the completion of the group cycle (post session), all groups were again tested with the POI and TSCS. Focus of Treatment in the ES groups followed a cognitive theme-centered approach as described in Appendix B.

#### Reference subjects for treatment focus (RSF)

These subjects chose a couples together group during their pre-intake interview and underwent assignment as previously described.

The RSF1 group consisted of four (4) young adult married couples (mean age of 28) of average aptitude (mean GATB G score of 99).

The RSF2 group consisted of four (4) young adult married couples (mean age of 26) of average aptitude (mean GATB G score of 106). Both groups attended ten, 90-minute sessions over ten weeks. At the completion of the group cycle, both groups were post tested with the POI. Focus of treatment in these groups followed a Rational Behavioral approach.<sup>3</sup>

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<sup>3</sup>Details of this treatment are now available in Counseling Services Report No. 22, "Effects of Applying Rational Behavioral Training in a Group Counseling Situation With Disadvantaged Adults", by Herbert A. Schwager, Staff Counselor, Mountain-Plains, Box 3078, GAFB, Montana, and are scheduled for publication in a parallel study during the fall of 1974.

### Reference subjects for treatment (RST)

Subjects are drawn from the pool of families fully qualified to enter the Mountain-Plains Program, but randomly selected not to undergo treatment. These controls are established for the overall program to accommodate the construction of a statistically valid group of comparison families for use in the research facet of the Mountain-Plains Program (Mountain-Plains, 1973b). After being assigned to the control group, families are followed-up at approximately six month intervals beginning about the 15th month after selection. (Nine months is the current average length of time for completing the program for Mountain-Plains students who subsequently are followed-up at six month intervals after program completion.) From those control subjects who have taken the POI at initial follow-up, a reference sample (N = 15) was selected by a stratified random process controlling sex and marital status to match the ES group.

## Treatment

### Treatment group (ES)

This group met for ten sessions over a twelve week period (excluding testing). The group met for 90-minutes each session (including "assembly time") in the same room, with the same professional counselor<sup>4</sup>. In addition to the experimental subjects, a counseling intern attended each session and assumed

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<sup>4</sup> Counselors were assigned to treatments on supervisory ratings as to their ability to adequately typify the treatment approach. Therefore, in this instance, the counselor is an integral part of the treatment.

the leader role on one occasion when the leader was unable to attend. Description of specific treatment, session by session, is given in Appendix B.

#### Reference subjects for treatment focus (RSF)

RSF subjects experienced an equal amount of group counseling exposure over a similar time period with a different counselor in a spouse together setting. The approach was Rational Behavioral and heavily instructional.

#### Reference subjects for treatment (RST)

The reference group received no Mountain-Plains treatment. POI's were received from this group approximately 15 months after they were designated as controls.

### Instrumentation

#### Tennessee self-concept scale (TSCS)

The TSCS was developed by Fitts (1965) as a standardized, multidimensional measure of self-concept. The original pool of items was compiled from other self-concept measures and written self-descriptions of patients and non-patients. Seven clinical psychologists unanimously selected items as to their fit with a two-dimensional 3/5 classification scheme. The TSCS consists of 100 self-descriptive items with five (5) Likert type response options ranging from completely true to completely false. Ninety items assess self-concept and ten (10), which are taken from the L Scale of the MMPI, measure self-criticism. The 3/5 classification of self-esteem scores includes: identity, self-satisfaction,

behavior, physical self, moral-ethical self, personal self, family self and social self. Scale descriptions derived from the manual (Fitts, 1965) are reported in Table 1.

The TSCS has been criticized because descriptive statistics on the norming sample of the TSCS and the method for selection of the sample are unreported (Suinn, 1972). Fitts (1955) reports that the standardization group from which the norms were developed was a broad sample of 626 persons and included people from various parts of the country who ranged in age from 12 to 68. The group contained approximately equal numbers of male and female subjects, both Negro and white subjects, and represented all social, economic, and intellectual levels from 6th grade through the Ph.D. degree. Fitts also reports that tests were obtained from high school and college classes, employers at state institutions, and various other sources. Although the norm group could be expanded, this has not been done. Fitts states that with relatively large samples ( $N = 75$ ), appreciable differences have not been found on sex, age, race, education or intelligence. Yet the norms are overrepresented in the number of college students, white subjects, and persons aged 12 to 30 years.

#### Reliability and validity

The test/retest reliability coefficients of the scales used in this study range from .60 to .92. No internal consistency reliabilities are reported for individual scales. Rather it is reported in the manual (Fitts, 1965) that reliabilities of most scales range from .80 to .90. Other evidence of the reliability of the

scales include Congdon's (1958) study with psychiatric patients where, even with the shortened scale, he obtained a reliability coefficient of 0.88 and Fitts' demonstration, through various types of profile analysis, that distinctive features of individual profiles are still present for most persons a year or more later.

There is some question as to what the scale actually measures. Bentler (1972) states that the scale is highly overinterpreted relative to data base and probably only measure 1 - 3 self-concept dimensions. However, Vacchiono and Strauss (1968) performed a factor analysis which roughly approximated the conceptually derived scales in use. Other factor analytic studies (e.g., Gable et.al., 1973; Fitzgibbons and Cutler, date unavailable) further confuses the picture as regards mathematically validating/optimizing scales. At present, one can only conclude from the reliabilities and wide and successful use of the instrument that the domain(s) measured are those listed in Table 1 and that high scale scores are indicative of strong self-concept. However, the cautious researcher needs to be aware of the above criticisms as potential problems in interpretation.

#### Personal orientation inventory

The POI was developed by Shostrum (1963) to assess values, attitudes, and behavior relevant to self-actualization (positive mental health). The POI consists of 150 two-choice, paired opposite statements of value and behavior judgments. The items are first scored for the two basic scales of personal orientation: Inner-Directed and Time Competence. The inventory is then

26a.

scored on ten subscales measuring important characteristics associated with self-actualization. The subscales are: self-actualizing value (SAV), existentiality (Ex), feeling reactivity (fr), spontaneity (S), self-regard (Sr), self-acceptance (Sa), nature of man (Nc), synergy (Sy), acceptance of aggression (A), and capacity for intimate contact (C). Scales are described in Shostrum (1966). The descriptions for the scales used in this study are adapted from the manual and reported in Table 2.

The items on the POI were based on observed value judgments of clinically healthy and clinically troubled patients as seen by therapists at the Institute of Therapeutic Psychology over a five year period (Shostrum, 1966). Criteria for selection of observed value judgments are not specified. Therapists were asked to describe the self-actualizing person with two or three adjectives from a checklist of self-actualizing and non-self-actualizing behaviors (Shostrum, 1965). Checklist items were related to research and theoretical formulations of many writers in Humanistic, Existential and Gestalt psychology. Value items appear twice in the POI to clarify the particular continuum or extremes of the dichotomy to the person taking the inventory. POI items are stated both positively and negatively to further clarify the context of usage as regards the concept under consideration.

#### POI norms

Normative data for the POI are available for college students and selected clinical and occupational groups. The college student scores are based on 2,607 entering college freshmen at western and midwestern liberal arts colleges.

TABLE 1

## TSCS Scales and Reliabilities

<u>Scale</u>	<u>Description</u>	<u>Reliability<sup>a</sup> (Test/Retest)</u>
Self Criticism (SC)	Ten mildly derogatory statements derived from the MMPI which most people admit as being true for them. Individuals who deny most of these statements are seen as being defensive.	.75
Total Positive (P)	Score reflects overall level of self-esteem.	.92
Row 1 P (R1)	Measure of basic identity, of how the subject sees himself.	.91
Row 2 P (R2)	Measures how one feels about the self one perceives, i.e., self satisfaction or self-acceptance.	.88
Row 3 P (R3)	Measures one's perception of one's own behavior or the way one functions.	.88
Column A (CA)	Measures physical self - how one views one's body, state of health, physical appearance, skills, and sexuality.	.87
Column B (CB)	Measures moral-ethical self, i.e., moral worth, relationship to God, feelings of being a good or bad person, and satisfaction with one's religion or lack thereof.	.80
Column C (CC)	Measures personal self, i.e., sense of personal worth, feelings of adequacy, and personality evaluation.	.85
Column D (DD)	Measures family self, i.e., feelings of adequacy, worth, and value as a family member.	.89
Column E (CE)	Measures social self, i.e., sense of adequacy and worth in social interaction with others in general.	.90
Total Variability (TV)	Represents the variability in responses within the instrument.	.67
Column Total Variability (CTV)	Represents variability in responses across columns.	.73
Row Total Variability (RTV)	Represents variability in responses across rows.	.60
Distribution (D)	Summary of the way one distributes answers across the five available choices on each item. Also interpreted as measure of the certainty about the way one sees himself.	.89

<sup>a</sup> For more detail on scale descriptions and reliabilities, see the manual (Fitts, 1965.)

TABLE 2

## POI Scales and Reliabilities

<u>Scale</u>	<u>Description</u>	<u>Reliability<sup>a</sup> (Test/Retest)</u>
Inner Directed (I)	Measures how independent and self-supportive an individual is and whether his reactivity orientation is basically toward the self.	.84
Existentiality (Ex)	Measures one's flexibility in applying values or principles in one's own life.	.85
Self-Regard (Sr)	Measures the extent to which a person feels positively about his strengths as a person.	.75
Self-Acceptance (Sa)	Measures acceptance of self including weaknesses or deficiencies.	.80
Time Competence (Tc)	Measures the degree to which a person lives and focuses his life in the present.	.71
Feeling Reactivity (Fr)	Measures sensitivity to one's own needs and feelings.	.65
Acceptance of Aggression (A)	Measures acceptance of feelings of anger or natural aggressiveness as opposed to defensive denial and repression of aggression.	.52
Capacity for Intimate Contact (C)	Measures the ability to develop intimate, warm relationships with other human beings.	.67

<sup>a</sup> Reliability coefficients based on college sample of 48 (Klavetter and Mogar, (1967) as reported in POI manual (Shostrum, 1966).

The norms lean toward college populations and no norms were found for out-patient psychiatric populations.

Shostrum (1966, p. 25) found that the inventory discriminates between clinically judged self-actualized and non-self-actualized groups on eleven of twelve scales to the 0.05 level of confidence (Nc was the exception). Conrad and McMahon (1974) found that a rural disadvantaged population (the same population sampled in current study) recorded scores that did not show statistical independence ( $p \leq 0.05$ ) from Shostrum's (1966) sample of hospitalized psychiatric patients on 5 of 12 POI scales including time competence, but were below ( $p \leq 0.05$ ) scores of Shostrum's normal adult sample on all twelve scales.

#### POI reliability and validity

Test/retest coefficients have been obtained for POI scales on a sample of 48 undergraduate college students. The inventory was administered twice within a one week interval and reliability coefficients of subscales ranged from .52 to .82 (Klavetter and Mogar, 1967; Shostrum, 1966, p. 32). The POI thus seems to have adequate reliability. Validity is indicated by the construction and successful use in a variety of settings to measure client change and distinguish between populations (e.g., Conrad and McMahon, 1974; Culbert, et.al., 1968, Leib and Snyder, 1967).

#### Instrument Administration

##### TSCS

The pre and post tests on the TSCS were administered during the pre and post sessions of the counseling cycle during the regular meeting time. The

tests were group administered in the Counseling Services Conference and Testing Room by the counseling aide under standard testing conditions. The tests were then hand scored by the aide using scoring guides provided with each specific test.

### POI

The POI was administered to experimental subjects (ES) upon program entry and at the conclusion of group treatment in the Counseling Services Conference and Testing Room by the counseling aide under standard testing conditions. The PC was administered to the control subjects for treatment focus (RSF) in an identical manner. Administration to the reference group for treatment (RST) group was accomplished by the Mountain-Plains field representative during a routine follow-up interview using procedures developed by the Counseling Services Department to make conditions of administration as similar as possible.

### Design

The study focuses upon four major questions utilizing four different designs to answer the questions set forth on pages 2 and 3.

#### Design 1 (for Question 1, p. 2)

A static group comparison is employed. The t-test will be used to test the directional hypotheses at the 0.05 confidence level for each of the TSCS scales used.

Design 2 (for Questions 2, 5, and 6, p. 2-3)

The One-group Pretest/Post test Design described by Campbell and Stanley (1966, p. 7) is employed with the t-test for related samples used to test the directional hypotheses on each of the TSCS and POI scales used in this study. The precise confidence level will be reported for the range  $p = 0.25$  through  $p = 0.01$ .

Design 3 (for Questions 3 and 7, p. 2-3)

A hierarchical design with nested treatments (Kirk, 1968, p. 229) using post tests only utilizing the analysis of variance as described by Kirk (1968, p. 232-3) for statistical comparison was considered to control for counselor effect and the fact of two groups per treatment. Since assignments to treatments is self-selected (although assignment to treatment group within the treatment was, with the exception of two subjects, mechanical random) it would be necessary to demonstrate that the ES and RSF groups did not differ initially on the criterion, or to partial out pretest scores. As: a) ES and RSF groups did differ on the pretest, use of post test raw scores was precluded, b) counselors were assigned to treatments on the criterion "ability to typify the treatment approach" counselor effects are an intentional and integral part of the treatment, and c) groups within treatments experienced essentially identical treatments, the computational complexity of appropriate score corrections for use of the hierarchical design was evaluated as not justifying the small gain in efficiency and a simple two group analysis of covariance (Roscoe, 1969) was chosen for statistical comparison.

Design 4 (for Questions 4 and 8, p. 2-3)

A post test-only-control-group-design (Campbell and Stanley, 1966, p. 25) most closely approximates the design. However, as there is a selection-to-post testing time differential of over a year, and the sampling for ES and RST subsamples is mechanically random, more caution in interpreting results is necessary than would be required for the pure design. The t-test for independent samples will be used to test the directional hypotheses.

## CHAPTER IV

## RESULTS

In this section the results of the study are narrated as regards differences between Mountain-Plains students and the TSCS norm, pre/post treatment differences on the TSCS and selected POI scales, and comparison of treated subjects to reference groups for treatment (RST) and for treatment focus (RSF) on selected POI scales.

#### Differences Between Experimental Subjects Entry Scores and TSCS Norms

Experimental subjects are indicated to have general feelings of lower self-worth (TP). These lower feelings focus in identity confusion (RI), seeing behavior as inappropriate--not meeting own standards (R3), negative view of physical selves (CA), negative feelings about adequacy and value as a family member (CD), and perceiving self as inadequate in social interaction (CE). This negative self-concept is indicated to be consistently low across self-concept areas (TV) with the most consistently negative self view centered in the three row variables (RTV) with some uncertainty or possible defensiveness indicated as regards their self-perception (D).

Experimental subjects scored lower than the norming sample on all nine of the TSCS (counseling form) trait scales (Table 3). Figure 1 shows experimental subject scores range from one-third to over one standard deviation below the norm on these scales. Both the statistical independence and the implied significance of all trait scales deviating in the predicted direction indicates that

the answer to research questions one (Chapter 1) is yes. The self-concept of experimental subjects is indicated by TSCS trait scores to be below the norm.

#### Differences Between ES Pre and Post Treatment Scores on the TSCS and Selected POI Scales

Experimental subjects are indicated to have a better self-concept after treatment in a cognitive group cycle (Table 3 and Figure 1). Pre/post treatment self-concept scores on the TSCS indicate subjects to have developed: 1) heightened feelings of self-worth (TP); 2) a clearer sense of identity (R1); 3) stronger feelings of self-satisfaction and self-acceptance (R2); 4) more real-self--ideal-self congruency (R3); 5) a more positive view of their physical selves (CA); 6) a more positive view of themselves in a moral-ethical frame of reference (CB); 7) stronger perceptions of personal adequacy (CC); 8) a more positive self-view as regards adequacy and worth as a family member (CD); and 9) a perception of themselves as being more adequate in social interaction (CE).

Post treatment scores (Table 4 and Figure 2) on the POI show subjects scoring as: 1) better able to live in the present as opposed to living in day-dreams and worries (Tc); 2) more self-supportive (I); 3) less rigid in applying values (Ex); 4) seeing self more positively (Sr); and 5) more accepting of self with weakness (Sa) than was the case prior to treatment. Experimental subjects scored higher on all five POI scales at post test. However, none of the differences reached the traditional 0.05 confidence level. As can be seen in Table 4, confidence levels ranged from 0.06 to 0.27. Both the statistically

significant differences on the nine TSCS trait scales, and the implied significance of the more favorable post treatment scores on all scales for both the TSCS and the POI, indicate that the answer to questions two is yes. The Mountain-Plains cognitive group cycle does improve self-concept as measured by TSCS and selected POI scales.

#### ES and RSF Groups Compared on Indicators of "Self-Concept" Development

Score differences ( $p \leq 0.05$ ) in favor of the RSF group were observed on the following POI variables: 1) inner locus of control (I); 2) flexibility in application of values (Ex); and 3) self-acceptance (Sa) (Table 5). No statistically significant ( $p \leq 0.05$ ) difference was found between the EX and RSF groups on the Tc or Fr scales. These differences indicate that the answer to question three is yes. The eclectic cognitive treatment affects self-concept and identity formation differently than a group using a Rational Behavioral approach.

#### ES and RST Groups Compared on Indicators of "Self-Concept" Development

On four of the five POI scales, the ES group recorded higher scores at post test than the RST group (Table 4 and Figure 2); however, only the difference regarding the ability to focus on current experience (Tc) can be interpreted with great ( $p = .04$ ) confidence. The tendency of scores to change in the predicted direction coupled with the level of certainty of statistical independence on the Tc scale indicate a "yes" answer to research question number four. Subjects

treated in cognitive group cycle show higher levels of development on self-concept indicators than a "no treatment" reference group as measured by selected POI scales.

#### Interpersonal and Intrapersonal Facility Development of the ES group in Treatment

Experimental subjects are indicated to have greater acceptance of aggression (POI-A), higher capacity for intimate contact (POI-C), and more sensitivity to their own needs and feelings (POI-Fr), following treatment (Table 4 and Figure 1). Since post treatment score differences are in favorable directions and can be interpreted with considerable confidence ( $p \leq 0.05$ ) in each case), the answer to questions five and six is seen to be yes. Subjects do indicate increased interpersonal, and intrapersonal facility after treatment as measured by the POI A, C, and Fr scales.

#### ES and RST Comparison on Interpersonal and Intrapersonal Facility

Experimental subjects are indicated to have increased intrapersonal facility (Table 4) after treatment as compared to the RST group (POI-Fr). Experimental subjects are not indicated to have increased interpersonal sensitivity versus the RST after treatment (POI-A and C). Thus the answer to research question number seven seems to be no. The ES group does not show post-treatment superiority versus the RST group on interpersonal sensitivity. However, the answer to question eight is yes. The ES group treated in eclectic cognitive cycle is indicated to have increased intrapersonal sensitivity versus the RST group.

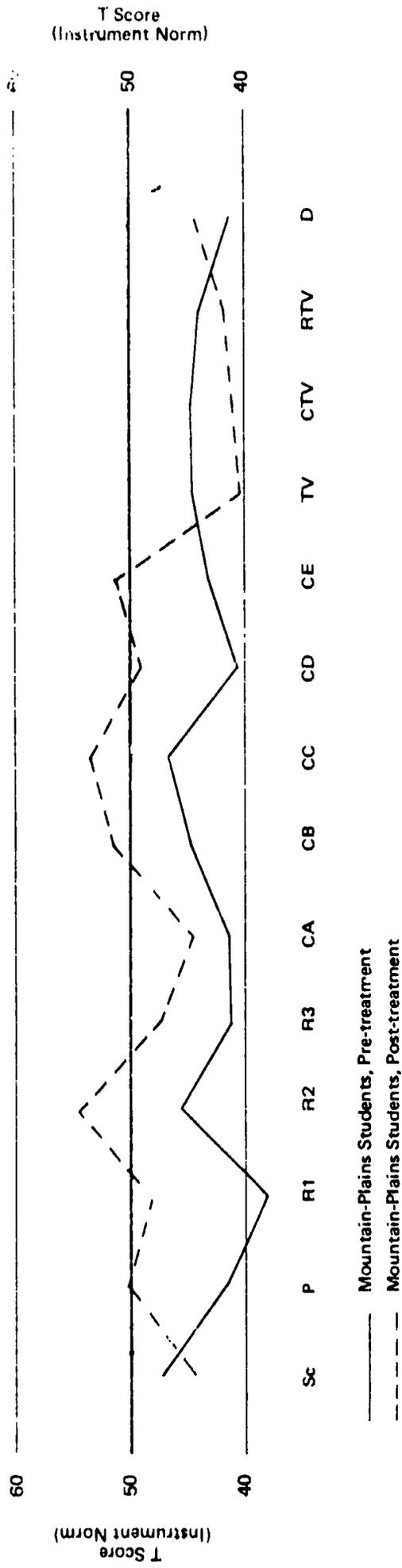
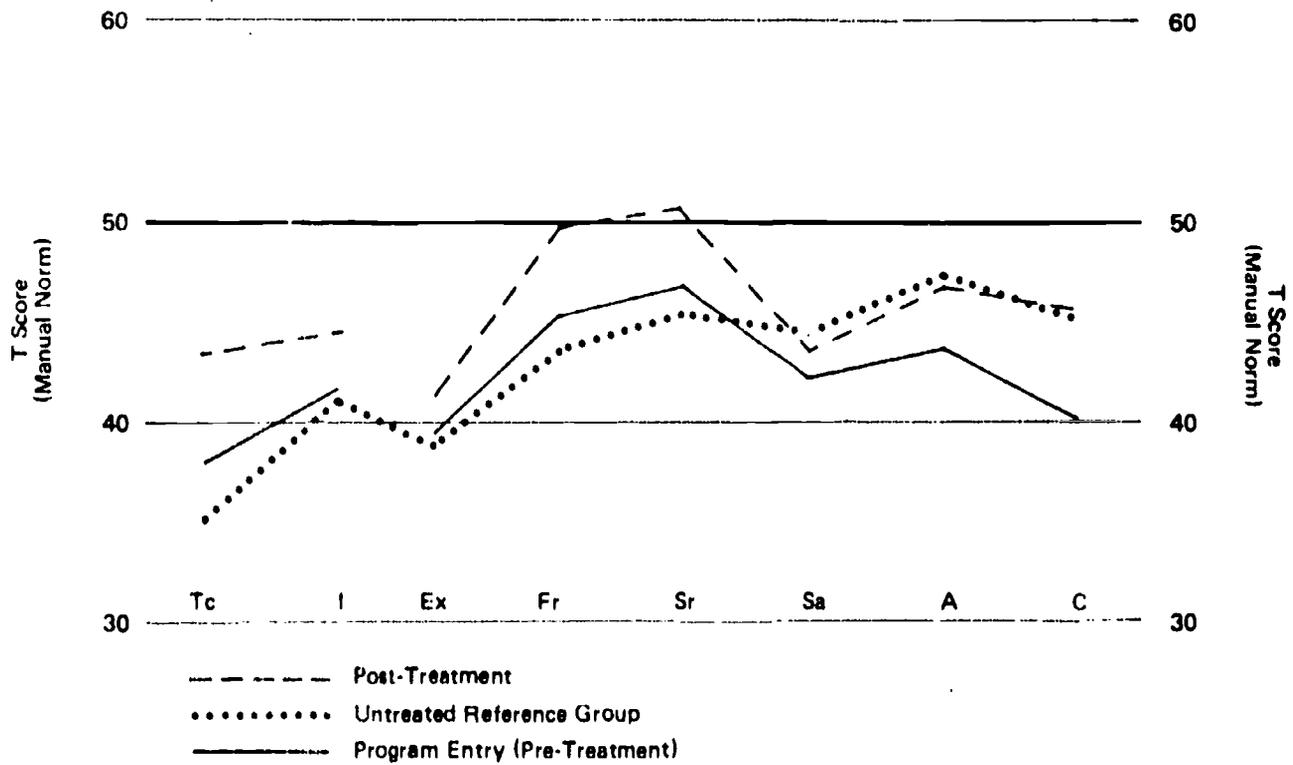


Figure 1  
Pre - Post Profile Comparison on TSCS Scales



**Figure 2**  
**Post-treatment Profiles on Selected POI Scales**  
**Versus Entry and "No Treatment" Profiles**

Table 3  
 Pretreatment – Post-treatment and Pretreatment – Norm  
 Comparisons for Mountain-Plains Students on the TSCS

SCALE	Mountain-Plains Students (ES)									
	Pretest		Post Test		Normal Sample		t		t	
	M	SD	M	SD	M	SD	Instrument Norm	pre-post	pretest – Instrument Norm	pre-post
Self-criticism (SC)	33.8	6.48	31.1	5.97	35.5	6.70	-0.99	2.41*		
Total Positive (TP)	322.4	47.98	347.6	40.01	345.6	30.70	-1.81*	-4.03*		
Row 1 (R1)	116.6	17.29	124.9	13.40	127.1	9.96	-2.28*	-4.02*		
Row 2 (R2)	99.6	18.64	110.2	15.92	103.7	13.79	-0.83	-3.13*		
Row 3 (R3)	106.2	16.59	112.5	14.33	115.0	11.22	-1.98*	-2.98*		
Column A (CA)	65.4	9.42	68.6	9.41	71.8	7.67	-2.56*	-2.88*		
Column B (CB)	67.0	9.52	71.4	9.34	70.3	8.70	-1.30	-2.82*		
Column C (CC)	62.6	10.23	68.0	8.39	64.5	7.41	-0.68	-2.69*		
Column D (CD)	63.6	13.01	70.1	9.12	70.8	8.43	-2.08*	-3.23*		
Column E (CE)	63.8	9.84	69.6	6.38	68.1	7.86	-1.64	-3.47*		
Total Variability (TV)	42.5	15.14	38.5	12.59	48.5	12.42	-1.48	1.62		
Column Total Variability (CTV)	26.0	12.03	23.1	9.71	29.0	9.12	-0.93	1.67		
Row Total Variability (RTV)	16.5	4.24	15.4	5.43	19.6	5.76	-2.74*	0.99		
Distribution (D)	102.4	30.14	107.7	34.82	120.4	24.19	-2.24*	1.10		

\*Denotes a Statistically Significant difference,  $p \leq 0.05$ .

**Table 4**  
**POI Score Indicators of Self-Concept/Integration, Interpersonal Sensitivity and Intrapersonal Sensitivity**

CONCEPT	SCALE	MOUNTAIN-PLAINS STUDENTS				REFERENCE FOR TREATMENT		POST VS PRE $t$	POST VS REF $P_2$	PRE VS REF $t$	$P_3$		
		PRE TEST M	SD	POST TEST M	SD	M	SD						
Self Concept/ Identity/ Integration	Tc	14.3	3.44	15.5	3.08	13.6	3.92	1.37	.10	1.81	.04	1.19	.13
	I	75.6	13.3	79.7	9.34	74.9	11.0	1.68	.06	1.10	.14	—	—
	Ex	16.6	4.97	17.5	5.19	16.3	4.46	0.62	.27	0.51	—	—	—
	Sr	11.0	3.27	12.1	2.48	10.8	3.26	1.51	.08	1.16	.15	—	—
	Sa	14.0	2.85	14.7	2.17	14.9	3.52	.82	.22	0.65	.26	—	—
Interpersonal Sensitivity Intrapersonal Sensitivity	C	14.7	3.73	16.9	4.11	16.8	3.80	2.26	.02	0.09	—	-1.53	.14
	A	14.4	3.43	15.6	3.14	15.7	3.15	2.67	.01	-0.11	—	-1.08	.29
	Fr	14.1	2.44	15.5	2.42	13.5	2.36	1.87	.05	2.29	.02	—	—

$P_1$  is for a one tail t-test for related samples,  $df = 14$ .

$P_2$  is for a one tail t-test for independent samples,  $df = 28$ .

$P_3$  is for a two tail t-test for independent samples,  $df = 28$ .

**NOTE:** The C scale is a factor both in personal sensitivity and integration (See Conrod and Pollack, 1974).

**Table 5**  
**Analysis of Covariance Results: Eclectic Cognitive Cycle**  
**Subjects Versus Rational Behavioral Group Subjects**

	ES				RSF				F ANCOVA
	Pre		Post		Pre		Post		
	M	SD	M	SD	M	SD	M	SD	
Tc	14.3	3.44	15.9	3.08	16.1	2.22	17.9	3.65	1.58
I	75.6	13.3	79.7	9.34	81.3	7.83	91.4	15.5	10.9 *
Ex	16.7	4.97	17.5	5.19	20.5	6.35	23.7	4.04	6.22*
Fr	14.1	2.44	15.5	2.42	15.1	3.23	16.7	2.22	1.00
Sr	11.0	3.27	12.13	2.48	11.0	2.45	12.5	2.17	0.26
Sa	14.0	2.85	14.7	2.17	15.5	3.31	18.1	3.99	5.29*
A	14.4	3.43	15.6	3.14	14.3	2.87	17.1	3.59	2.60
C	14.7	3.73	16.9	4.11	17.5	2.80	21.1	2.66	4.59*

\*Statistically Significant,  $p \leq 0.05$

NOTE: Complete Analysis of Covariance Summary Tables for these variables are included as Appendix F.

## CHAPTER V

### DISCUSSION

The study's major questions focused on ascertaining if: 1) self-concept development of a sample of entering students (ES) was less favorable than that of the general population; 2) self-concept could be improved through the group counseling technique employed; and 3) improvement in self-concept differed between an eclectic cognitive cycle and two reference groups. Secondary questions regarding the effect of treatment on interpersonal and intrapersonal facility were also addressed. Given reservations and qualifications elaborated in the following paragraphs, overall conclusions are that experimental subjects experience subnormal self-concept development at initiation of treatment, that counseling treatment positively impacts self-perception, and that the strongest impact is found in the theory focused group.

In addition to elaborating qualifications and limitations of findings, this section deals with the sufficiency of gains as regards employability and the question of attribution of effects to the treatments employed.

#### TSCS Score Bias

Some caution in interpretation of TSCS results of subjects as compared to the instrument norms is indicated by the fact that the norming sample seems to be overrepresented by white persons and college students and thus may not be fully representative of the adult population; nevertheless results do lend support to counselor/staff observations that Mountain Plains students exhibit a

more negative self-concept than is normal to the general population. While below the norm, the TSCS self-criticism score (Sc), does not indicate that subjects were extremely defensive, and inspection of Table 3 (Figure 1) results indicate that decreasing trait scale scores by partialing out the SC norm departure for pre and post tests would leave the pattern and thrust of results unchanged. This increases the confidence with which results may be interpreted despite the possibility that the raw scores may be positively skewed.

#### Relationship of Self-Concept and Employability

From the work of Tiffany and colleagues it appears that self-concept variables are important employability factors (See Figure 3, Appendix C). Current results would indicate probable post program employment success for a majority of students in the treatment group on the assumption that the Tiffany "rehabilitated" group is a useful predictor of employment success potential. (Since the rehabilitated group closely resembles the instrument norm, the instrument norm could itself be used as a predictor criterion.)<sup>5</sup>

The similarity of Mountain-Plains entry scores to those of Tiffany's urban, work-inhibited group indicates that mutual extrapolation/adaptation of results between urban and rural employability studies/programs may be possible, at least with regard to self-concept variables. This could enhance both program development and research evaluation for all disadvantaged clients by enabling

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<sup>5</sup> The relative predictor strength of self-concept scores versus other variables is a part of the overall Mountain-Plains research program, but is beyond the scope of the current study.

program designers to draw from a wider body of research than might otherwise be appropriate.

#### Differences Versus the RSF Group

Results indicate the RSF group to show stronger impact than the cognitive cycle treatment (ES group) on three variables (I, Ex, and Sa). However, a careful examination of student histories shows that prior to group treatment the RSF subjects received 64 hours of counseling treatment whereas the ES group received 31 hours. This 2:1 ratio of RSF:ES treatment time between pretesting (program entry) on the POI and treatment probably artificially enhances these differences in favor of the RSF subjects.

As the ES Group was treated spouse apart and the RSF group spouse together, differences in effect could be attributable to this variable. However, nearly two years of programming counseling for the population has indicated self-selection into the option rather than the option to be the key variable. Also, Schwager and Conrad (1974) found that a different cognitive treatment did not affect spouse together and spouse apart subjects differently where both spouses experience the same treatment.

If RSF gain scores are reduced by the proportion of pre-counseling treatment (2:1 ratio) the treatment gain differences on the POI in favor of RSF group is reduced and effects of treatments are more similar.<sup>6</sup> Possible boost

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<sup>6</sup> There is no way to know if this or any other mathematically possible correction factor is quantitatively valid.

for RSF scores may also be contributed to by the fact that pre-treatment counseling time in the RSF group was focused on certain individuals rather than evenly spread over all subjects. It was expected that those individuals receiving the most counseling previous to treatments under study would show the highest gains on test measures. Examination of scores for individuals showed that RSF couple receiving most prior treatment did seem to show the strongest overall gains.

Additionally, the RSF couple most strongly impacted had experienced essentially the same treatment as the ES group prior to entering the RBT (RSF) group and had been validated as completing counseling. This couple requested the RSF treatment because of a curiosity about the RBT approach to groups engendered by long experience with Alcoholics Anonymous. The operational program policy and procedure argued for allowing the couple to experience the treatment and they were, therefore, allowed to participate in the group. The male member of this couple was rated by his occupational instructor as his "best student ever." Similarly, both members of another couple included by regular assignment procedure in the RSF group had exceptionally high ability scores. The husband was later elected as president of the student council and the family as "student family of the month." This type of influence of exceptional subjects is a danger of self-selected mechanical random sampling, is a bias not readily controllable, and is especially damaging in a low N study of the current type.

It is also significant that subjects in the RSF group all had the same counselor for individual counseling as well as group treatment, whereas only five subjects in ES group had the same counselor for both group and supplementary<sup>7</sup> individual treatments. It is assumed that subjects with the same counselor for individual and group treatment will experience more treatment continuity than those having two different counselors. Thus, the type of concurrent treatment (as well as the amount of "pre-treatment" already discussed) would seem to favor the RSF group. Therefore as a result of the ethical considerations which precluded denying out-of-group or pre-group treatment or additional treatment to students needing/requesting this attention, results have probably been affected in favor of the RSF group.

#### Differences Versus the RST Group

The gains of the ES group versus the RST group, particularly in the Tc and Fr Scales, indicate that treatment gains are not a spontaneous artifact of maturing. The similarity of ES post treatment and RST Group scores on the POI A and C scales may indicate spontaneous RST gains in these areas, or may reflect a follow-up sampling bias in that the follow-up attrition rate is about one-fifth. Assuming that the most stable and responsible persons/couples will be those most readily found for follow-up, the inability to distinguish between groups on these scales is as likely to represent sampling bias as spontaneous gain. In light of the differences on the POI Tc, I and Fr scales the

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<sup>7</sup> Concurrent supplementary treatment in both the ES and RSF groups was thirty hours.

sampling explanation emerges as the more viable interpretation of the similarity of ES post-treatment and RST scores on the Sa, A, and C scales, and the findings on the Tc and Fr scales may be even more confidently interpreted.

A speculative scenario (which would require further evidence to be called a finding) would depict couples with the stronger interpersonal skills (skills indicated by the A and C scale scores) as tending to maintain better marital and community relationships and thus remain in a particular location (and easily found for follow-up) while their self-concept/integration problems continue to mount, other life circumstances to deteriorate, and relatively more time to be spent worrying and daydreaming (traits consistent with low Tc scores).

#### Attributing Treatment Gains to Counseling Treatment

As students are undergoing treatment in other program elements concurrently with counseling it can be argued that the counseling treatment was not the agent producing the favorable test score changes observed. Several factors tend to refute this argument. First, only counseling has self-concept improvement as a specific objective. Second, although non-counseling elements are similar for all students, an among treatments difference was found. Third, both the overall POI profile for ES's (pretested at program entry) and their TSCS profile (pretested at initiation of formal counseling, an average of nine weeks later) show similarly depressed profiles on self-concept indicators; indicating that nine weeks of regular program did not induce change whereas ten weeks of regular program plus counseling did induce change. (As two

different instruments are used this is an indication rather than a conclusion.) It is reasonable to tentatively conclude that program elements without counseling did not produce self-concept gain. However, it is not possible with current data and program constraints to test the converse--that counseling without other program elements would produce a gain.

#### Importance of Effectiveness of Treatment and Counselor Variables in ES's Treatment

The fact that appropriate exercises of a generally cognitive and fairly simple type can produce significant self-concept gains when administered by a counselor with an "average" education (M.S. in Guidance and Counseling) and moderate (two years plus) experience in therapeutic counseling indicates that the treatment under study has potential for use in a broad range of "traditional" settings (e.g. high schools, agencies, collegiate adjustment seminars, etc.) where a focus on self-concept/identity formation is a goal. Although these gains may be less striking on some variables than an RBT approach applied by a counselor with similar experience and more advanced and focused training (Ed. S. in Family Counseling and special training and certification as a Rational Therapist), the former type of counselor is more often found in current institutional practice and most easily trained and/or located for initiating new programs.

#### Suggestions and Foundations for Further Study

Thoresen (1969) has called for more focus on the individual and his behavior. Employability behavior of all subjects (ES, RSF, and RST) is being followed-up

as a part of the overall Mountain-Plains R & D program. The Appendix E "integration" scores show eleven ES's making favorable score changes and four unfavorable changes. Five of the eleven positive gains are indicated to be statistically significant ( $p \leq 0.05$ ) as opposed to two of the negative changes. Thus the treatment and/or other concurrent program experiences are seen to work for most but against some students. The two cases of negative impact plus one program drop-out in the ES group (not included in data) are equal to the recent program drop-out rate of 20%.<sup>8</sup> A deviant case analysis for the two negatively impacted subjects and the casualty are planned. It is hoped that this focus on the negative effects on the minority of participants will make it possible to attribute failure to input variables (a selection mistake), program effects (program failure), or other unsuspected effects, or combinations.

The problem of attribution of effects remains and should be pursued. To date, program and ethical constraints have precluded the type of sampling and treatment purity necessary to answer these questions conclusively. Either these blocks to direct answers need to be overcome in some fashion that does not impair program or violate ethics, or "circumstantial evidence" in these areas needs to be pursued to the fullest extent.

Finally, a method for assessing the type and extent of "finding bias" in the data for the untreated control population seems to be of great importance. The

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<sup>8</sup> RSF group also included one program drop-out not included in data.

subjective opinion of the author is that the follow-up attrition from this population is from the weakest members of this population causing program effects versus controls to be underestimated.

#### Interpreting Employability Problems

This study adds to the mounting evidence (e.g. Tiffany et.al., 1969/1970; Fitts and Associates, 1969-72; Miskimins and Baker, 1973; Conrad, 1974a) that affective variables are key elements in disadvantaged status. It is suggested these elements should receive appropriate, focused, professional attention in efforts directed towards improving the employability/socio-economic status of such populations.

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## APPENDIX A

ARTICLES FROM NATIONAL MODEL IV - JUNE, 1974  
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## PROGRAM ORIGINS TRACED

## Needs In Rural Areas Viewed As Key

Any attempt to trace the evolution of Model IV, from its conception and implementation through its functioning maturity, must be viewed in the context of the project's pragmatic, innovative, and adaptive approach to social problem solving.

In the late 1960's there arose three seemingly unconnected developments which, when synthesized, laid the groundwork from which the Model IV project took root: The sudden closing of a large Air Force Base posing a serious economic threat to Northeastern Montana; a renewed determination on the part of progressive educators to affect an alternative approach to educational problems; and a continuing concern for the social and economic failures of rural Americans.

In 1969, as a direct result of the closing of the air base, Eastern Montana College was awarded a Department of Health, Education and Welfare grant to conduct a feasibility study to determine a potential use for the site. The air base, located nineteen miles north of Glasgow, Montana, represented great potential in terms of the availability of services and facilities.

At about the same time educators were searching out new approaches to past educational failures. The previous decade saw hundreds of private and federally funded programs disperse isolated services to disadvantaged individuals in the hope of bettering their situation. The majority of these projects, whether offering health or housing advantages, educational or employment opportunities, either dealt in only one type of service or were directed toward only one member of a family--usually in terms of short-run economic goals. As a consequence,

the concept of career education, particularly family regional residential career education, began receiving enthusiastic support as a potential solution to accumulated educational failures.

The late 1960's also saw a renewed concern with the continuing social and economic crisis of rural agricultural America; those citizens forced to compete in a market place which had become increasingly urban and industrial. There was a growing need to provide rural Americans with new tools and approaches to problem solving, an approach which would have as its result new skills and new opportunities as well as bringing about a heightened appreciation and satisfaction with their personal lives.

Inevitably, those administering the Eastern Montana College grant, those interested in developing a career approach to education, and those concerned for the future of the rurally disadvantaged, discovered the opportunity each had to offer.

In April of 1971 a proposal for the creation of Mountain-Plains was released by the U.S. Office of Education, a grant of \$4 million was awarded, articles of incorporation were filed, key staff positions were filled, and the career education demonstration project began to take shape. The first task was an extensive inquiry into the target population of the six state region in order to establish the specific needs of rural families and allow eligibility criteria to be ordered. The second task was the renovation of air base facilities.

The program adopted a comprehensive approach designed to provide services aimed at the total family; a program which could provide complete diagnostic,

tutorial, and individualized services. The broad program objective was to provide for each student's potential growth, strengthening the total family, as well as providing a basis for future economic and social productivity. The premise underlying the Model IV structure was a firm belief that family oriented career education in a residential setting represented an effective way of improving the employability, standards of living, participation in community affairs, and life satisfaction for the disadvantaged.

During its early development phase Model IV went through a difficult period of adaptation, a period of designing means to fit ends. Approaches were applied to each situation on a trial and error basis, those that proved functional were retained, those that did not were discarded. Offices were established in each of the six state capitals to coordinate recruitment, placement, and job development. Consultants were engaged to search general problem areas and assist Mountain-Plains staff in providing additional impetus to the program. Physical problems had to be overcome as student families began to arrive at the center; such items as housing, transportation, supply requisition, medical and recreational facilities. The focus of such elements of the project as counseling and career guidance had to be delineated and the structures initiated.

Following the development and start-up period, the project moved through an organization phase. Data collection facilities and an overall research design were implemented, enabling the program to begin testing its hypothesis through a preliminary measurement of program effect. Instructors involved themselves with the development of curriculum which would coincide with Model IV's unique

individualized learning situation. A preliminary cost analysis was undertaken to determine the economic feasibility of reproducing the effort. Scheduling problems and the collection of accurate research data required the initiation of an innovative recordkeeping system.

By late 1973, the project began to reach maturity, growth was stable, problem areas predictable, success more observable. Administrative structures and management operations had become integrated and functional. The social and economic return to each of the six states was becoming a measurable entity while research indicated areas of adjustment and further refinement. Presently the character of the program has established itself and all that remains is the process leading to final assessment.

What does the future hold for Model IV? Bruce Perryman, Mountain-Plains Executive Director, says, "This alternative educational delivery system exhibits enormous potential for future educational projects and we hope to be able to perfect and document a model program which can be implemented anywhere in the nation." Certainly, any program which comes into existence in answer to needs must, in the end, be judged in light of increased response to those needs.

## COUNSELING PROGRAM METHODS DEFINED

by

Rowan Conrad  
Coordinator, Counseling Services

A root assumption underlying the Mountain-Plains Program is that employability problems are at least as much a function of personal/personality problems

as they are a lack of technical skills. Therefore, Model IV pays a great deal of attention to personal variables throughout the program. These efforts are focused through the personal and family development counseling program. Major overall counseling objectives include social contact skills, self-confidence/self-concept, marital communication, and personal responsibility.

Research at Mountain-Plains has shown that student problems can be interpreted in terms of inappropriately resolved developmental tasks as described by Erik Erickson in *Childhood and Society*. This has been a major breakthrough in terms of interpreting multiple interacting problems, conceptualizing treatment strategy, and guiding an overall counseling program design. The organizing principle for personal and family developmental counseling at Mountain-Plains has therefore become an appropriate resolution of the developmental tasks of the adult transition, identity, and intimacy. Upon exit, students (average age 26) should be ready to negotiate the generativity stage without the burden of inappropriately resolved developmental tasks.

The overall counseling program is developmentally oriented as regards philosophy, eclectic in use of theory and technique, and client self-directed in terms of treatment focus and setting. Entering students receive a group orientation, reviewing the role of counseling within the overall career education program of Model IV. The dual roles of counseling--problem resolution and personal/interpersonal skill development--are explained in terms of their relationship to career success. Subsequently, each family attends an individual session with a professional counselor who explains the specific objectives

of the counseling program and the various treatment settings and options. An initial treatment cycle is then negotiated with the student. The underlying assumption is that the student is an expert on his needs and problems whereas the professional counselor is an expert on processes for problem resolution and personal development. In negotiating treatment, the intent is that counselor and student interact their particular expertise to maximum benefit in selecting and applying a counseling program.

The desired outcome of the negotiation processes in the eclectic model is to arrive at the most productive (or at least a productive) combination of five major counseling variables; counselor, client, problem, setting, and approach. The only common element in treatment is the *Cognitive Group Cycle* which is selected by three-fourths of the students--usually as their initial treatment cycle.

Negotiated treatments vary widely and include the use of Transactional Analysis for alcoholics, Rational Behavioral Therapy, client centered approaches, Gestalt Therapy and biofeedback. Special training for professional counseling staff has included the Colorado Psychodrama Center, the Institute for Rational Therapy, the Menninger Foundation, and the Esalen Institute.

Once any negotiated treatment cycle is completed, counselor and student have a feedback and review session. Both either agree that the student's accomplishments are sufficient to insure his future ability to hold a job, in which case the student is "scheduled out" of counseling, or problems needing further attention are identified and a new treatment cycle negotiated and scheduled.

*To date, counselor and student have been unable to reach agreement through negotiation in only one percent of the cases.*

The counseling emphasis extends beyond the counseling center and its in-house programs. Personal/family counselors are constantly involved in informal consultation with instructors, Community Development Staff, and Career Guidance Counselors. (Model IV separates Career Guidance/Career Development Counseling from Personal and Family Development Counseling by department. Both departments are staffed with emphasis on different personal and educational attributes with a focus on diversified tasks and objectives.) Broad spectrum team approaches to problem resolution and personal development are standard procedure. This emphasis is intended to insure transmission of in-session gains to "real-world" settings.

A current program status review shows need analysis completed, basic operating design in place, and effective exercises/approaches identified. The Counseling Department at Mountain-Plains is now negotiating an operational phase wherein heavy emphasis is placed upon research documentation of effects and detailed program/procedure/technique/exercise description.

## APPENDIX B

## TREATMENT DESCRIPTION BY SESSION

Pre-Session The Tennessee Self-Concept Scale was administered, and the reason for testing was briefly explained (part of the research being conducted at Mountain-Plains). The basic research nature of the program had been previously explained to all students before entering Mountain-Plains and again in orientation at entry into the program.

Session 1 The first part of this session was spent on a diary introduction (Lodge, 1973). The purpose of the exercise was to acquaint members with one another, aid each member in speaking to the group in a non-threatening way, and share initial impressions of another person with the whole group. The rest of the session was devoted to answering questions and comments of group members.

Session 2 This session was devoted to rank ordering sixteen statements about educational aims and discussing how and why members saw them as important or unimportant for them (Lodge, 1973). The purpose of the exercise was to see how members view their present educational goals, and to compare their ideas with those of other group members.

Session 3 This session started with the leader explaining how we usually note our problems and weaknesses while neglecting our strengths and the good things about ourselves. Members were then asked to list all of their strengths (both personal and task) and then read three of the listed strengths to the group. Other group members were then asked to add to each person's list the strengths

that they perceived in them (Lodge, 1973). Discussion then centered on how members felt as they stated their strengths and heard members add strengths to their list. Ways persons develop views of themselves in relation to the world around us were also discussed.

Session 4 In this session, members were asked to compile an "I Want List" (Lodge, 1973). Then each member read their list, chose one or two specific wants, and told how they would go about getting what they want. Other group members were encouraged to add their ideas and considerations of how to fulfill these wants.

Session 5 This session was devoted to identifying the steps involved in setting goals and utilizing the steps presented to work through specific member goals. The following steps were presented on a blackboard: goal, obstacle, affirmation, visualization, time and benefit. The leader explained the steps and gave examples. Also presented were criteria for effective goal setting similar to the SPIRO Model (Pfeiffer and Jones, 1972). Members were then asked to state one of their goals and work it through using the steps provided. Other members were encouraged to add any comments as regards steps involved and personal considerations. The purpose of the exercise was to systematize steps involved in reaching a goal, demonstrate that one can work in the present toward a goal in the future, and reinforce setting goals rather than drifting.

Session 6 The first part of this session involved a chalkboard listing of steps involved in problem solving. The first listing included: define problem,

think of all possible solutions, identify resources available to help solve the problem, pick the best alternative, and evaluate the solution. The second listing included: problem identification, fact finding, brain storming, problem solution and problem activation. These steps were then utilized by group members to work through the specific problems they mentioned step by step.

The second part of the session was devoted to the End Game (Lodge, 1973) as an example of problem solving. Decision making procedures and structuring was done by a member volunteer who led the exercise. The leader contributed his opinions, clarified the steps involved in problem solving and aided member volunteer to set up the decision making procedure. Purpose of the exercise was to give members experience in solving a complex, unstructured problem, and to facilitate group discussion and decision making.

Session 7 This session was devoted to discussion of member viewpoints about an Opinionnaire on Womanhood (Lodge, 1973). Members were free to discuss any of the statements that most interested them. A special purpose of this exercise was to compare differences in self-viewpoints between single heads-of-household and married individuals.

Session 8 This session involved a Magic Shop exercise (Seeley, 1974). One variation used was to let members choose any intangibles that they would like to have without giving up one of their own intangibles. Discussion was focused on how an individual develops these intangibles within themselves.

Session 9 This session focused on a First Impressions exercise where each member was asked to state how he/she felt he/she initially impressed

others (Seeley, 1974). Other members then told what their initial impressions of the speaker were. Discussion then centered on how initial impressions are important in various situations, including job interviews.

Session 10 This session was devoted to members ranking themselves on specific counseling objectives: self-concept, self-confidence, self-acceptance, self-control, self-knowledge, responsibility, dependability/reliability, alcohol problems, marital harmony, intimacy, social contact, and directedness. Members then shared their ratings with the group and explained why they rated themselves as they did.

The last part of this session was a wrap up of the group. The leader encouraged questions, complaints, comments, and concerns from group members. This session was a lead-in to individual sessions wherein members decided to either discontinue counseling or enter into a new treatment cycle.

Post Session Test instruments, including the TSCS and the POI were administered.

APPENDIX C

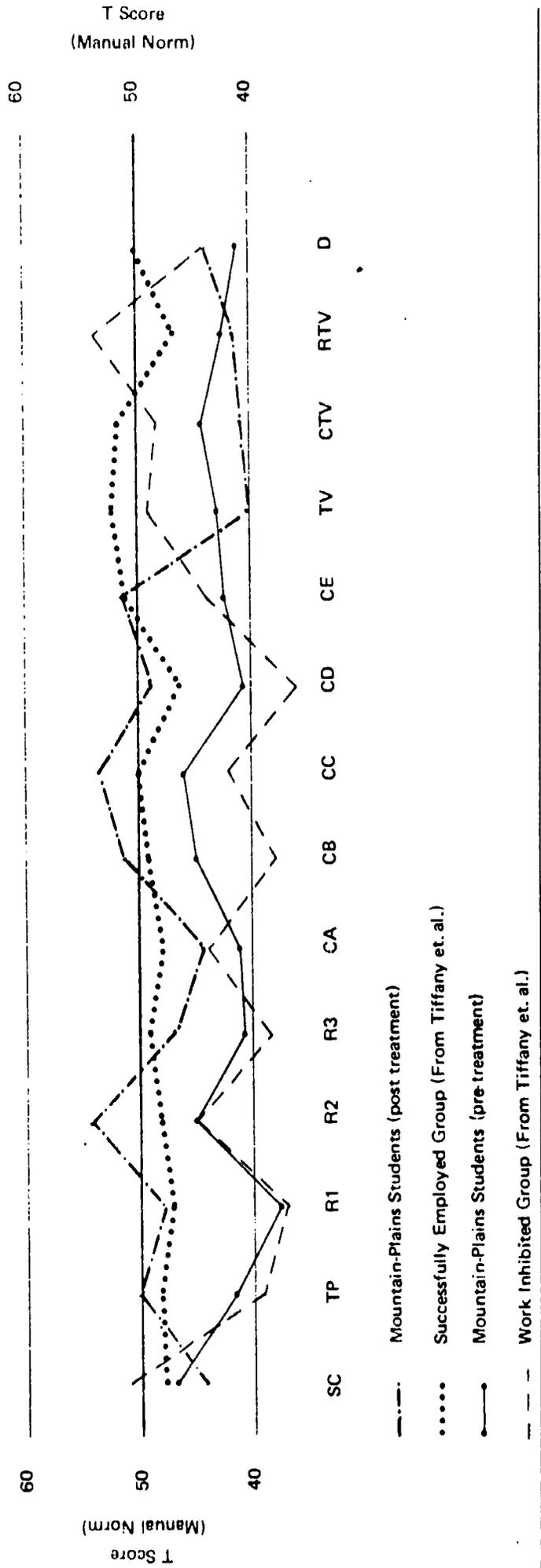


Figure 3  
**Self-Concept of Mountain-Plains Students  
 Compared to Employed and Work-Inhibited Groups**

APPENDIX D  
Complete POI Scores and Profiles for Selected Groups

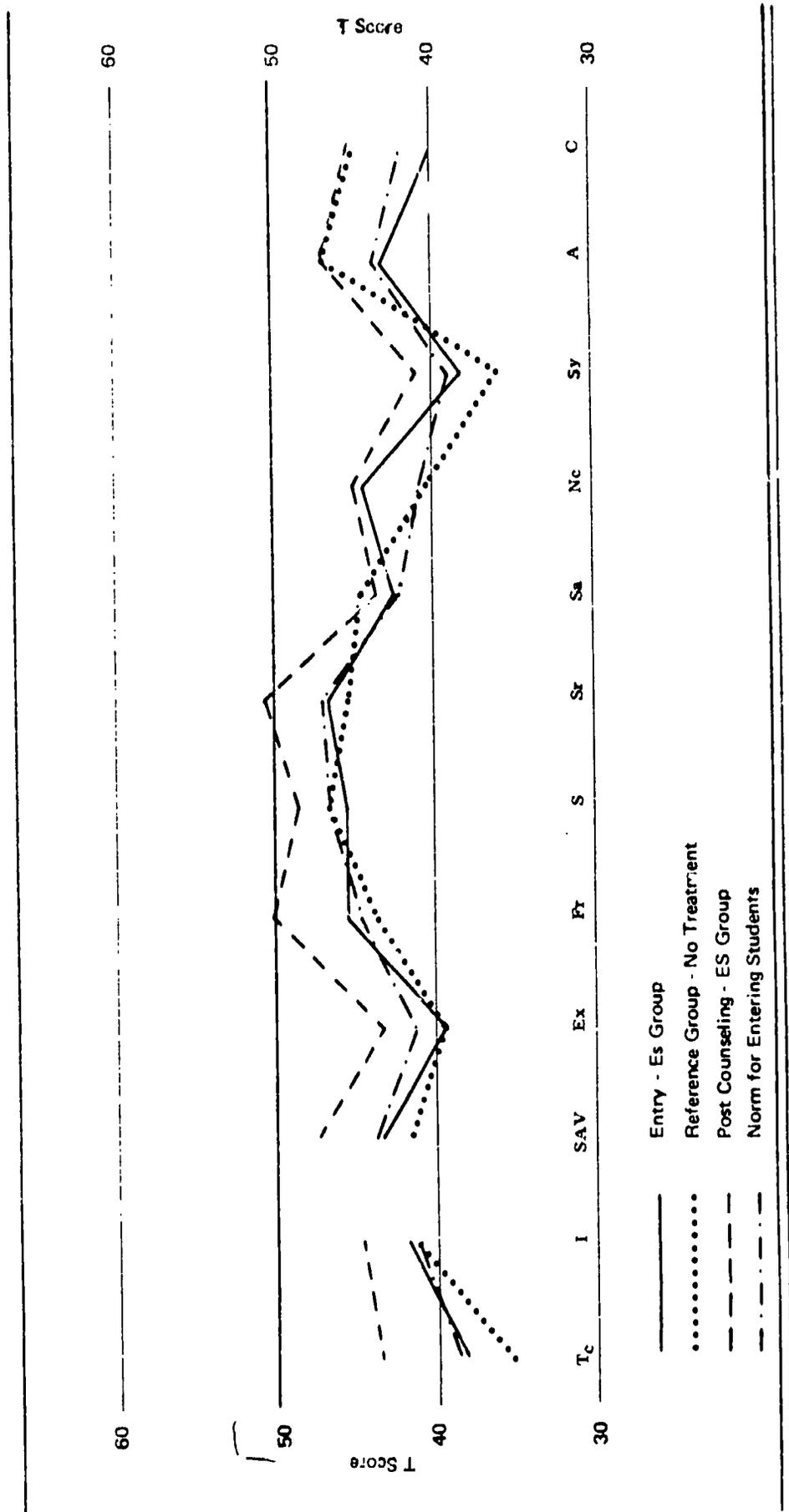


Figure 4

POI Profiles for Selected Groups

Table 6  
Complete POI Profile for Subjects and  
Reference Subjects for Treatment

GROUP	VARIABLE	Tc	I	SAV	Ex	Fr	S	Sr	Sa	Nc	Sy	A	C
ES PRE	M	14.33	75.6	18.06	16.6	14.13	10.27	11.00	14.00	11.40	5.93	14.4	14.73
	SD	3.44	13.29	4.51	4.97	2.44	3.26	3.27	2.85	2.77	1.62	3.43	3.73
RST	M	13.6	74.93	17.67	16.3	13.53	10.67	10.8	14.9	10.60	5.73	15.73	16.80
	SD	3.92	10.38	3.31	4.46	2.36	1.47	3.26	3.52	2.72	1.39	3.15	3.80
ES POST	M	15.93	79.7	19.20	17.5	15.53	11.20	12.1	14.7	11.53	6.27	15.60	16.93
	SD	3.08	9.34	3.61	5.19	2.42	2.81	2.48	12.17	2.03	1.44	3.14	4.11

NOTE: N for both the ES and RST group is 15.

## APPENDIX E

Table 7

## Factor Scores on "Integration" for the ES Group

Subject	Factor Scores	
	Pre	Post
1	-0.45	2.93*
2	-0.41	0.76
3	2.79	2.47
4	-2.04	-3.67
5	2.78	0.23*
6	-1.16	0.89*
7	0.65	2.48*
8	1.26	0.32
9	5.31	1.29*
10	2.27	2.86
11	-5.78	-4.84
12	1.09	3.34*
13	-1.32	-1.49
14	0.99	0.87
15	-5.85	3.41*
Mean	0.01	0.79
SD	3.03	2.47

"Factor" Score = .72 Tc + .58 I + .76 Ex + .75 Sa + .62 C

\*Score Difference is significant,  $p \leq 0.05$ , least mean difference test (t).

NOTE: Factor scores are calculated from z scores. Loadings are from Conrad and Pollack (1974).

## Appendix F

## ANCOVA Summary Tables for Treatment Focus

Table 8. POI I Scale

<u>SOURCE</u>	<u>df</u>	<u>SS<sub>x</sub></u>	<u>SP</u>	<u>SS<sub>y</sub></u>	<u>df'</u>	<u>SS<sub>y</sub>'</u>	<u>MS<sub>y</sub>'</u>	<u>F</u>
Between	1	247	505	1033	1	571	571	10.9
Within	28	3331	1555	2135	27	1410	52.2	----
Total	29	3578	2060	3168	28	1981	----	----

Table 9. POI Ex Scale

<u>SOURCE</u>	<u>df</u>	<u>SS<sub>x</sub></u>	<u>SP</u>	<u>SS<sub>y</sub></u>	<u>df'</u>	<u>SS<sub>y</sub>'</u>	<u>MS<sub>y</sub>'</u>	<u>F</u>
Between	1	108	177	228	1	128	128	6.21
Within	28	909	216	607	27	555	20.6	----
Total	29	1017	393	835	28	683	----	----

Table 10. POI Sr Scale

<u>SOURCE</u>	<u>df</u>	<u>SS<sub>x</sub></u>	<u>SP</u>	<u>SS<sub>y</sub></u>	<u>df'</u>	<u>SS<sub>y</sub>'</u>	<u>MS<sub>y</sub>'</u>	<u>F</u>
Between	1	0	0	1.20	1	1.20	1.20	0.26
Within	28	234	77	151.5	27	126.2	4.67	----
Total	29	234	77	152.7	28	127.4	----	----

Table 11. POI Sa Scale

<u>SOURCE</u>	<u>df</u>	<u>SS<sub>x</sub></u>	<u>SP</u>	<u>SS<sub>y</sub></u>	<u>df'</u>	<u>SS<sub>y</sub>'</u>	<u>MS<sub>y</sub>'</u>	<u>F</u>
Between	1	17.6	37.5	76.8	1	55.4	55.4	5.28
Within	27	267.7	66.5	288.7	26	272.2	10.5	----
Total	28	285.3	104	365.5	27	327.6	----	----

Table 12. POI Tc Scale

<u>SOURCE</u>	<u>df</u>	<u>SSx</u>	<u>SP</u>	<u>SSy</u>	<u>df'</u>	<u>SSy'</u>	<u>MSy'</u>	<u>F</u>
Between	1	22.5	26.0	30.0	1	19.0	19.0	1.58
Within	27	233.9	44.4	319.8	26	311.4	12.0	----
Total	28	256.4	70.4	349.8	27	330.4	----	----

Table 13. POI Fr Scale

<u>SOURCE</u>	<u>df</u>	<u>SSx</u>	<u>SP</u>	<u>SSy</u>	<u>df'</u>	<u>SSy'</u>	<u>MSy'</u>	<u>F</u>
Between	1	7.50	8.50	9.63	1	5.0	27.6	5.5
Within	27	229.4	68.6	151	26	130.5	5.02	----
Total	28	236.9	77.1	160.6	27	135.5	----	----

Table 14. POI A Scale

<u>SOURCE</u>	<u>df</u>	<u>SSx</u>	<u>SP</u>	<u>SSy</u>	<u>df'</u>	<u>SSy'</u>	<u>MSy'</u>	<u>F</u>
Between	1	.03	-.77	16.1	1	17.4	17.4	2.60
Within	27	281	211	332.5	26	173.9	6.69	----
Total	28	281	210.3	348.6	27	191.3	----	----

Table 15. POI C Scale

<u>SOURCE</u>	<u>df</u>	<u>SSx</u>	<u>SP</u>	<u>SSy</u>	<u>df'</u>	<u>SSy'</u>	<u>MSy'</u>	<u>F</u>
Between	1	56.0	84.7	128	1	41.7	41.7	4.59
Within	27	305	174	336	26	236	9.08	----
Total	28	361	259	464	27	278	----	----