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THE RELATIONSHIP OF AN INSTRUMENTED T-GROUP AND PERSONALITY TO CHANGES IN SELF-CONCEPT AND SELF-ACTUALIZATION

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ABSTRACT

The effectiveness of a self-administered, instrumented sensitivity training method (PROCESS) was examined in terms of personality and changes in self-concept and self-actualization. Subjects included thirty-two third-year University students in Psychology, ten Nursing graduates in a University Nursing Studies programme, and five maximum security psychiatric patients. For the students, a marathon approach was used. A Case Study was made with the patients to subjectively compare group development in PROCESS to the developmental stages occurring in leader-led T- and Encounter groups.

All three groups showed a decrease in discrepancy between their perceived Actual behaviour and their perceived Preferred behaviour from before to after their group experience. A holdout control procedure was used. The change was primarily accounted for by a change in Actual, and not Preferred behaviour. All three groups increased their mean scores on POI self-actualization scales, but the control groups' mean scores also increased over the experimental period. Women improved more than men in self-concept, but not in self-actualization.

The predicted relationships between affiliation motivation and improvements in self-concept and self-actualization did not occur. Subjects with high PRF Affiliation did not improve more than subjects with low Affiliation. The PRF personality variables of Cognitive Structure and Social Recognition were negatively related to the pre- and post-measures, thus contaminating the findings. Rigid thinking and concern about others' attentions were related to lower self-concept and self-actualization scores.

Difficulties with the Hawthorne effect, repeated testing with reflective measures, and the relationship of affiliation to Maslow's hierarchy, were discussed. Methodological, ethical, and theoretical problems with the study of self-administered, instrumented sensitivity groups were summarized. Adequate follow-up studies with behavioural criteria for effective changes as a result of experiencing groups

seem to be the greatest need.

In a subjective analysis of the group development, several stages of Bennis' and Shepard's, Schutz', and Tuckman's theories of group development were observed. PROCESS seems to be an innovative and viable alternative to traditional psychotherapeutic groups, with a more positive orientation, at least for normally intelligent patients as well as being an effective form of sensitivity training for university students.

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Finally, I would like to extend a special thanks to Dr. Pugmire, the nurses, and patients in the Maximum Security Unit at Lake Alice Psychiatric Hospital whose participation added a special dimension to the present study. Their generous donation of time and enthusiastic co-operation have made it possible to extend the applicability and usefulness of this type of experience from the university laboratory setting to a practical clinical setting.

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CHAPTER I
INTRODUCTION

In recent years, as modern man has become increasingly socially alienated, there has been an upsurge in the human relations movement. However, many questions still remain unanswered as to its effectiveness as a method of producing change and personal growth in those participating in such training. Frequently, the concept of "self-actualization" is associated with personal growth.

Maslow's (1970) motivational theory suggests that man's primary instinctive motives consist of five sets of interrelated basic needs which are arranged in a hierarchy ranging from lower to higher ones. The motive for self-actualization is the highest need in Maslow's hierarchical system. Maslow describes self-actualizing people as being realistic, able to accept themselves and others, spontaneous, autonomous, creative, and able to enter into mature love relationships (Murray, 1964). He sees self-actualization as the ultimate goal of all sensitivity training (Maslow, 1970). Sensitivity groups attempt to assist people to grow and develop to their maximum potential by focusing on their immediate experience and by exploring ways in which they respond to and affect one another during the course of the group's development (Vicino et al., 1973). The degree of success in attaining this ideal depends on many variables, including group atmosphere, personality characteristics of the participants, and style of leadership (Back, 1973; Shaffer and Galinsky, 1974).

The present thesis involves a study of the interaction effects of certain personality variables combined with treatment (a form of sensitivity training called PROCESS) and their effect in producing change in self-concept and self-actualization in a group of university students. The changes produced in the student group will be examined and compared with similar changes produced in a group of maximum security psychiatric patients.

Sensitivity Training Defined

Back (1973) illustrates his reluctance to operationally define the difference between T- and Encounter groups by referring to both methods under the heading "sensitivity training." His distinction between the two methods is basically a geographical one. He refers

to a T-group as the "technique developed at Bethel by the National Training Laboratory" (Back, 1973, p.6) and Encounter is the term he associates with Esalen and the Western Behavioral Science Institute.

Schutz, on the other hand, defines Encounter as "a method of human relating based on openness and honesty, self awareness, self-responsibility, awareness of the body, attention to feelings and an emphasis on the here-and-now" (Corsini, 1974, p.401). Rogers (1973) explains that originally the T-group emphasized human relations skills but that it has now become much broader in its approach. He sees the Encounter group as emphasizing personal growth and development as well as improving "inter-personal communication and relationships through an experiential process" (Rogers, 1973, p.12). He states that a sensitivity training group may resemble either of the above groups. Yalom (1970) stresses that the term Encounter group has many aliases including the names sensitivity training, T-groups, marathon groups, personal growth groups, etc. He feels that there are many similarities among these groups but marked procedural differences which would preclude classifying them as identical. He does make a distinction between the T-group and the Encounter group classifying "encounter" as being more unstructured, relying more on physical contact and nonverbal exercises and generally emphasizing the experience rather than "change per se" (Yalom, 1970). This definition tends to be in fairly close agreement with Schultz' concept of what constitutes an Encounter group.

Shaffer and Galinsky use the terms "T-group", "sensitivity training group", and "Human Relations laboratory" interchangeably. They briefly define the "T-group" as "an intensive effort at inter-personal self-study, and an attempt to learn from the raw experience of member participation in a group how to improve interpersonal skills and to understand the phenomena of group dynamics" (p.189). They do point out that originally the T-group model was much more structured with a "more specified theoretical learning thrust" (p. 269) than the Encounter model and with a much more strict here-and-now focus than the Encounter model. However, since the late sixties there has been an increasing tendency to use the terms interchangeably so that many leaders now conduct their groups as "sensitivity-training groups

without any clear decision as to which of the two models they are primarily using" (p.269).

The preceding arguments would tend to indicate that T-groups, Encounter and marathon groups, to name a few, may generally be considered to belong to the same "sensitivity-training" family thus making it possible to draw parallels and connections between studies examining the effects of these groups in producing various types of change in their participants.

The Problem

Vicino et al. (1973) have developed and evaluated a programme of eight self-administered exercises for personal and interpersonal development, called PROCESS. This instrumented group approach was of interest to the author of the present thesis since it appeared to be an effective way of providing an experience equivalent to a traditional T-group without the necessity of having a professional trainer. It possesses the additional advantage of providing the experimenter/trainer with an opportunity to deal with a greater number of participants than would be possible using the more traditional methods.

Despite the promise shown by PROCESS, its original developers made a number of methodological errors in their original evaluation of it. Although the participants tended to improve their self-concept, and self-perception, which were both measured by the "Who Am I" questionnaire, none of the three personality measures (the Rokeach Dogmatism Scale; Bills, Vance and McLean Index of Adjustment and Values; and the Marlowe-Crowne Social Desirability Scale) showed significant differences between the groups. The experimental groups did not receive significantly better scores than the control groups on the personality scales. Since the groups were significantly different on the pre-measures using the "Who Am I" questionnaire, with experimentals having higher discrepancy scores between "Actual" and "Preferred" self than controls, and since "after-only" personality measures were used, the two groups may also have differed initially on the personality dimensions being measured.

Several other problems occurred in the evaluation of PROCESS. No standardized measures of self-actualization were taken, nor were other data, such as the "Who Am I" discrepancy scores, analyzed in terms of the personality variables. To extend the knowledge of

possible interactions of personality variables with treatment procedures, the Vicino et al. experiment was partially replicated by the author of the present thesis with selected self-actualization and personality measures.

The author of the present thesis was also interested in this instrumented T-group because of its possibilities as a form of treatment for psychiatric patients. Some of the advantages of using this particular form of sensitivity training included the fact that it could be used without requiring the presence of a professional trainer, appeared to be effective in producing positive growth in people without overly traumatizing them, and would provide the opportunity to give a larger number of patients access to this active form of treatment. More details of the advantages of this particular group approach for psychiatric patients will be discussed in the chapter dealing with its use for the maximum security psychiatric patients.

A second problem involves the dearth of literature on the use of sensitivity groups with maximum security psychiatric patients. Although some therapy groups have been conducted with this population (Mowit, 1972; Truax et al., 1966), the present author was interested in an exploratory examination of one small sample who experienced PROCESS on the same self-concept and self-actualization measures taken of the experimental and control groups.

The Instrumented Approach

The instrumented group consists of a self-administered approach in which technology is used to stimulate group interaction (Seligman and Desmond, 1973). Rather than attempting to introduce some other sensitivity training method, PROCESS was chosen for several reasons. First, by comparing the stated objectives of PROCESS with those of the more traditional forms of sensitivity training, it seemed that the two sets of objectives are identical: (1) Both types of group experience aim at improving the interpersonal skills of members by increasing self-awareness and one's ability to understand others (Corsini, 1974; Shaffer and Galinsky, 1974; Vicino et al., 1973). (2) Each attempts to deal with issues which are of personal and interpersonal relevance (Lakin, 1972; Shaffer and Galinsky, 1974; Vicino et al., 1973). (3) Both types of groups make some attempt

to act as agents of change (Vicino et al., 1973; Yalom, 1970). (4) Development of increased awareness and skill in analyzing group process is also common to both as is the desire to impart insight and increased ability to be accepting of one's self and others (Lakin, 1972; Shaw, 1971; Vicino et al., 1973).

Secondly, Vicino et al (1973) reviewed several theoretical arguments: (1) participants have greater responsibility for their own learning; (2) learning may transfer more readily into other situations, as compared to groups which depend on trainers; (3) learning data are collected systematically, and hence become more meaningful to participants.

Thirdly, instrumented groups do result in changes comparable to traditional trainer-led groups, usually on measures of self-concept. For example, Thomas (1971) compared an instrumented group to a traditional T-group, an Encounter group, a Case Study group, and a control group. In instrumented feedback groups, based on the Managerial Grid developed by Blake and Mouton, members respond to questions on IBM cards, analyze the responses, plot results on charts, and make the results accessible to group members (Seligman and Desmond, 1970). Information includes group structure, level of support and trust, group accomplishment, development and cohesion, decision making procedures, and rankings along certain psychological dimensions.

The seventy college students were randomly assigned to treatment groups and given the Tennessee Self Concept Scale, the Fundamental Interpersonal Orientation-Behaviour (FIRO-B), Rokeach's Dogmatism Scale, the Alexander-Husek Differential, the Giffin Trust Differential, and the Analysis of Skills as pretest and posttest measures, yielding twenty change scores. The Encounter group showed significant changes over all of the other groups in 11 of the 20 scores. However, the instrumented and T-groups, together with the Encounter group showed significant changes in thirteen of the twenty scores, as compared to the Case Study and control groups, but showed no significant differences between each other. Of interest for the absence of the Hawthorne effect, (Roethlisberger and Dickson, 1939), whereby the control groups do not receive special attention other than the pre- and post-measures, there were no significant differences between the Case Study and control groups.

Another example with a different instrumented approach, the Bell and Howell Encountertapes, also illustrates the efficacy of the self-administered technical approach (Bollet, 1972). Pretesting

and posttesting with the Personal Orientation Inventory (POI) and the Interpersonal Check List, Bollet showed similar results for 127 graduate students divided into seven leaderless groups matched with eight leader-led groups. The leaders in the leader-led groups followed a verbatim transcript from the Encountertapes to standardize treatment, but unfortunately, no control group was used to which the instrumented or leader-led groups could be compared.

In contrast to Thomas' (1971) finding that an Encounter group showed the greatest extent of significant changes, Rudman (1971), using Encountertapes, showed the opposite. The ninety students were divided into three each of Encounter groups, Encountertape groups, and control groups. The change in self-concept (Tennessee Self-Concept Scale) for subjects in the Encounter groups was not significantly greater than the change in self-concept for subjects in the control group; however, there was markedly greater change in the Encountertape group subjects than in the control group subjects. In this study, therefore, the instrumented approach was more successful in producing change than the more traditional approach.

An improvement on the previous study was made by Dye (1972) in controlling for the Hawthorne effect. Fifty-six nursing student volunteers were randomly assigned to an Encountertapes group, an affect-oriented sensitivity group, a cognitively oriented communications group, a placebo group, and a control group. The placebo group maintained journal recordings of critical incidents in their lives as nursing students. As measured by the Tennessee Self Concept Scale and compared to the control groups, the three treatment groups improved significantly but not greater than each other, thus lending further support to the comparability of self-administered, instrumented sensitivity training groups to traditional trainer-led groups.

There are other advantages to the self-administered, instrumented T-group. Professional trainers are not required, and each group receives standardized treatment. The last point requires further elaboration. Many sensitivity training experiments which showed changes on various measures involve different trainers for the various small experimental groups. Some studies found opposite results for at least one of the small experimental treatment groups, so that treatment is not necessarily consistent across groups. For example, when Gordon (1972) compared two interpersonal feed-back-oriented groups led by two different Encounter leaders, one group moved in the direction of self-actualization with significantly greater Feeling

Reactivity (Fr) on the POI than the controls, and tended to adopt Self-Actualizing Values (SAV) more than the waiting-list controls. In the other group, however, an opposite pattern was discovered. The experimental subjects slightly decreased in self-actualization as compared to the controls on the POI Self-Regard (Sr) and Time Competence (Tc) scales. To what extent group atmosphere and/or the style of the leader had an effect on the scales could not be determined. Undoubtedly, the leadership style of the trainer can have significant effects on the outcome of group treatments (Foulds, 1970; Lieberman et al., 1973; Truax, 1966.) For example, Truax (1966) has shown that the leader's degree of accurate empathy, unconditional positive regard, and self-congruence are related to constructive self-concept changes, as measured by Q-sort data.

Instrumented Groups and Personality Measures

A few studies with instrumented groups seem to have omitted or had difficulty with measures of self-actualization and personality. Solomon, Berzon and Weedman (1968) who devised a series of booklets which were used as structuring materials to guide the interaction of self-directed personal growth groups, found that participants in these self-directed groups showed significant, positive increases in self-concept compared to "no-experience" controls. As in the Vicino et al. study (1973), Solomon et al. failed to take measures of self-actualization, although Vicino et al. did attempt, albeit unsuccessfully, to measure the effects of personality. In addition the Solomon et al. materials were too cognitive, too structured, and did not allow for sufficient interaction. A later study by Solomon et al. (1970) evaluated a less structured set of audiotapes emphasizing experiential rather than cognitive learning. The materials were designed to increase participants' awareness of the interrelationships between their own feelings and behaviour, and the feelings and behaviour of others. In comparison to no-experience controls, the group participants experienced increased openness, increased sensitivity to others, increased self-motivation, and increased self-acceptance, as measured by a series of daily pre-post measures. But again, the authors failed to use standardized measures of self-actualization and personality.

Like leader-led T-groups, self-administered, instrumented sensitivity training groups seem to concentrate on changes in self

concept. Simmons (1973) varied the intensity of the experience with the Human Development Institute (HDI) Encountertapes for three leaderless groups composed of school personnel and church members. Differential gains occurred on the Tennessee Self-Concept Scale, strongly favouring the high intensity group (a ten-hour marathon). Unfortunately, Simmons did not compare the three groups to a control or a Hawthorne group.

One author (Becker, 1973) did include a standardized personality measure. He used the Eysenck Personality Inventory (EPI) to divide forty-two volunteer vocational rehabilitation clients into an introverted and extraverted group, after which he divided them into an experimental and a control group. After the experimental group met over a two-day weekend with the Encountertapes, no significant differences were found among any of the groups, introverted or extraverted, experimental or control, on such measures as the Tennessee Self-Concept Scale and a personal distance measure. Becker's findings may have been unsuccessful because of the choice of subjects. Most of the previously mentioned studies used college students whose basic needs in Maslow's hierarchy could be considered relatively satisfied as compared to the vocational rehabilitation clients whose security needs may not have been adequately met due to lack of job opportunities, thus making them less likely to reach the self-actualization level. In addition, the EPI may be a poor choice for measuring extraversion in the "American" sense of sociability, whereas Eysenck favours the "European" definition which tends to idenfity the concept with relation to impulsiveness and weak superego controls (Lanyon, 1972). Presumably Becker, working with American clients, was thinking of sociability.

Another measure of introversion-extraversion, the 16PF, was used by La Salle (1971) in controlled treatment with the Encounter-tapes and a programmed text of personnel relations. Interestingly, the Hawthorne effect was controlled by a placebo treatment for one control group consisting of the article "Learning To Be Free" by Carl Rogers. With the seventy-five volunteer undergraduate students randomly assigned to groups, there were no significant differences between any of the four groups (Encountertapes, Programmed Text, placebo, control) on the Tennessee Self-Concept Scale. Also, Pearson product - moment correlations failed to attain statistical significance for the expected relationship between self-concept change and extra-version. It would seem that extraversion is not a relevant personality variable in sensitivity training groups. Since the groups were run

over a period of six weeks, the intensity of the experimental approaches may not have been sufficient to raise self-concept scores. It was noted above (Simmons, 1973) that high intensity groups improved most on the Tennessee Self-Concept Scale.

To minimize the Hawthorne effect other than by using a placebo control group (Parisi, 1972; Thomas, 1971) it has been suggested that a "holdout" control procedure should be used, in which the control groups receive the same treatment as the experimentals, but after the experiment has been completed (Link, 1972; Massarik, 1973; Vicino et al., 1973). However, to shorten the delay for the controls in receiving treatment and hence attention, the experiment should be conducted in a brief period. Marathon or massed groups generally seem to be as effective as spaced groups among college student populations, using a wide variety of measures of change (Counseling Centre Staff, 1972; Fanning, 1972; Lathey, 1972; Miller, 1973; Schwartz, 1971; Shapiro, 1971).

Affiliation Motivation

Gibb and Gibb (1968) who observed many leaderless groups contend that, "An experienced group trainer, leader, or therapist can often be helpful; but our experiences have indicated that the strongly motivated leaderless group is even more powerful in producing personal and group growth" (p. 108). Although they did not specify which motives, the Gibbs' may have implied affiliation motivation (nAff). Murray originally listed nAff as one of the twenty social motives or "psychogenic needs" (Murray, 1964). These motives were arrived at by studying a small number of subjects very intensively with interviews, questionnaires and specially designed psychological tests such as the Thematic Apperception Test (TAT). McKeachie (1961) sees nAff involving "concern with establishing, maintaining or restoring a positive affective relationship with another person" (p. 127). Several studies suggest that people who have high nAff would benefit more from a group treatment which is high in affiliation cues than people with low nAff.

French and Chadwick (1956) hypothesized that a subject's internal motivation level would be a determinant of the level reached in the experimental situation and that those subjects with high internal nAff would be more affected by the environmental cues than those with low internal nAff. Using the Test of Insight as a measure of nAff, the authors divided 144 male officer training candidates into high

and low nAff groups, on the basis of scores above or below the median for the group. Later, the experimental group of candidates met together for a lecture on being well liked and sensitive to other's reactions. They then rated each other and themselves on scales of popularity and desire to be well liked.

The talk and ratings were designed to arouse affiliation cues. The non-aroused control group completed a test of military attitude at the same time. Immediately after the period, both groups were again given the Test of Insight to determine pro-affiliation and anti-affiliation scores for dependent variables. As compared to the control group and men with low nAff, the arousal condition did result in significant increases in pro-affiliation scores for the men with high nAff. French and Chadwick failed to note that by using the Test of Insight both as a main effect variable and as a dependent variable, a contamination of results was inevitable - subjects with high nAff initially would be expected to give a high number of affiliation responses on the same test!

French (1958) later improved on her choice of dependent variable, by using a number of phrases correctly reconstructed by a group into a short story. In the later study, she provided "feeling" cues to half the four-person groups all of whose members had high nAff, by periodically praising the group on how well they worked together, how they supported one another, and so on. As compared to the groups whose members had high internal nAff but were given task-oriented cues such as how efficient they were, the "feeling-cued" groups obtained significantly higher phrases' scores. The other groups formed of people with high achievement motivation were eager to complete the task and argued violently. In contrast, the affiliation groups were quieter and less intense, showing more friendly interest in one another and in the experimenter. Since a sensitivity training group provides many "feeling" cues, it would be expected that participants who have high nAff would benefit more than those who have low nAff.

Stock (1964) reports on an unpublished early paper by Miles which found that TAT nAff seemed to be indirectly related to unfreezing of old behaviour patterns, involvement in the T-group, and the clear reception of feedback for 34 members of the 1958 Laboratory for Elementary School Principals. Further details are not provided, so that the nature of the effect of nAff on the group performance is not known. In a later unpublished paper, Miles (Stock, 1964) found that feedback in human relations workshops which referred to warm,

friendly behaviour facilitated change for participants who had high nAff. But again, the measures of change were not stated.

Statement of Hypotheses

The theory and research reviewed suggest two hypotheses:

(1) As compared to control groups, experimental groups that experience PROCESS will improve their concept of themselves and will increase in self-actualization.

(2) There will be a positive linear relationship between nAff and improvement of self-concept, and between nAff and self-actualization scores. Subjects with high nAff will improve more in self-concept and self-actualization than subjects with low nAff, after both groups have experienced PROCESS.

CHAPTER II

METHOD

Subjects

Thirty-two male and female third-year psychology students and ten third-year Nursing Studies graduate nurses at Massey University participated in the experiment, as part of the course requirements. Five psychiatric patients in a Maximum Security Unit took part in a post-hoc study with PROCESS. A case study supplement to the present thesis provides more detail (pp.39-48).

Instruments

PROCESS, "A Program of Self-Administered Exercises for Personal and Interpersonal Development," is a set of materials aimed at facilitating experiential learning in groups (Vicino et al., 1973). A short summary of the content of each exercise and the format of the exercises is described in APPENDIX H (p.64).

The "Who Am I" questionnaire is a before-after measure built into Exercises I and VIII (APPENDIX I). Participants rated themselves on 20 nine-point scales dealing with personal and interpersonal styles of behaviour. Each of the scales was defined by polar-opposite adjectives, such as warm/cold, phony/sincere. The participants were asked to describe their own behaviour as they saw it ("Actual" score) and also their behaviour as they would like it to be ("Preferred" score). Vicino et al. (1973) found that PROCESS led to more accurate self-perceptions and greater self-acceptance, as reflected in a reduction of the discrepancy between their perceived Actual and Preferred behaviour scores.

The Personal Orientation Inventory (POI) is a fairly reliable measure of self-actualization (Shostrom, 1974). Ilardi and May (1968) reported reliability coefficients for the subscales with forty-six student nurses over a one-year period, well within the range of most personality measures. Shostrom (1968) and Fisher (1968) examined fakeability on the POI, resulting in a more rigid adherence to traditional society values rather than towards self-actualization. The POI has been used successfully to measure change in personal orientation among participants of non-instrumented human relations

groups (Aubry, 1968; Bellanti, 1972; Cooper, 1971; Culbert et al., 1968; Dyer, 1967; Flanders, 1968; Guinan and Foulds, 1970; Parisi, 1972; Treppa and Fricke, 1972; Trueblood and McHolland, 1968; Young and Jacobson, 1970). For delinquent males in a navy brig, Shostrom (1968) found that their mean scores on all twelve POI scales were below the norm means. Since Culbert et al. (1968) discovered that people with low self-actualization scores improved more than people with average self-actualization scores after a sensitivity training course, it would be expected that the maximum security patients would improve significantly on the measures used. Part of the increase in the Culbert et al., study, however, could be explained by a tendency for scores to regress toward the mean. A description of the POI scales is provided in APPENDIX D (p.60). Other measures such as Schutz' FIRO were considered as measures for the dependent variables. However, there is a limitation to the number of pre- and post-measures which people will complete in a short time without becoming frustrated and uncooperative. As for the FIRO, Stock (1964) reported one study which has found that people who scored high on the FIRO Inclusion scale (those who want to join groups) were seen as low in participation when actually in groups. Link (1972) failed to show any changes on the FIRO-B with a Marathon T group, as compared to controls.

The Personality Research Form (PRF) is a true-false measure of twenty-two different stable personality characteristics (APPENDIX B, p.57). As compared to other personality measures such as the California Psychological Inventory, the PRF Form AA has high test-retest reliability, with coefficients ranging between .70 and .90 over one week for 135 college students (Jackson, 1967). The manual carefully evaluates the scales' freedom from response biases, and validity with respect to factorial purity, behaviour ratings, and self-ratings. The test seems to be the best objective measure of affiliation, when reliability and validity coefficients of other affiliation measures are compared to the PRF (Clarke, 1973).

The programme Evaluation Questionnaire, based on the one used by Vicino et al., (1973), is shown in APPENDIX J (p.70). The information gathered in the evaluation may be useful for a subsequent revision of PROCESS.

Independent and Dependent Variables

The independent variable was the experience in a self-administered

instrumented sensitivity group, and the dependent variables comprised discrepancy scores between Actual and Preferred self on the "Who Am I" Questionnaire, and scores on the 12 scales of the POI. Personality variables were controlled by scores on the twenty-two PRF scales.

Procedure

Table 1 outlines the assessment and treatment schedule (p.15). During the first three weeks of September, 1975, all subjects, including the patients, received the PRF and POI. The third-year Psychology students were separated by sex. Each sex group had names listed alphabetically and was randomly assigned to the experimental and control conditions, using a Gellerman series as described by Friedman (1972). Two groups were formed under each of the conditions using a different Gellerman series for random assignment. Similarly, the Nursing students were assigned to experimental or control groups. Hence, six groups were formed: two experimental groups with eight Psychology students in each; two control groups with eight Psychology students in each; one experimental group with five Nursing students: and, one control group with five Nursing students.

The three experimental groups met on the following weekend for two eight-hour sessions. The present author participated in two-hour bi-weekly sessions for four consecutive weeks with the patients in the maximum security unit library. Changes on the POI have been demonstrated with college students after a leader-led, non-instrumented marathon thirty-hour weekend experience (Guinan and Foulds, 1970), and after a similar fifteen-hour experience (Young and Jacobson, 1970). Although PROCESS has been run over a period of weeks, it seems feasible to conduct it in a weekend session with university students. Control subjects would not be contaminated by extended discussion of experiences with experimental subjects, attrition should be zero, and the Hawthorne effect should be minimized since the control subjects would not have long to wait before receiving special attention.

Reasons for holding marathon groups include the development of tensions and involvement to a higher intensity than that in regular sessions. Emphasis is on the "here and now" rather than on the past. Also, it was felt that the intensity of the experience could produce immediate change by more effectively creating crises duplicating what would happen to the participant in the real world (Gazda, 1970). By being a special event in the person's life, the marathon creates an atmosphere of crisis and expectancy so that the participant who

Table I

Assessment and Treatment Schedule

Week of Treatment	1 - 2	3	4	5	6	7	8
Time	I			II		III	
Experimental Groups	PRF[1] POI[2]	"Who Am I" Part 1	PROCESS	"Who Am I" Part 2 POI Evaluation Q.	-	-	-
Control Groups	PRF POI	"Who Am I" Part 1	-	"Who Am I" Part 2 POI	PROCESS	"Who Am I" Part 2 POI Evaluation Q.	-
Patients	PRF POI	"Who Am I" Part 1	PROCESS	PROCESS	PROCESS	PROCESS	"Who Am I" Part 2 POI Evaluation Q.

1 cf. Jackson, 1967
2 cf. Shostrom, 1974

is often led to expect a break through in behaviour for himself often finds it happening because he works so hard at it (Gazda, 1970). Also, the intense intimacy which is developed in this type of group helps the individual to be more ready to experience intimacy in a real-life situation. This type of approach does have its limitations in the treatment of psychiatric patients however, since people are pushed closer to the limits of their capabilities rather than being guarded from their apparent weaknesses.

In addition to this, Jones and Medvene (1975) caution that marathon sensitivity training facilitates self-actualization changes of a positive nature in high and medium ego-strength subjects but may be harmful for low ego-strength subjects. Although a measure of ego-strength was not obtained on the maximum security patients they were significantly lower ($p < .01$) on self-actualization and self-concept than the college students and could thus conceivably be low on ego strength. Hence, PROCESS for the maximum security patients was conducted under supervision over several weeks.

After the weekend session, all experimental and control subjects again completed the "Who Am I" questionnaire and the POI. During the next weekend, the control group repeated the experience. The "Who Am I" questionnaire was completed twice by the experimental groups and three times by the control groups. Four responses were obtained from each subject in the experimental group on each of twenty scales: the Actual (A) and Preferred (P) response from Exercise I (Time I) and the Actual and Preferred response from Exercise VIII (Time II). Six responses were obtained from subjects in the control group: the Actual and Preferred responses obtained when the experimental group started the programme, but two weeks before the control people began the programme (Time I); the Actual and Preferred responses obtained when the control group started the programme, which was the time when the experimental group was completing its eighth session (Time II); the Actual and Preferred responses obtained when the control group ended the programme (Time III).

Thus, for purposes of experimental comparison, Time I experimental measures are equivalent to Time I control and Time II experimental measures are equivalent to Time II control.

The following comparisons were of interest in measuring the extent to which the exercises promoted changes in perceptions about one's Actual (A) and Preferred (P) behaviour: $(A_{II}-A_I)$ for the experimental compared to $(A_{II}-A_I)$ for the control and $(P_{II}-P_I)$ for the experimental

compared to (P_{II}-P_I) for the control. These comparisons were done at the aggregate level. In each case, one score for one subject consisted on the sum (over the twenty items) of the absolute differences between the two scores in question. Following Vicino et al., (1973), F tests were performed on all between-group comparisons.

As a check on the random assignment of subjects to treatment conditions, the mean PRF and POI scores for the experimental groups were compared to the mean PRF and POI scores for the control groups (APPENDIX A, p.56: APPENDIX C, p.59). With the five percent level of significance as the criterion, only the PRF Play scale showed significant differences between means, with the experimental groups having a higher mean score than the control groups. The Play scores were controlled in the analysis of results. Similarly, there were no significant differences between the groups on the "Who Am I" Initial Discrepancy (P_I-A_I) mean scores of 28.71 and 27.76 (Table II, p.19). The means and standard deviations of both groups are similar to those in the POI manual (Shostrom, 1974) for normal adults, with a slight tendency toward scores of the self-actualization sample.

All statistical calculations and tests were computed using the Statistical Package for the Social Sciences (SPSS) on the Massey University Burroughs 6700 computer. For the POI scales, the following comparisons were made using t-tests of significance of differences between means: (1) the mean scores for all the experimentals with the mean scores for all the controls, at Time I and at Time II; (2) the mean scores for the experimentals at Time I with their mean scores at Time II; (3) the mean scores for the controls at Time I with their mean scores at Time II and at Time III; (4) the experimental's mean change scores from Time I to Time II with the control's mean change scores over the same period; (5) comparisons (1), (2), (3) for the experimental Nurses' group with the control Nurses' group: (6) the patients' mean scores at Time II with their mean scores at Time III; (7) men's versus women's scores on the dependent variable measures. For the PRF, correlation coefficients were calculated between scores from all twenty-two PRF scales with scores from all the dependent variables, to determine if there was any relationship between personality and changes as a result of the PROCESS experience.

CHAPTER III

RESULTS

"Who Am I" Questionnaire

Table II (p.20) presents the mean difference scores on the "Who Am I" questionnaire. From Table II, the following observations can be made. Firstly, the mean of the absolute discrepancies between Actual and Preferred behaviour for the experimental subjects was reduced from 28.71 to 24.57 between Time I and Time II. This reduction was significantly greater ($F = 11.60$, $p < .05$) for the experimentals than for the controls, who, during the same period, also slightly decreased their mean discrepancy score from 27.76 to 26.19. Secondly, the mean of the absolute discrepancies between Actual behaviour at Time I and Actual behaviour at Time II was significantly greater ($F = 3.48$, $p < .05$) for the experimentals (19.71) than for the controls (10.81), but not the means of the absolute discrepancies between Preferred behaviour at the two times ($F = 1.55$, $p > .05$). Actual, and not Preferred behaviour ratings changed.

Thirdly, the effects of PROCESS were essentially the same for the control as they had been for the experimental sample. The absolute discrepancy between Actual and Preferred behaviour was reduced from 26.19 to 20.90 ($p < .05$) by the group experience of the controls between Time II and Time III after the main experiment was over. Similar results were found when the Nursing samples were analyzed separately (Table III, p.20), but only a trend ($p < .10$) of change in discrepancy was obtained. Although there was no control group for the patients' data, the patients' discrepancy scores followed the same trend as those of the students' scores (see Figure 1, p.21). Women made significantly larger changes ($F = 4.70$, $p < .01$) than men after both groups had experienced process, (Table IV, p.22). Again, changes were in Actual, rather than Preferred behaviour.

Self-Actualization

From Tables V and VI (pp. 23,24), the POI scale means at Time II for the experimentals are not significantly ($p > .05$) different from the means for the controls at the same time. The controls' mean scores increased slightly, but not significantly from Time I to Time II (Table VI). In contrast, the experimentals' mean scores increased

Table II

Mean Difference Scores on the "Who Am I" Questionnaire
Experimental vs Control

Measure	Experimentals' Changes During Programme N = 21 Mean	Controls' Changes During Control Period N = 21 Mean	F Value	Controls' Changes During Programme N = 21 Mean
Change in Actual ($A_{II}-A_I$)	19.71	10.81	3.48*	17.86
Change in Preferred ($P_{II}-P_I$)	14.33	10.48	1.55	14.95
Initial Discrepancy (P_I-A_I)	28.71	27.76	1.53	26.19
Final Discrepancy ($P_{II}-A_{II}$)	24.57	26.19	1.04	20.90
Change in Discrepancy ($P_{II}-A_{II}$) - (P_I-A_I)	-4.14	-1.57	11.60*	-5.29

*p < .05

Table III

Mean Difference Scores on the "Who Am I" Questionnaire
Experimental vs Control Nurses

Measure	Experimentals' Changes During Programme N = 5 Mean	Controls' Changes During Control Period N = 5 Mean	F Value	Controls' Changes During Programme N = 5 Mean
Change in Actual ($A_{II}-A_I$)	24.60	23.40	9.69**	22.60
Change in Preferred ($P_{II}-P_I$)	11.40	19.80	1.17	20.00
Initial Discrepancy (P_I-A_I)	41.20	27.00	2.43	26.00
Final Discrepancy ($P_{II}-A_{II}$)	30.40	26.00	1.43	19.00
Change in Discrepancy ($P_{II}-A_{II}$) - (P_I-A_I)	-10.80	-8.00	7.51*	-7.00

*p < .10
**p < .05

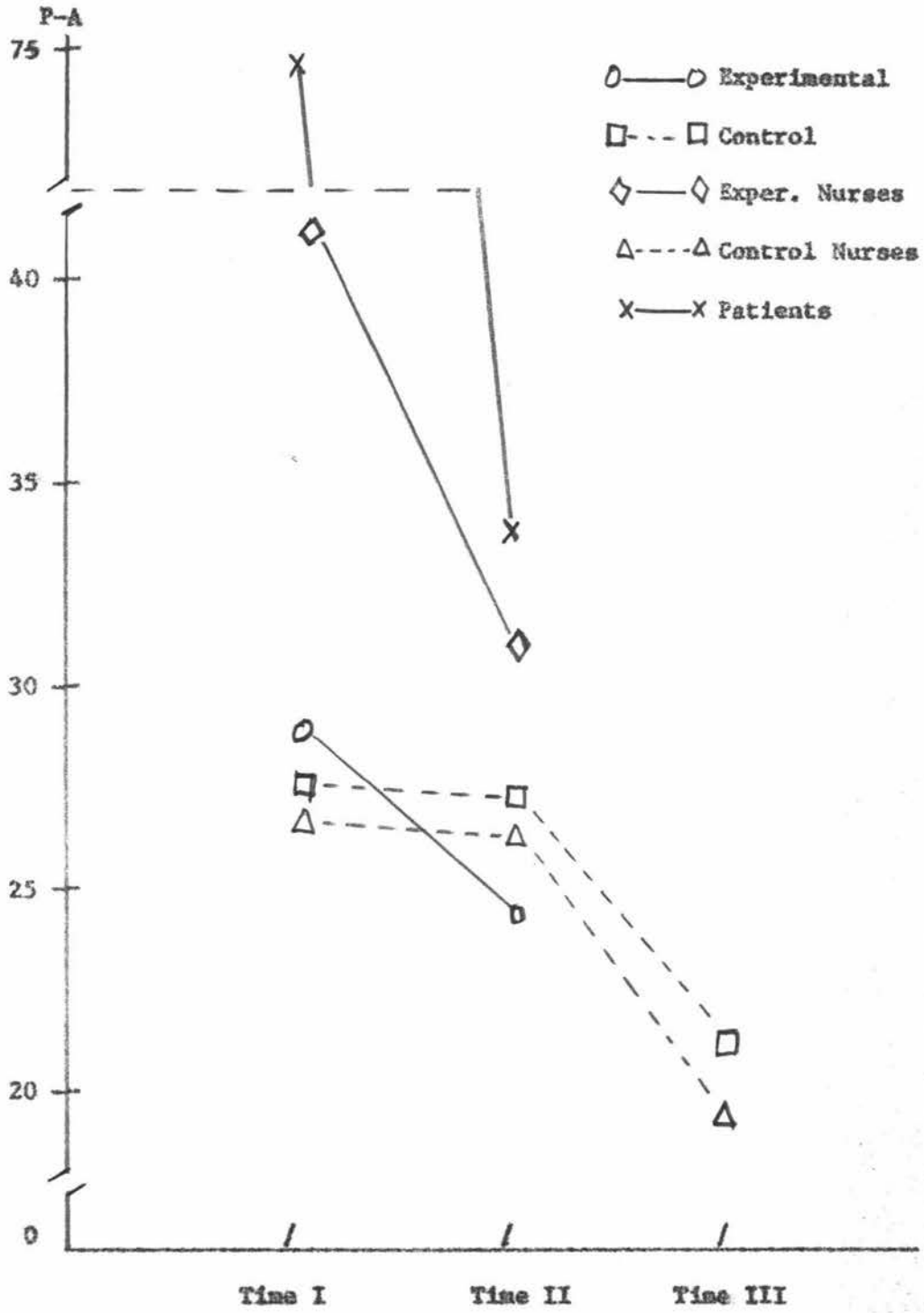

Figure 1. Mean Discrepancy Scores, "Who Am I" Questionnaire

Table IV

Mean Difference Scores on the "Who Am I" Questionnaire
Men vs Women

Measure	Men's Changes During Programme N = 15 Mean	Women's Changes During Programme N = 27 Mean	F Value
Change in Actual ($A_{II}-A_I$)	13.93	16.00	5.14*
Change in Preferred ($P_{II}-P_I$)	13.40	11.85	1.09
Initial Discrepancy (P_I-R_I)	26.40	29.26	1.77
Final Discrepancy ($P_{II}-A_{II}$)	24.40	25.93	1.18
Change in Discrepancy ($P_{II}-A_{II}$)-(P_I-A_I)	-2.00	-3.33	4.70*

*$p < .01$

Table V

Experimentals' Means on Personal Orientation Inventory[1]
Time I vs Time II
N = 21

Scale[2]	Pre-Measure Time I		Post-Measure Time II		t-value
	Mean	S.D.	Mean	S.D.	
Tc	17.43	3.01	18.62	1.60	-2.33*
I	84.00	11.76	92.10	9.50	-5.89**
SAV	19.52	2.94	20.57	2.69	-2.18*
Ex	21.76	4.93	23.90	3.55	-3.20**
Fr	15.67	2.67	17.05	3.14	-3.00**
S	12.29	2.43	13.38	2.13	-2.95**
Sr	11.19	2.09	12.00	2.19	-2.27*
Sa	16.52	3.06	18.00	3.08	-3.20**
Nc	11.10	2.63	12.00	2.05	-1.64
Sy	7.10	1.38	7.71	1.06	-2.21*
A	14.95	3.14	16.33	2.76	-2.94**
C	17.76	3.55	19.29	2.81	-2.36*
O:I	2.40	0.85	2.99	1.30	-2.89**

[1] cf. Shostrom, 1974.

[2] cf. APPENDIX D

*p < .05

**p < .01

Table VI

Controls' Means on Personal Orientation Inventory[1]
Time I vs Time II vs Time III
N = 21

Scale[2]	Pre-Measure Time I Mean	Post-Control Period Time II Mean	Post-Programme Time III Mean	t-value Time II vs Time III
Tc	17.57	18.38	19.10	-1.35*
I	89.43	90.95	98.24	-2.21**
SAV	20.00	20.67	21.19	<1
Ex	23.38	25.24	27.24	-1.95**
Fr	16.76	17.24	18.33	-1.52*
S	12.57	13.14	14.48	-2.04**
Sr	12.00	12.38	12.76	<1
Sa	17.29	18.05	20.14	-3.63**
Nc	11.90	11.57	12.19	-1.47*
Sy	7.38	7.47	7.86	-1.05
A	16.71	17.19	18.52	-2.37**
C	19.29	20.38	22.05	-1.65*
O:I	3.40	3.43	4.23	-3.21**

[1] cf. Shostrom, 1974

[2] cf. APPENDIX D

*p < .10

**p < .05

on all fourteen scales from Time I to Time II (Table V), with thirteen of the differences reaching the minimum level of significance ($p < .05$). After the controls experienced PROCESS, they also increased on all fourteen scales (Table VI), six of the differences reaching minimum level of significance, and four of the differences showing trends toward significance ($p < .10$). By taking the differences between POI scores at Time I and at Time II, the mean change scores for the experimentals were larger than for the controls on all fourteen scales (Table VII, p.26), but only four means for the scales Inner-directed (I), Feeling reactivity (Fr), Nature of man (Nc), and Support ratio (O:I) were significantly higher for the experimentals than for the controls. Tables VIII to X (pp. 27,28,29) show similar changes for the Nursing participants and the patients. There were no significant differences between the University men and women.

Personality Measures

By calculating correlation coefficients between the score for each PRF scale and the score for each of the dependent variables, it was found that PRF Cognitive Structure and Social Recognition correlated significantly ($p < .05$) but negatively with many POI pre- and post-measures, and with "Who Am I" final discrepancy scores. Part of the correlation matrices are reproduced in APPENDICES E and F (pp.61-62). Affiliation correlated significantly with both pre- and post-measures of POI Nature of man (Nc), and with post-measures of Self-Actualizing Value (SAV) and Synergy (Sy). Play was significantly correlated with the post-measure of Self-regard (Sr). However, when correlations were computed between each PRF scale and each change score of the dependent variables, only Social Recognition and Feeling reactivity (Fr) were significantly correlated (APPENDIX G, p.63).

Table VII

Means and Standard Deviations of Change Scores on Personal Orientation Inventory[1] Experimental vs Control

Scale[2]	Experimentals N = 21		Controls N = 21		t-value
	Mean	S.D.	Mean	S.D.	
Tc	1.19	2.34	0.71	2.33	<1
I	8.10	6.30	1.48	9.07	2.75**
SAV	1.05	2.20	0.48	2.75	<1
Ex	2.14	3.87	1.86	3.05	<1
Fr	1.38	2.11	0.33	1.71	1.77*
S	1.10	1.70	0.48	2.18	1.03
Sr	0.81	1.63	0.29	1.77	1.00
Sa	1.48	2.11	0.90	2.90	<1
Nc	0.90	2.53	-0.52	1.72	2.14*
Sy	0.62	1.28	0.19	1.08	1.17
A	1.38	2.16	0.57	2.87	1.03
C	1.52	2.96	1.19	2.89	<1
O:I	0.58	0.92	0.01	1.17	1.74*

[1] cf. Shostrom, 1974

[2] cf. APPENDIX D

*p ≤ .05

**p ≤ .01

Table VIII

Experimental Nurses' Means on Personal Orientation Inventory[1]
Time I vs Time II
N = 5

Scale[2]	Pre-Measure Time I		Post-Measure Time II		t-value
	Mean	S.D.	Mean	S.D.	
Tc	18.00	2.24	18.00	2.00	0
I	79.00	14.37	88.40	10.53	-3.54**
SAV	18.80	3.96	21.80	2.86	-3.00**
Ex	18.20	5.89	19.80	2.78	-1.09
Fr	13.60	2.41	16.40	4.22	-2.06*
S	11.80	3.35	12.80	2.39	-1.05
Sr	11.60	1.14	12.80	1.64	-1.33*
Sa	16.60	3.78	17.00	1.87	-0.27
Nc	11.00	2.45	13.60	1.14	-3.20**
Sy	6.40	2.19	8.00	1.23	-2.67**
A	12.20	1.79	16.00	3.39	-4.75**
C	15.00	3.31	16.60	3.72	-0.76
O:I	2.00	0.53	2.30	1.26	-0.65

[1] cf. Shostrom, 1974

[2] cf. APPENDIX D

*$p < .10$

**$p < .05$

Table IX

Control Nurses' Means on Personal Orientation Inventory[1]
Time I vs Time II vs Time III
N = 5

Scale[2]	Pre-Measure Time I Mean	Post-Control Period Time II Mean	Post-Programme Time III Mean	t-value Time II vs Time III
Tc	20.00	18.38	19.10	-1.35*
I	89.20	90.95	98.24	-2.21**
SAV	22.00	20.67	21.19	-0.87
Ex	25.80	25.24	27.24	-1.95**
Fr	17.00	17.24	18.33	-1.52*
S	13.80	13.14	14.48	-2.04**
Sr	14.20	12.38	12.76	-0.86
Sa	18.20	18.05	20.14	-3.63**
Nc	12.00	11.57	12.19	-1.47*
Sy	7.80	7.48	7.86	-1.05
A	16.80	17.19	18.52	-2.37**
C	21.28	20.38	22.05	-1.65*
O:I	3.42	3.43	4.23	-3.21

[1] cf. Shostrom, 1974

[2] cf. APPENDIX D

*p < .10

**p < .05

Table X

Patients' Means on Personal Orientation Inventory[1]
Time I vs Time II
N = 5

Scale[2]	Pre-Measure Time I		Post-Measure Time II		t-value
	Mean	S.D.	Mean	S.D.	
Tc	13.60	4.39	17.20	3.27	-5.31**
I	81.00	7.68	90.00	10.30	-2.34**
SAV	20.80	2.28	21.60	2.07	-0.44
Ex	18.60	2.51	21.40	3.36	-4.80**
Fr	15.20	3.35	16.00	2.55	-2.14**
S	10.80	1.10	13.00	2.92	-1.90*
Sr	11.80	2.49	13.20	0.84	-1.06
Sa	15.60	0.89	18.60	2.07	-2.45**
Nc	11.14	2.30	12.60	2.07	-2.06**
Sy	6.80	1.64	7.40	1.34	-0.88
A	14.80	2.28	17.40	2.61	-3.20**
C	17.80	1.30	20.20	1.92	-2.33**
O:I	1.88	0.58	2.72	0.92	-2.34**

[1] cf. Shostrom, 1974

[2] cf. APPENDIX D

*p < .10

**p < .05

CHAPTER IV

DISCUSSION

Confirmation of Hypotheses

The first hypothesis was supported. As compared to control groups, the experimental groups that experienced PROCESS significantly improved their self-concept on the "Who Am I" questionnaire. Preferred behaviour ratings remained relatively unchanged, while Actual behaviour ratings came closer to the Preferred behaviour. The hypothesis was further supported by similar changes which occurred for the controls themselves, the nurses, and the patients after they had experienced PROCESS. The changes were comparable to and in the same range as the original PROCESS groups in Vicino et al., (1973). Burke and Bennis (Stock, 1964) found that actual self and ideal self as measured by bipolar scales, tended to converge after experience in T-groups. Like the present study, the convergence occurred mainly because of changes in the way the self was perceived rather than in the way the ideal self was conceptualized.

The patients' dramatic decrease in discrepancies between actual and preferred scores could be explained for two reasons. First, the very high discrepancy scores would tend to regress toward the mean. Secondly, perhaps the patients had a longer time than the students to consolidate changes in self-concept.

Significant improvements were also found on some of the self-actualization measures (I, Fr, Nc, O:I). Unfortunately, during the experimental period, the control groups also increased their scores on the POI scales. The increase was probably not a regression upward toward the mean scores, since the controls' POI scores were slightly higher than the experimentals' scores at Time I (APPENDIX C, p. 59). The POI may not be as free from response-bias as the author (Shostrom, 1974) claims it to be, since both initial and final scores were negatively related to the PRF Cognitive Structure and Social Recognition scores. People with high scores on Cognitive Structure (dislike of ambiguity in information) or on Social Recognition (concern about recognition), tended to have low scores on self-actualization. Conversely, people with low scores on Cognitive Structure or on Social Recognition tended to have high scores on

self-actualization. The POI scales best related negatively to rigidity in thinking and concern about one's effect on people included flexibility in application of values (Ex), sensitivity to and dependence on own needs and feelings (A, Fr, and O:I), acceptance of self (Sa), and capacity for intimate contact (C).

The control group may have improved their POI scores over the experimental period, even though they received no specific treatment, because of their anticipation to improve in self-actualization. Young and Jacobson (1970) who found similar results hypothesized that the special attention given to the control subjects as a result of their being selected as participants may have resulted in their improved scores. Barron and Leary (1955) initially discovered this "waiting-list" phenomenon when they attempted to measure the effects of individual and group treatment for psychiatric patients with the MMPI. The patients were compared to controls who were told that treatment facilities were heavily booked for six months. After the six months, the control group had improved their MMPI scores, some of them significantly. No subsequent research is known by the present author of this phenomenon. It seems that a placebo group is necessary as one control group which receives no treatment to control for the Hawthorne effect at the same time as the experimental groups are receiving the treatment. Alternatively, repeated testing of the groups with tests that emphasize self-reflection may have resulted in increased scores. In two unrelated experiments, Treppa and Fricke (1972) and Young and Jacobson (1970) noted this possibility when their student controls similarly improved on the POI over the experimental periods.

The second hypothesis was not confirmed. Affiliation, as measured by the PRF, was not significantly related to any of the improvements on the POI self-actualization scales, nor to improvements on the "Who Am I" self-concept measures. Neither were any of the other personality variables similarly related, except Social Recognition and Feeling reactivity (Fr). People with high scores on concern about recognition tended to have low scores on sensitivity to one's own needs and feelings. One difficulty may be in the choice of measuring instrument for nAff. French (1958) and Miles (Stock, 1964) used projective measures of nAff; whereas, the PRF is a self-report measure. However both the TAT and French's Test of Insight have low stability coefficients over several weeks (Dodds, 1961; Himelstein and Kimbrough, 1960), so that an objective measure was chosen for the

present experiment. People with high PRF Affiliation like to "make efforts to win friends" (APPENDIX B, p. 57), and hence may be concerned with their effect on people (Social Recognition). Indeed, Jackson (1967) and the present author found a high, but non-significant correlation (.34) between the Affiliation and Social Recognition scales. As noted above (pp.30-1), people with high Social Recognition scores tended to have low self-actualization scores. Thus, projective and self-report tests may be measuring different concepts, analogous to Lanyon's (1972) interpretation of the "American" versus the "European" interpretation of extraversion. Perhaps the projective nAff may be conceptualized as "participatory empathy" or "feeling with people," whereas the objective Affiliation may be more "social concern" about getting along with one's friends. In terms of Maslow's hierarchy, unless a person's social needs of friendship are relatively satisfied, he will not proceed to the higher self-actualization level.

Sex Differences

Rudman (1971) found that positive changes in self-concept, as measured by the Tennessee Self-Concept Scale, for female students was greater than the change in self-concept for male students. Both sexes had experienced either Encounter groups or sessions with Encountertapes. Similar results were found in the present study with the "Who Am I" questionnaire as a measure of self-concept. Wills (1974) analyzed high, median, and low scores on the POI Interpersonal scale in terms of sex differences. Female undergraduates tended to be in the higher groups, as compared to the men. However, women in the present study did not improve significantly more than men on the POI scales. Three reasons may explain why. First, all subjects were relatively high on the POI scales at Time I, as compared to the Manual norms, so that degree of improvement would be slight. Second, there were no significant differences between men and women on the initial POI scores, thus contradicting Wills' findings. Third, the subjects in the present study were all third-year university students enrolled in experiential, group-oriented Social Psychology courses. The self-selection factor would tend to favour men who were already functioning fairly high on Maslow's hierarchy of needs, and who were oriented toward the more "feeling" area of Psychology. Wills' subjects included only freshmen who were also from other disciplines.

Other Findings

Tables XI and XII (pp. 35,36) show the composite percentages of participants' and Nurses' responses to the Evaluation Questionnaire. Instructions and format in addition to topics and content were rated favourably for clarity by more than 90 per cent of the participants. The exercises were judged at least "fairly helpful" by more than 75 per cent of the people, who found the process and learnings at least "fairly valuable." Most people (68%) would recommend PROCESS to a friend. Below each table is a summary of answers about specific aspects of the exercises and processes. It is interesting to note that approximately 20% of the participants made special unsolicited comments about the positive orientation of PROCESS, in contrast to traditional sensitivity training groups which may focus on people's weaknesses more frequently. Cooper (1971) noted that his T-groups tended to put greater emphasis on negative rather than positive feedback, and Miles (Stock, 1964) found that his groups which were more positive in orientation tended to foster warm interpersonal relationships. However, no empirical measures of degree of positive orientation have been taken to compare groups. Obtaining reliable estimates of what is "positive" may be difficult. Since large percentages of the participants rated the experience favourably, meaningful data to compare degree of improvement on the measures of the dependent variables (interval data) with ratings of satisfaction on the Evaluation Questionnaire (ordinal data) were not obtained.

Implications

In conducting an experiment to bring about change, especially with sensitivity training groups, it is difficult to relate either self-reported changes or short-term changes with long-term behavioural changes. Subjects disappear over time, and Rogers (1973) has noted that it may take months or even years before the benefits of sensitivity training take relatively permanent effect. Relatively few studies attempt to validate their findings with follow-up behavioural data. Culbert et al., (1968) attempted to relate the Problem Expression Scale (PES), a measure of self-aware verbal behaviour, to the POI scales, after two groups of students completed sensitivity training. The data failed to show even a directional correlation between the POI

Table XI

Composite Percentages of Participants' Responses to Evaluation Questionnaire
N = 42

Item	Evaluation Percentages				
1. Instructions & format were:	52.4 Very Clear	42.9 Fairly Clear	4.8 Not Very Clear	0 Not At All C.	
2. Topics & content were:	45.2 Very Clear	52.4 Fairly Clear	2.4 Not Very Clear	0 Not At All C.	
3. In general, the exercises were:	19.0 Very Helpful	57.1 Fairly Helpful	21.4 Not Very Helpful	2.4 Not At All H.	
4. Process & learnings were:	38.1 Very Valuable	45.2 Fairly Valuable	16.7 Not Very Valuable	0 Not At All V.	
5. Would you recommend this to a close friend?	23.8 Definite Yes	45.2 Probably Yes	14,3 Not Sure	11.9 Probably Not	4.8 Definite Not

a. Specific processes which were most helpful:
Receiving and giving feedback (92.9%); getting to understand people better (45.2%); opportunity to talk about one's own feelings (28.6%); positive growth orientation (19.0% unsolicited responses)

b. Specific parts of exercises which were most helpful:
"Who Am I" comparisons (42.9%); sex-role adjectives (40.5%)

c. Specific processes which were least helpful:
time limits (66.7%); structure (33.3%)

d. Specific parts of exercises which were least helpful:
role play (54.8%); map & scroll activities (50.0%); influence line (40.5%); action plans (31.0%)

Table XII

Composite Percentages of Nurses' Responses to Evaluation Questionnaire
N = 10

Item	Evaluation Percentages				
1. Instructions & format were:	20 Very Clear	80 Fairly Clear	0 Not Very Clear	0 Not At All C.	
2. Topics & content were:	20 Very Clear	70 Fairly Clear	10 Not Very Clear	0 Not At All C.	
3. In general, the exercises were:	40 Very Helpful	60 Fairly Helpful	0 Not Very Helpful	0 Not At All H.	
4. Process & learnings were:	30 Very Valuable	70 Fairly Valuable	0 Not Very Valuable	0 Not At All V.	
5. Would you recommend this to a close friend?	20 Definite Yes	50 Probably Yes	10 Not Sure	0 Probably Not	20 No Comment

a. Specific processes which were most helpful:
Receiving and giving feedback (90%); getting to understand people better (50%); opportunity to talk about one's own feelings (30%); positive growth orientation (20% unsolicited responses)

b. Specific parts of exercises which were most helpful:
"Who Am I" comparisons (80%); contracts (80%); map & scroll activities (70%); sex-role adjectives (60%); action plans (60%); role-play (50%)

c. Specific processes which were least helpful:
time limits (70%)

d. Specific parts of exercises which were least helpful:
influence line (70%); listening trios (70%)

and PES. The authors conclude that while sensitivity training supports and promotes self-actualizing values, concepts, and percepts for its participants this does not necessarily correlate with changes in self-actualizing verbal behaviour. The authors also make the point that change in an individual's values, concepts and percepts may be a necessary, but not sufficient, antecedent to behavioural change. Often sensitivity training groups appear to go through a crisis in values and norms before taking effect. The authors suggest that longitudinal studies using the POI as well as behavioural change indexes may serve to throw more light on this area.

Mattocks and Jew (1974) showed that male prisoners who participated in group psychotherapy in a correctional psychiatric institution who were high in POI self-actualization scored significantly higher on the Q-Sort Adjustment Scale than prisoners low in self-actualization. Therefore, there does seem to be some consistency between the concept of a well-adjusted person and the concept of self-actualization. Although the authors did not follow up their subjects with behavioural criteria, temporarily it seemed that the higher the level of self-actualization, the better the adjustment; the lower the level of self-actualization, the poorer the adjustment. Hence, with the patients in the present sample, because of their increase in self-actualization, better adjustment would be expected. Later follow-up by the present author on rates of recidivism may give some indication of the validity of this expectation.

Seligman and Desmond (1973) provided a comprehensive review of leaderless groups. They noted that Benne believes that the instrumented approach is helpful in group and organizational life outside of the lab experience. People who assume responsibility for effecting changes in the group and themselves will transfer their learning to other situations more readily than members who have relied upon a leader. The concept seems logical, but the research supporting it needs to be done.

Vicino et al., (1973) compared the experimentals' and controls' "Who Am I" scores at Time I and at Time II to ratings on the same scales by two non-participant peers for each subject. Although initially the same, the absolute discrepancy at Time II between peer and self-ratings was significantly lower for the experimentals than for the controls, so that after experiencing PROCESS the experimentals' self-perceptions were more congruent to their ratings by outside observers.

In addition to lack of follow up with behavioural measures, other than verbal ones, research with self-administered, instrumented sensitivity training groups has many problems. Thomas (1971) notes that: (1) Learning goals have not always been clearly defined, and attempting to ascertain change without specifying goals is difficult, if not impossible. (2) Instruments that can be used to measure changes have not been in great abundance. (3) Inadequate research designs and careless adherence to methodological procedures has been a problem in many studies. (4) Almost no research has been done in comparing different kinds of human relations training. (5) Past research has been completely negative when attempts have been made to assess personality changes in respect to training involvement. Variables which may account for the discrepancies among findings include: (1) the subjects; (2) the subjects' environment outside the group; (3) the research design; (4) the nature of leadership provided by the therapist; (5) the criterion variables used; and (6) the measurement of these variables (Seligman and Desmond, 1973), Hosford and Briskin (Seligman and Desmond, 1973) notes that gaps existed among theoretical rationales, research, outcome criteria, and practices in counselling.

> "Also the majority of the studies were concerned primarily with changes in personality variables over the course of the treatment. In very few studies was there any follow-up to determine the stability over time or to detect the possible delayed effects. In even fewer studies was there any attempt to measure behavioural changes in the clients as a result of the treatment. In using changes in personality variables as criteria, these studies were subject to all the methodological and conceptual problems associated with personality measurement... as well as with the problems of repeated measures and interpretation of associated change. Self-concept was the most frequently studied variable, usually measured by self-rating, through Q-sorts or the semantic differential technique. Other variables studied were feelings, as measured by the FIRO-F or some other type of self-report.

> Also used were selected scales of the MMPI. The possible sources of error in self-rating and self-report inventories are well known ... and the problems in operationalizing a definition of self-concept is know, thus the difficulty in obtaining a reliable and valid measure of the self-concept is a serious one. Many of these measures were made pre and post treatment, or early and late in the treatment in an attempt to measure change in self-concept, which brings the possibility of additional error in the second rating due to subject reactivity to the first measure. Although experimental techniques can be employed to control for some of this possible error, they were not evident in the research. Much of the lack of experimental control is undoubtedly due to the difficulties in conducting controlled research in applied settings." (Seligman and Desmond, 1973, p.83).

Seligman and Desmond also call attention to the ethical problems associated with leaderless T-groups, since many instruments are very powerful tools in arousing emotions. Some participants may need psychiatric help, unknown to the experimenter either before or after the experience. The present study was conducted with mature students under the supervision of the Director of Nursing Studies and a Clinical Psychologist. With the Maximum Security patients, whose experience is detailed in the next chapter, two psychiatrists and two psychiatric nurses provided supervision at the Hospital.

CHAPTER V

CASE STUDY

The Problem

There is some evidence to indicate that group experiences for maximum security psychiatric patients do play a part in reducing the recidivism rate. For example, Mowit (1972), gave short-term intensive group therapy to a group of 14-19 year olds in a correctional facility for incorrible adolescents. A 15% reduction in recidivism rate and a significant improvement in attitudes toward the self, family and social institutions was revealed on follow-up of these patients.

Similarly, Shervington (1974) suggested that the high recidivism rate in U.S. federal prisons is seen as an indication that the goal of rehabilitation has not been achieved. He recommended goal-oriented group activities for patients with individual therapy reserved for crisis situations.

It was assumed by the author of the present thesis that participation in a group experience would help have a socializing effect on the patients, thus enabling them to confront group situations with more confidence on release from the maximum security unit. Yalom (1970) points out that a study of twenty-eight former out-patients showed that they felt that group therapy provided very important curative factors such as support which includes reduction of feelings of isolation, sharing of problems, learning to express oneself, and universality, that is, the knowledge that others share the same problems and concerns (Yalom, 1970). Although there are still many differences between sensitivity groups and therapy groups there has been evolution towards convergence in many areas. For example, both have as their goal the development of the individual's positive potential and the same types of outcome goals such as sending and receiving communication, relational facility, risk taking, increased interdependence, functional flexibility, self-control, awareness of behaviour, sensitivity to group process, sensitivity to others, acceptance of others, tolerance of new information, comfort, insight into self and role (Yalom, 1970). Both T-groups and therapy groups highly value self-disclosure, and the content of what is disclosed is remarkably similar from group to group. For the above reasons,

the present author concluded that it would be of interest to conduct a sensitivity group instead of using a traditional group therapy approach, as an exploratory study.

There were, in addition to this, several advantages in choosing the instrumented T-group approach. Discussions with maximum security unit staff revealed they did not wish extremely painful memories stirred up among patients as this approach often resulted in disturbed behaviour without any appreciable increase in insight. The sensitivity group with its here-and-now approach may therefore minimize this possibility. Since the various PROCESS exercises dealt with specific themes, were structured, and clearly outlined the goals of the next session, the patients would be provided with a framework of security consonant with their regulated life in the maximum security unit. Like the present patient sample, the psychiatric patients and felons from Shostrom's (1974) and Fisher's (1968) samples were significantly lower than the normals on the POI inner-directed scale (I), which could be considered a measure of need for security. PROCESS, therefore, was considered conducive to providing the security.

The present author functioned as group leader throughout all the sessions for the following reasons: (1) Seligman and Desmond (1973) emphasized that leaderless sessions are contraindicated "in certain groups where acting out is a constant threat not only to therapy but also to the well-being of group members" (p.74).

(2) Observation of the development of the group was considered better through the participant-observer approach rather than screening where facilities were inadequate. However, as both leader and participant-observer, the present author was limited in interpreting all of the underlying processes and translating them into theories of group development. From subjective impressions, general trends similar to those predicted by the theories were compared.

(3) The present author wished to receive feedback on her performance as group leader from the two maximum security unit nurses, who also provided feedback on the usefulness of the various sections of PROCESS.

Subjects

Due to the fact that this particular type of group approach has never been used with maximum security psychiatric patients before,

consideration was given to the selection of patients to participate in the programme. The staff recommended patients who were not likely to become physically aggressive under the group condition. Another prerequisite was that they all be within the normal range of intelligence. This was done for two reasons (1) to ensure that they would be capable of comprehending the information dealt with, and (2) because research on the effectiveness of groups in producing positive change shows that the studies obtaining the most positive results tend to be those involving young, intelligent subjects (Seligman and Desmond, 1973). This finding is consistent with findings by Singh (1974) who compared the personality profiles of recidivists and non-recidivists. He discovered that non-recidivist criminals were intellectually superior to recidivists. The five patients in the present study had verbal IQ levels ranging from Average (90-109) to Superior (120-129) as measured by the Wechsler Adult Intelligence Scale.

Background Data:

Fernando (1972) found that 67.8% of the fifty-six patients domiciled in the maximum security psychiatric unit over a one year period were between the ages of fifteen and forty years, with 48.1% of them having been separated from their mothers by age 15, 53.6% from their fathers by this age, and 35.7% from both parents. Fernando also noted that over three quarters of the men were single. Four out of the five group members in PROCESS were separated from one or both parents before age 18 and never married. The other group member was raised by both parents, and was divorced at this time of writing.

Mr. B, aged 21, had been adopted when he was less than one-year old. He was malnourished and badly beaten about the head and body, a twin whose sibling died of malnutrition. His adoptive parents separated when he was 17 and within a year he began stealing. After several sexual offences and attempts at suicide he was sent to maximum security and diagnosed as a residual schizophrenic.

A second patient, Mr. D, also aged 21 and also adopted, tended to be somewhat sadistic from early childhood and began ritualistic killing of animals after his adoptive mother died of cancer when he was 14. He also attempted suicide several times, exhibited

grandiose and persecutory delusions and was transferred to maximum security from another psychiatric hospital after offering to "help" a fellow patient who was feeling depressed by attempting to strangle him. His mental state during the past year seemed more stable than it had been on his admission. He was also diagnosed as a schizophrenic and a homosexual.

The third patient, Mr. C, aged 22, experienced the separation of his parents when he was six or seven years old. By his own admission he felt that he was like other children until he was about eight years old, after which time "I didn't worry about doing things wrong." He was admitted after stabbing his younger sister to death when he was 14, being diagnosed as a simple schizophrenic.

The fourth patient, Mr. E, aged 23, was a twin like Mr.B. Within six months of his mother's sudden death when he was 18, he started a series of fires. He was diagnosed as a pyromaniac with temporal lobe psychosis but was not considered violent. He was transferred to maximum security in an attempt to control his disconcerting habit of attempting to set fire to the institutions in which he was a patient.

The fifth patient, Mr. A, aged 51, seemed the only one of the five to have experienced an uneventful childhood. He married and led a relatively normal life until after the war when he began to have migraine headaches and bouts of depression. Over the past thirty-four years he has been in and out of psychiatric hospitals suffering from manic depressive psychosis and returning to a relatively normal life in between. Currently divorced, he was admitted to maximum security after becoming violent and threatening to kill his two grandchildren.

Group Development

The development of the group was examined in terms of three theories of group development. An outline of each theory is provided in Appendices K, L, and M (pp. 71 - 75). The sessions are traced within the framework of Bennis' and Shepard's theory, (Hare, 1973) and supplemented where appropriate by the other two theories, Schutz' (Hare, 1973: Schutz', 1973), and Tuckman's (Hare, 1973).

Bennis and Shepard's Subphase I, persisted for the first two sessions of PROCESS. Although the first session was structured and

the purposes for it were explained, the members seemed to look to the leader for even more structure and direction. Mr. B and Mr. E functioned as counterdependents - rebels against authority structures. Mr. E refused to participate stating that he had nothing to say about himself, did not know what the whole thing was about and was not particularly interested. Although the other group members attempted to draw him out, it was to no avail. The other counterdependent, Mr. B, was somewhat reticent but did make a small but valuable contribution. He questioned the compatibility of the various group members, wondering what they had in common, stated he had a feeling of isolation and did not know if he would remain a member of the group, thus expressing some inclusion concerns.

Mr. A and Mr. C functioned more as independents with Mr. C initiating the group interaction. He was quite honest and yet pleasant, admitting that he considered his own needs above everyone else's, and sometimes forgot to acknowledge what others had said. His manner towards the others was warm and friendly, but he did admit that he enjoyed being "noticed" - an illustration of Schutz' inclusion - type statement.

Mr. A mentioned that he was shy, but towards the end of the first session stated that he had felt a sense of honesty and companionship throughout the exercise. Thus, he too, was voicing inclusion concerns.

Mr. D was clearly the dependent member, constantly seeking the guidance of the leader that what he was doing was what was expected of him, trying to clarify what the goals and objectives of the group were (another inclusion issue). Even at this early stage, he tended to be one of Schutz' overpersonals, desiring a greater degree of intimacy than the others were prepared to give. For example, he expressed feelings of loneliness and his desire to be loved and cared for by one person. Although the independent group members accepted his feelings and listened with interest to his statements, one of the counterdependents, Mr. B, appeared to be acutely embarrassed, not wishing to process information at this level of intimacy. His concerns seemed to foreshadow later underpersonal tendencies.

Mr. D also exhibited some flight behaviour, discussing his unhappy childhood and hatred of his father. Generally, he attempted to introduce many interpersonal problems which were external to the present group. The first session also conformed to Tuckman's first

stage, Forming. Mr. E exhibited the resistance mentioned under group structure, and suspicion of the new situation. Mr. D discussed peripheral problems, attempted to define the situation, and tried to establish a proper therapeutic relationship with the therapist through the development of rapport and confidence.

During the second session, in which members provided feedback on interpersonal behaviour, the present group seemed to remain in Bennis' and Shepard's Subphase I and Schutz' Inclusion phase. Mr. B and Mr. E again functioned as counterdependents although in radically different ways. Mr. E showed his rebellion against authority by refusing to participate, although his resistance was very passive. He appeared to be dozing off at one point but did listen quite carefully when any comments were made which dealt with him personally, such as comparing him to other members of the group on certain qualities. Mr. E's behaviour appeared to conform to Shutz' under-social person who has too little inclusion and tends to withdraw.

Mr. B's counterdependent behaviour consisted of refusing to participate in certain sections of the exercise. For example, he refused to initiate action steps in the change section. He also announced towards the end of this session that he did not think he would return. This behaviour indirectly revealed inclusion concerns on his part. His attempts to establish his role in the group and threats to withdraw provided clarification of his role. Perhaps this behaviour also had elements of Control in it, in that he was trying to force reactions from both the leader and other members. As the exercises progressed to require members to reveal more of themselves, Mr. B's behaviour further revealed him as one of Schutz' underpersonals.

Towards the end of this meeting, the antagonism was beginning to build up between the dependent and counterdependent members; as the group moved towards Subphase 2. For example, Mr. B (counter-dependent) expressed his hostile feelings towards Mr. D (dependent) by referring to him as being "childish and self-pitying." This reaction on Mr. B's part helped to move the group towards Tuckman's second stage, the Storming stage which sees the emergence of hostility between group members. The dependent member, Mr. D, took this criticism quite well, incorporating a resolve to try to avoid this type of behaviour in the future, in his model for change.

The third session dealt with the goals and issues related to accepting one's self and others. Listening skills without judging and evaluating were emphasized. This session did not conform too closely to Bennis' and Shepard's developmental theory but did provide a modified example of Subphase 2 - the drift of the counter-dependent members away from the leader towards "doing their own thing," but without the dissatisfaction and hostility present in Bennis' and Shepard's model. Perhaps the lack of conflict was due to the mollifying nature of the structure of the exercises combined with the fact that these patients, being quite well institutionalized, were more likely to accept authority figures without overtly questioning them.

In this session Mr. B's counterdependent behaviour consisted of assuming the informal leadership role in the group. He freely offered his opinions, and volunteered to play the father in the role play. He used the opportunity to vent his annoyances against his dependent "son", Mr. D, who also volunteered for the role. The role play between these two members served as a tension release for both of them. As mentioned by Bennis and Shepard, the most dominant members at this stage are the most assertive counterdependent and dependent members.

Mr. B also illustrated the later stages of the Schutz' Inclusion phase by "carefully observing the participation level of the other members" and trying to encourage them to respond in the manner he felt they should. Thus, he exhorted Mr. E, whose counterdependent behaviour was illustrated by his continued silence, to become more active and "really become a member of the group like the rest of us have." Mr. E continued to remain passive, but towards the end of the session the leader attempted to gauge his feelings by explaining hers. She explained that she felt herself to be in a dilemma, torn between trying to draw him into the group so that he would not feel "left out" yet not wanting to focus too much attention on him so that he felt he was being coerced into participating.

Mr. E responded quite favourably, discussing his fears of not being as articulate or as capable of keeping up with the other group members. Mr. A very constructively suggested that Mr. E might find it helpful to jot down brief notes on areas which he might care to discuss with the group to give himself more confidence. Mr. C functioned as a supportive member, also picking up the inclusion

theme, by examining Mr. E's role in the group. In this session, Tuckman's Forming stage was still evident with testing behaviour.

In the fourth session, the group remained in Subphase 2 of Bennis' and Shepard's model with the counterdependent Mr. B again engaging in "fight" type behaviour. For the initial part of the session he was quite happy to engage in the group task since he was able to assume a very active leadership role. However, in the latter part of the session, in which group members helped one another, he felt very threatened, refused to participate, and physically withdrew from the group. He explicitly informed the leader and other members as he left that he had no intention of returning again. Tuckman's Storming phase and Schutz' Control phase were observed in this session with Mr. B's resistance, hostility, and attempts to exert control over the group even as he withdrew from it. He also resisted any techniques, such as the writing of contracts, which might require him to "expose" himself. The other members' reactions to Mr. B's outbursts seemed to make the group more cohesive in an effort to compensate for Mr. B's negativism. In an attempt at tension release, Mr. E encouraged the leader to continue trying to stimulate his interest, but to be careful not to use any words which he found difficult to understand.

In the fifth session, Bennis' and Shepard's Subphase 3 appeared to be prominent, with the members being fairly independent, taking over leadership roles, and with counterdependent members being less resistant. For example, the group decided not to arrange themselves in the "Influence Line" because of the possible negative repercussions in doing this type of exercise. The assertive independents such as Mr. A and Mr. C played a large part in the decision-making regarding what activities should be kept in as suitable. One counterdependent, Mr. B, deferred to the "age and wisdom" of Mr. A. Since part of the exercise was designed to bring out inclusion concerns, and since Mr. B was probably concerned about his previous outburst, the group tended to revert back towards the Inclusion stage. Mr. E provided tension release by using metaphors to describe other members in humorous terms. The group appeared to have moved into Tuckman's third stage (Norming), since group members accepted one another's idiosyncracies, even to the point of being able to joke about them.

In session six, the group conformed most closely to Bennis and Shepard's Subphase 3 with the independents providing an atmosphere in which the members were intensely involved with the group task. Mr. B

continued to exhibit some counterdependent behaviour by focussing in on the dependent member Mr. D whose self-revelations were considered to be overpersonal by Mr. B. Mr. B accused him of being an attention-seeker. However, an independent, Mr. A, pointed out to Mr. B that perhaps he hated this trait in Mr. D because he himself tended to do exactly the same thing while using different tactics. Mr. B seemed taken aback but did accept the criticism without becoming unduly upset. He was fairly quiet for the rest of the session, perhaps mulling over this revelation.

The later phases of Schutz' Control stage were also in evidence with the above-mentioned "sibling-like rivalry for the leader's attention" between Mr. B and Mr. D. Mr. B expressed a tendency toward Storming, but the other group members appeared to be in Tuckman's Norming stage, discussing their feelings and interpretations about each other in a very open manner.

Both the seventh and eighth sessions conformed very closely to Bennis' and Shepard's Subphase 4, the Enchantment phase, characterized by group solidarity, and a happy atmosphere. The nurses commented that the patients seemed "high." The last two sessions corresponded to Schutz' Affection and Tuckman's Norming stages. However, the group did not work through to the final stages in either Bennis' and Shepard's or Tuckman's theories, a not unusual occurence. On the day following the eighth session, a debriefing period was conducted. The members continued to function in the Enchantment phase. All the patients (except Mr. B) expressed that they would be better able to cope with failure now that they had the group to rely on for support. Some members, such as Mr. A, expressed sadness at the impending "death" of the group. Such expressions indicated a reversion back to Schutz' Inclusion level. As predicted by Schutz (APPENDIX L), the last three sessions did follow a reversal from the initial development of Inclusion, Control, and Affection, but seemed to have skipped the Control phase. Again, the secure atmosphere and expected patient roles may have minimized the struggle for control. Alternatively, the men's experience may have provided a degree of "uplift," making them wish to maintain their level of feeling as a group, without disruption. Other members noted that Mr. B and Mr. D were socializing better in the exercise yard and refectory. Several expressed the feeling that something like this should continue as an ongoing programme. Both Mr. C and Mr. D felt that they were no longer as self-centred as they had been when the sessions began.

The present author judged that all these theories had some relevance to the group's development. However, the developmental sequence did not conform to this group as well as it had to an earlier unstructured group in which she had participated. Several reasons could be offered. Bennis' and Shepard's, and Schutz' theories were both developed as a result of observing unstructured T- and Encounter groups, and thus would fit more closely the specific types of group from which they were developed. Tuckman's theory was developed by reviewing fifty studies of development in therapy groups which are highly anecdotal in nature and reflect the clinical biases of the observer (Hare, 1973). Also, certain of the conflictual areas did not become as overt as in the theories. For example, the conflict against authority figures outlined in Bennis' and Shepard's model was minimized for two reasons: (1) Most of the patients involved in the group were coming up before the review panel in the near future. Thus they were more likely to feel they should be on their "best" behaviour despite the fact that the author explained to them several times that their participation was part of a pilot project, and anything they said or did during the group would not be repeated before the review panel. (2) The patients were less likely to question rules and regulations than college students, the population on which two of the theories were developed, since they were more habituated to regimentation.

CHAPTER VI

SUMMARY AND CONCLUSIONS

This thesis has presented the results of an empirical evaluation of a self-administered programme for personal and interpersonal development, (PROCESS), and has examined some of the changes in terms of personality variables. A Case Study was used to subjectively compare development in PROCESS to development in leader-led T-groups and Encounter groups, based on three theories of group development.

All three groups, Psychology students, Nursing graduates, and maximum security psychiatric patients, who participated in PROCESS showed a decrease in the discrepancy between their perceived Actual behaviour and their Preferred behaviour from before to after their group experience. However, control subjects showed no change over the same period. If it is assumed that self-concept can be conceptualized by the discrepancy between actual and preferred ways of self-perception, PROCESS seems to enhance self-concept. The results were replicated later when the students who had served as controls participated in the PROCESS experience. The discrepancy reduction is primarily accounted for by a change in perceived Actual behaviour, rather than by a change in Preferred behaviour. Because similar changes in self-concept occurred in the present study (a marathon approach) as in the Vicino et al., (1973) study (a spaced approach), it was concluded that PROCESS could be used with higher-level university students over a shorter time period such as two consecutive weekends.

All three participant groups increased their mean scores on self-actualization, as measured by the POI, but the control groups' mean scores also increased over the experimental period. Women improved more than men in self-concept, but not in self-actualization. In addition, the predicted relationships between affiliation motivation and improvements in self-concept and self-actualization were not found. The PRF personality variables of Cognitive Structure and Social Recognition were significantly related to the pre- and post-measures of dependent variables, thus contaminating the findings. Difficulties with the Hawthorne effect, repeated testing with self-reflective measures, and the relationship of the concept of affiliation to Maslow's hierarchy

were discussed. Methodological, ethical, and theoretical problems with the study of self-administered, instrumented sensitivity groups were briefly summarized. Adequate follow-up studies with behavioural criteria for effective changes as a result of experiencing such groups seems to be the greatest need.

In a subjective analysis of the group development with the five patients, several stages of Bennis' and Shepard's, Schutz', and Tuckman's theories of group development were observed. PROCESS seems to be an innovative and viable alternative to traditional psychotherapeutic groups, with a more positive orientation, at least for normally intelligent patients. Training in recognizing the forces involved in the group approach and how maximum therapeutic use can be made of them is of vital importance in the preparation of future psychotherapists. With people having more of their primary physiological, safety, security, and social needs taken care of, according to Maslow's theory, there will be more emphasis on dealing with higher needs of self-development, even among psychiatric patients. A multidisciplinary background with experiences in philosophy, art, and the humanities as well as the social sciences is becoming increasingly necessary to enable the therapist to understand the existential anxiety and guilt currently experienced by increasing numbers of people who are also striving towards positive growth.

REFERENCES

Aubry, W. E. An analysis of a one-week workshop for developing self-actualization and effective interpersonal behavior. In E. L. Shostrom, Supplement to Manual for the Personal Orientation Inventory. San Diego, Calif.: Educational and Industrial Testing Service, 1968.

Back, K. W. Beyond Words. Baltimore, Md.: Penguin Books Inc., 1973.

Barron, F. and Leary, T. F. Changes in psychoneurotic patients with and without psychotherapy. Journal of Consulting Psychology, 1955, 19, 239 - 245.

Becker, J. The effects of instructional audio-tape in self-directed encounter groups. In M. Seligman and R. E. Desmond, Leaderless groups: a review. Counseling Psychologist, 1973, 4, 70 - 87.

Bellanti, J. The effects of an encounter group experience on empathy, respect, congruence, and self-actualization. Dissertation Abstracts International, 1972, 32 (11-B), 6668 - 6669.

Bollet, R. M. The effect of leader presence on change in a personal growth group. Dissertation Abstracts International, 1972, 32 (8-A), 4340.

Clarke, D. E. Measures of achievement and affiliation motivation. Review of Educational Research, 1973, 43, 41 - 51.

Cooper, C. L. T-group training and self-actualization. Psychological Reports, 1971, 28, 391 - 394.

Corsini, R. (Ed.) Current Psychotherapies. Itasca, Ill.: F. E. Peacock Publishers, Inc., 1974.

Counseling Center Staff. Effects of three types of sensitivity groups on changes in measures of self-actualization. Journal of Counseling Psychology, 1972, 19, 253 - 254.

Culbert, S. A., Clark, J. V., and Bobele, H. K. Measures of change toward self-actualization in two sensitivity training groups. Journal of Counseling Psychology, 1968, 15, 53 - 57.

Dodds, J. B. An experimental study of the determinants of affiliation imagery in Thematic Apperception stories. Dissertation Abstracts, 1961, 21, 3842 - 3843.

Dye, C. An analysis of the effects of human relations training upon student nurses' measured anxiety, self concept, and group participation. Dissertation Abstracts International, 1972, 33, (2-B), 795.

Dyer, R. D. The effects of human relations training on the interpersonal behavior of college students. Dissertation Abstracts International, 1967, 28 (3-A), 2068 - 2069.

Fanning, L. E. Massed vs. spaced experiences in personal growth groups. Dissertation Abstracts International, 1972, 32 (8-A), 4344.

Fernando, G. P. S. Analysis of patients in a national maximum security unit. Unpublished manuscript, Lake Alice Psychiatric Hosp., Marton 1972.

Fisher, G. Performance of psychopathic felons on a measure of self-actualization. Educational and Psychological Measurement, 1968, 28, 561 - 563.

Flanders, J. N. A humanistic approach to inservice education. Test results; Personal Orientation Inventory. In E. L. Shostrom, Supplement to Manual for the Personal Orientation Inventory. San Diego, Calif.: Educational and Industrial Testing Service, 1969.

French, E. G. Effects of the interaction of motivation and feedback on task performance. In J. W. Atkinson (Ed.) Motives in Fantasy, Action, and Society. Toronto: Van Nostrand, 1958, 400 - 408.

French, E. G. and Chadwick, I. Some characteristics of affiliation motivation. Journal of Abnormal and Social Psychology, 1956, 52, 296 - 300.

Friedman, H. Introduction to Statistics. New York: Random House,1972.

Foulds, M. L. Effects of a personal growth group on a measure of self-actualization. Journal of Humanistic Psychology, 1970, 10, 33 - 38.

Gazda, G. M. Innovations to Group Psychotherapy. Springfield, Ill.: Charles C. Thomas, 1970.

Gibb, J. R. and Gibb, L. M. Leaderless groups: Growth-centered values and potentials. In H. Otto and M. Mann (Eds.) Ways of Growth. New York: Grossman, 1968, 101 - 114.

Gordon, R. D. A quantitative investigation of selected dynamics and outcomes of the basic encounter group. Dissertation Abstracts International, 1973, 32 (10-B), 6046 - 6047.

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

Hare, A.P. Theories of group development and categories for interaction analysis. Small Group Behavior, 1973, 4, 259 - 304.

Himelstein, P. and Kimbrough, W. Reliability of French's "Test of Insight". Educational and Psychological Measurement, 1960, 20, 737-741.

Ilardi, R. L. and May, W. T. A reliability study of Shostrom's Personal Orientation Inventory. Journal of Humanistic Psychology, 1968, 8, 68 - 72.

Jackson, D. N. Personality Research Form Manual, New York: Research Psychologists Press Inc., 1967.

Jones, D. S. and Medvene, A. M. Self-actualization effects of a marathon growth group. Journal of Counseling Psychology, 1975, 22, 39-43.

Lakin, M. Interpersonal Encounter: Theory and Practice in Sensitivity Training. New York: McGraw-Hill, 1972.

Lanyon, R. I. Review of Eysenck Personality Inventory. In O. K. Buros (Ed.) The Seventh Mental Measurements Yearbook. Vol. I. Highland Park, N.J.: The Gryphon Press, 1972, 163-164.

LaSalle, A. J. The effects of encounter and programmed group treatments on self-concept. Dissertation Abstracts International, 1971, 32 (4-A), 1857.

Lathey, R. K. A comparison, of change toward self-actualization in marathon group counseling and traditional group counseling. Dissertation Abstracts International, 1972, 32 (7-A), 3692.

Lieberman, M. A., Yalom, I. D., and Miles, M. B. Encounter: the leader makes the difference. Psychology Today, 1973, 6, 69 - 76.

Link, S. L. A study of degree of change in self-concept as a result of participation in a marathon T-group. Dissertation Abstracts International, 1972, 32 (11-B), 6622 - 6623.

Maslow, A. H. Motivation and Personality. (Second Ed.) New York: Harper and Row, 1970.

Massarik, F. A. A sensitivity training impact model: Some first (and second) thoughts on the evaluation of sensitivity training. In F. L. Vicino et al, The Impact of PROCESS: Self-administered exercises for personal and interpersonal development. Journal of Applied Behavioral Science, 1973, 9, 737 - 755.

Mattocks, A. L. and Jew, C. C. Comparison of self-actualization levels and adjustment scores of incarcerated male felons. Educational and Psychological Measurement, 1974, 34, 69 - 74.

McKeachie, W. J. Motivation, teaching methods, and college learning. In M. R. Jones (Ed.) Nebraska Symposium on Motivation 1961. Lincoln, Neb.: University of Nebraska Press, 1961, 111 - 142.

Miller, R. S. A comparative study of the marathon group experience in a university counseling center. Dissertation Abstracts International, 1973, 33 (10-A), 5497.

Mowit, R. C. Improving behavior of delinquent adolescents through group therapy. Hospital and Community Psychiatry, 1972, 23, 239 - 241.

Murray, E. J. Motivation and Emotion. Englewood Cliffs, N.J.: Prentice-Hall, 1964.

Parisi, E. M. The T-group and accurate self-perception: A time trend and process analysis. Dissertation Abstracts International, 1973, 33 (9-A), 4950 - 4951.

Roethlisberger, F. J. and Dickson, W. J. Management and the Worker. Cambridge, Mass.: Harvard University Press, 1939.

Rogers, C. R. Encounter Groups. London: Pelican, 1973.

Rudman, S. Positive changes in self-concept as a function of participation in encounter groups and encountertape groups. Dissertation Abstracts International, 1971, 31 (9-B), 5674.

Schutz, W. C. Elements of Encounter. Big Sur: Joy Press, 1973.

Schwartz, R. I. An experimental study of massed and spaced encounter. Dissertation Abstracts International, 1972, 33 (6-A), 2723.

Seligman, M. and Desmond, R. E. Leaderless groups: A review. Counseling Psychologist, 1973, 4, 70 -87.

Shaffer, J. B. P. and Galinsky, M. D. Models of Group Therapy and Sensitivity Training. Englewood Cliffs, N.J.: Prentice-Hall, 1974.

Shapiro, R. J. A comparative investigation of emotionality and multiple outcome criteria in marathon and traditional growth groups. Dissertation Abstracts International, 1971, 32 (6-B), 3652 - 3653.

Shaw, M. E. Group Dynamics: The Psychology of Small Group Behavior. New York: McGraw-Hill, 1971.

Shervington, W. Prison, psychiatry, and mental health. Psychiatric Annals, 1974, 4, 43 - 60.

Shostrom, E. L. Manual for the Personal Orientation Inventory. San Diego, Calif,: Educational and Industrial Testing Service, 1966, 1974.

Simmons, R. Intensity as a variable in programmed group interaction: The marathon. In M. Seligman and R. E. Desmond, Leaderless groups: A Review. Counseling Psychologist, 1973, 4, 70 - 87.

Singh, U.P. Personality profiles of recidivists and nonrecidivists. Indian Journal of Social Work, 1974, 35, 227 - 232.

Solomon, L. N., Berzon, B., and Davis, D. P. A personal growth program for self-directed groups. Journal of Applied Behavioral Science, 1970, 6, 427 - 452.

Solomon, L. N., Berzon, B., and Weedman, C. W. The programmed group: A new rehabilitation resource. International Journal of Group Psychotherapy, 1968, 18, 199 - 219.

Stock, D. A survey of research on T groups. In E. L. Bradford, J. R. Gibb, and K. D. Benne (Eds.), T-Group Theory and Laboratory Method. New York: Wiley, 1964, 395 - 439.

Thomas, M. D. Developing human potential through group interaction: A study of changes in personality factors, personal attitudes, and group functioning. Dissertation Abstracts International, 1971, 31 (11-B), 6884.

Treppa, J. A. and Fricke, L. Effects of a marathon group experience. Journal of Counseling Psychology, 1972, 19, 466 - 467.

Truax, C.B. Effective ingredients in psychotherapy: An approach to unraveling the patient-therapist interaction. In G. E. Stollak, B. C. Guerney, M. Rothberg (Eds.), Psychotherapy Research: Selected Readings. Chicago: Rand McNally and Co., 1966, 586 - 593.

Truax, C. B. and Carkhuff, R .R. Toward Effective Counseling and Psychotherapy. Chicago: Aldine, 1967.

Trueblood, R. W. and McHolland, J. D. Measures of change toward self-actualization through human potential group process. In E. L. Shostrom, Supplement to Manual for the Personal Orientation Inventory. San Diego, Calif.: Educational and Industrial Testing Service, 1968.

Vicino, F. L., Krusell, J., Bass, B. M., Deci, E. L., and Landy, D. A. The impact of PROCESS: Self-administered exercises for personal and interpersonal development. Journal of Applied Behavioral Science, 1973, 9, 737 - 755.

Wills, E. S. Personality variables which discriminate between groups differing in level of self-actualization. Journal of Counseling Psychology, 1974, 21, 222 - 227.

Yalom, I. D. The Theory and Practice of Group Psychotherapy. New York: Basic Books, Inc., 1970.

Young, E. R. and Jacobson, L. I. Effects of time-extended marathon group experiences on personality characteristics. Journal of Counseling Psychology, 1970, 17, 247 - 251.

APPENDIX A

Means and Standard Deviations of Experimentals and Controls on Personality Research Form[1]

Scale	Experimentals N = 21		Controls N = 21		t-value
	Mean	S.D.	Mean	S.D.	
Abasement	7.33	3.01	7.19	2.91	1
Achievement	12.33	3.15	12.52	2.84	1
Affiliation	14.81	3.09	13.52	3.83	1.20
Aggression	4.33	2.50	5.19	2.77	-1.04
Autonomy	9.38	3.81	9.57	4.08	1
Change	12.43	2.91	12.00	2.83	1
Cognitive Structur	10.05	3.14	9.57	4.42	1
Defendence	6.52	3.52	8.00	3.24	-1.41
Dominance	8.76	3.58	9.00	4.21	1
Endurance	10.00	2.37	10.95	3.14	-1.11
Exhibition	7.57	3.61	7.52	3.44	1
Harmavoidance	10.76	4.05	10.62	4.08	1
Impulsivity	10.86	3.38	9.33	4.64	1.22
Nurturance	15.05	2.33	13.81	2.40	1.69
Order	9.14	4.41	10.24	4.01	1
Play	11.48	3.79	8.95	4.11	2.07*
Sentience	16.43	2.18	17.00	2.53	1
Social Recognition	9.29	3.09	7.24	3.96	1.87
Succorance	10.67	3.68	8.57	3.67	1.85
Understanding	13.81	3.01	14.05	2.82	1
Infrequency	0.71	1.06	0.43	0.68	1.04
Desirability	15.67	1.96	16.10	2.21	1

[1] cf. Jackson, 1967

*p $<$ .05

APPENDIX B

PERSONALITY RESEARCH FORM SCALES

SCALE	DESCRIPTION OF HIGH SCORER	DEFINING TRAIT ADJECTIVES
Abasement	Shows a high degree of humility; accepts blame and criticism even when not deserved; exposes himself to situations where he is in an inferior position; tends to be self-effacing.	meek, self-accusing, self-blaming, obsequious, self-belittling, surrendering, resigned self-critical, humble, apologizing, subservient, obedient, yielding, deferential, self-subordinating.
Achievement	Aspires to accomplish difficult tasks; maintains high standards and is willing to work toward distant goals; responds positively to competition; willing to put forth effort to attain excellence.	striving, accomplishing, capable, purposeful attaining, industrious, achieving, aspiring enterprising, self-improving, productive driving, ambitious, resourceful, competitive
Affiliation	Enjoys being with friends and people in general; accepts people readily; makes efforts to win friendships and maintain associations with people.	neighborly, loyal, warm, amicable, good-natured, friendly, companionable, genial, affable, cooperative, gregarious, hospitable, sociable, affiliative, good-willed.
Aggression	Enjoys combat and argument; easily annoyed; sometimes willing to hurt people to get his way; may seek to "get even" with people whom he perceives as having harmed him.	aggressive, quarrelsome, irritable, argumentative, threatening, attacking, antagonistic, pushy, hot-tempered, easily-angered, hostile, revengeful, belligerent, blunt, retaliative.
Autonomy	Tries to break away from restraints, confinement, or restrictions of any kind; enjoys being unattached, free, not tied to people, places, or obligations; may be rebellious when faced with restraints.	unmanageable, free, self-reliant, independent, autonomous, rebellious, unconstrained, individualistic, ungovernable, self-determined, non-conforming, uncompliant, undominated, resistant, lone-wolf.
Change	Likes new and different experiences; dislikes routine and avoids it; may readily change opinions or values in different circumstances; adapts readily to changes in environment.	inconsistent, fickle, flexible, unpredictable, wavering, mutable, adaptable, changeable, irregular, variable, capricious, innovative, flighty, vacillating, inconstant.
Cognitive Structure	Does not like ambiguity or uncertainty in information; wants all questions answered completely; desires to make decisions based upon definite knowledge, rather than upon guesses or probabilities.	precise, exacting, definite, seeks certainty, meticulous, perfectionistic, clarifying, explicit, accurate, rigorous, literal, avoids ambiguity, defining, rigid, needs structure.
Defendence	Readily suspects that people mean him harm or are against him; ready to defend himself at all times; takes offense easily; does not accept criticism readily.	self-protective, justifying, denying, defensive, self-condoning, suspicious, secretive, has a "chip on the shoulder," resists inquiries, protesting, wary, self-excusing, rationalizing, guarded, touchy.
Dominance	Attempts to control his environment, and to influence or direct other people; expresses opinions forcefully; enjoys the role of leader and may assume it spontaneously.	governing, controlling, commanding, domineering, influential, persuasive, forceful, ascendant, leading, directing, dominant, assertive, authoritative, powerful, supervising.
Endurance	Willing to work long hours; doesn't give up quickly on a problem; persevering, even in the face of great difficulty; patient and unrelenting in his work habits.	persistent, determined, steadfast, enduring, unfaltering, persevering, unremitting, relentless, tireless, dogged, energetic, has stamina, sturdy, zealous, durable.
Exhibition	**Wants to be the center of attention; enjoys having an audience; engages in behavior which wins the notice of others; may enjoy being dramatic or witty.**	**colorful, entertaining, unusual, spellbinding, exhibitionistic, conspicuous, noticeable, expressive, ostentatious, immodest, demonstrative, flashy, dramatic, pretentious, showy.**

SCALE	DESCRIPTION OF HIGH SCORER	DEFINING TRAIT ADJECTIVES
Harmavoidance	Does not enjoy exciting activities, especially if danger is involved; avoids risk of bodily harm; seeks to maximize personal safety.	fearful, withdraws from danger, self-protecting, pain-avoidant, careful, cautious, seeks safety, timorous, apprehensive, precautionary, unadventurous, avoids risks, attentive to danger, stays out of harm's way, vigilant.
Impulsivity	Tends to act on the "spur of the moment" and without deliberation; gives vent readily to feelings and wishes; speaks freely, may be volatile in emotional expression.	hasty, rash, uninhibited, spontaneous, reckless, irrepressible, quick-thinking, mercurial, impatient, incautious, hurried, impulsive, foolhardy, excitable, impetuous.
Nurturance	Gives sympathy and comfort; assists others whenever possible, interested in caring for children, the disabled, or the infirm; offers a "helping hand" to those in need; readily performs favors for others.	sympathetic, paternal, helpful, benevolent, encouraging, caring, protective, comforting, maternal, supporting, aiding, ministering, consoling, charitable, assisting.
Order	Concerned with keeping personal effects and surroundings neat and organized; dislikes clutter, confusion, lack of organization; interested in developing methods for keeping materials methodically organized.	neat, organized, tidy, systematic, well-ordered, disciplined, prompt, consistent, orderly, clean, methodical, scheduled, planful, unvarying, deliberate.
Play	Does many things "just for fun;" spends a good deal of time participating in games, sports, social activities, and other amusements; enjoys jokes and funny stories; maintains a light-hearted, easy-going attitude toward life.	playful, jovial, jolly, pleasure-seeking, merry, laughter-loving, joking, frivolous, prankish, sportive, mirthful, fun-loving, gleeful, carefree, blithe.
Sentience	Notices smells, sounds, sights, tastes, and the way things feel; remembers these sensations and believes that they are an important part of life; is sensitive to many forms of experience; may maintain an essentially hedonistic or aesthetic view of life.	aesthetic, enjoys physical sensations, observant, earthy, aware, notices environment, feeling, sensitive, sensuous, open to experience, perceptive, responsive, noticing, discriminating, alive to impressions.
Social Recognition	Desires to be held in high esteem by acquaintances; concerned about reputation and what other people think of him; works for the approval and recognition of others.	approval seeking, proper, well-behaved, seeks recognition, courteous, makes good impression, seeks respectability, accommodating, socially proper, seeks admiration, obliging, agreeable, socially sensitive, desirous of credit, behaves appropriately.
Succorance	Frequently seeks the sympathy, protection, love, advice, and reassurance of other people; may feel insecure or helpless without such support; confides difficulties readily to a receptive person.	trusting, ingratiating, dependent, entreating, appealing for help, seeks support, wants advice, helpless, confiding, needs protection, requesting, craves affection, pleading, help-seeking, defenseless.
Understanding	Wants to understand many areas of knowledge; values synthesis of ideas, verifiable generalization, logical thought, particularly when directed at satisfying intellectual curiosity.	inquiring, curious, analytical, exploring, intellectual, reflective, incisive, investigative, probing, logical, scrutinizing, theoretical, astute, rational, inquisitive.
Desirability	Describes self in terms judged as desirable; consciously or unconsciously, accurately or inaccurately, presents favorable picture of self in responses to personality statements.	
Infrequency	Responds in implausible or pseudo-random manner, possibly due to carelessness, poor comprehension, passive non-compliance, confusion, or gross deviation.	

APPENDIX C

Means and Standard Deviations of Experimentals and Controls on Personal Orientation Inventory[1] (Pre-Measure)

Scale[2]	Experimentals N = 21		Controls N = 21		t-value
	Mean	S.D.	Mean	S.D.	
Tc	17.42	3.01	17.57	4.07	1
I	84.00	11.76	89.43	15.58	-1.27
SAV	19.52	2.94	20.00	3.65	1
Ex	21.76	4.93	23.38	4.80	-1.08
Fr	15.67	2.67	16.76	3.90	-1.06
S	12.29	2.43	12.57	4.03	1
Sr	11.19	2.09	12.00	2.81	-1.06
Sa	16.52	3.06	17.29	4.22	1
Nc	11.10	2.63	11.90	2.17	-1.09
Sy	7.10	1.38	7.38	1.47	1
A	14.95	3.14	16.71	4.40	-1.50
C	17.76	3.55	19.29	4.57	-1.21
O:I	2.40	0.85	3.40	2.14	-1.99

[1] cf. Shostrom, 1974

[2] cf. APPENDIX D

APPENDIX D

Descriptions of Personal Orientation Inventory Scales[1]

Scale	Description	High Scorer
Tc	Time competency	Living in the present
I	Inner-directed	Independent, self-supportive
SAV	Self-Actualizing Value	Holds values of self-actualizers
Ex	Existentiality	Flexible in application of values
Fr	Feeling reactivity	Sensitive to own needs & feelings
S	Spontaneity	Freely expresses feelings behaviorally
Sr	Self-regard	High self-worth
Sa	Self-acceptance	Accepting of self in spite of weaknesses
Nc	Nature of man	Sees man as essentially good
Sy	Synergy	Sees opposites of life meaningfully related
A	Acceptance of Aggression	Accepts feelings of anger or aggression
C	Capacity for intimate contact	Warm interpersonal relationships
O:I	Support ratio	Depends primarily on own feelings

[1] cf. Shostrom, 1974

APPENDIX E

Correlations between Pre-Measures and Personality Variables
N = 42

POI[2] \ PRF[1]	Affiliation	Cognitive Structure	Play	Social Recognition
Tc	.07	-.05	-.19	-.17
I	.11	-.37	0	-.37*
SAV	.15	-.23	.06	-.20
Ex	-.20	-.34*	-.17	-.38*
Fr	0	-.36*	.13	-.43*
S	0	-.42*	.04	-.37*
Sr	-.18	-.08	-.29*	-.33*
Sa	.07	-.34*	-.08	-.41*
Nc	.32*	-.17	.02	-.02
Sy	.18	.01	-.06	.10
A	.07	-.26*	0	-.35*
C	-.09	-.28*	-.16	-.40*
O:I	.05	-.42*	-.09	-.44*
"Who Am I" Initial Discrepancy	-.04	.11	-.06	.24

[1] cf. Jackson, 1967

[2] cf. Shostrom, 1974

*p < .05

APPENDIX F

Correlations between Post-Measures and Personality Variables
N = 42

POI[2] \ PRF[1]	Affiliation	Cognitive Structure	Play	Social Recognition
Tc	.16	-.33*	0	-.38*
I	.11	-.36*	.18	-.31*
SAV	.28*	-.19	.19	-.03
Ex	-.06	-.42*	.09	-.48*
Fr	.17	-.28*	.17	-.30*
S	.19	-.38*	.15	-.36*
Sr	-.03	-.18	-.09	-.26*
Sa	.09	-.24	-.04	-.43*
Nc	.32*	.05	.12	.22
Sy	.35*	-.06	.06	.04
A	.10	-.30*	-.06	-.28*
C	.06	-.30*	-.05	-.39*
O:I	.09	-.41*	.08	-.33*
"Who Am I" Final Discrepancy	.13	.33*	-.05	.42*

[1] cf. Jackson, 1967

[2] cf. Shostrom, 1974

*p < .05

APPENDIX G

Correlations between Changes in Dependent Variables and Personality Variables
N = 42

PRF[1] / POI[2]	Affiliation	Cognitive Structure	Play	Social Recognition
Tc	.02	-.03	.21	0
I	.21	.02	.21	.23
SAV	.10	-.05	.04	.06
Ex	-.11	-.01	.13	-.17
Fr	.05	.16	-.02	-.31*
S	.11	-.07	.08	.10
Sr	.20	.01	.19	.22
Sa	-.02	-.20	.05	-.04
Nc	.04	.12	.05	.14
Sy	-.10	.01	.03	-.13
A	-.06	.01	-.09	.01
C	-.02	.04	-.06	.03
O:I	.15	.13	.08	-.08
"Who Am I" Change in Discrepancy	.21	.09	.01	.01

[1] cf. Jackson, 1967

[2] cf. Shostrom, 1974

*p < .05

APPENDIX H

Format and Content of PROCESS Exercises[1]

Format

There are eight exercises, each of which is conducted during a single two- to three-hour group session. Each exercise deals with a specific topic or issue, and successive exercises build on principles developed in earlier ones.

The program is designed to be self-administering; there is no need for the presence of a professional trainer or leader. A set of guidelines is provided with each exercise, to be used by a participant-administrator who is one of the group members. The members take turns as administrators for the different exercises. The administrator for a given exercise is responsible for clarifying instructions, helping participants stay within time limits, and distributing and collecting materials.

The guidelines for the administrator include: (1) specific instructions regarding the nature of his role and the extent of his responsibilities; (2) a description of the educational issue involved in the exercise; (3) a statement of the goals and purposes of the exercise; (4) a procedural description of the activities; and (5) a time schedule.

Participants have instruction booklets, which include: (a) a statement of the goals and purpose of the exercise; (b) a schematic summary of all the steps; (c) general ground rules and suggestions for the exercise; (d) a detailed description of what to do in each step of the exercise; (e) suggested time limits for each step, along with instructions on how and when to move from one step to the next; (f) questions to be answered at the end of each activity; and (g) questions designed to help the participant plan specific actions (behaviour changes) he intends for the near future.

Content

The following is a short summary of the content of each exercise.

Exercise I offers an introduction to the process of learning in a group setting. In the first step, each participant shares information about himself with the total group. Next, each individual fills out a questionnaire on his personal and interpersonal style (Who Am I: Part I) indicating his actual and preferred behaviour. This questionnaire provides information for the completion of the last step. In the third step, a conceptual model, the Johari Window is presented to help the participants integrate some of the processes that may have occurred

[1] Adapted from Vicino et al., 1973, Pp. 739 - 741.

within the group. In the last step, participants (in response to specific questions) again share information with the others, and add some of their feelings about what has occurred.

Exercise II focuses on the feedback process. It is intended to provide the participant with a nonthreatening opportunity to learn how others view him or her on certain traits of interpersonal behaviour. In the first step, each participant records reactions to others on a list of traits, and indicates similarities between the other participants. After making this list, each participant follows a set of guidelines for giving feedback to the others. A model for change is also presented. Specific actions for initiating, pursuing, and carrying out behaviour change are proposed by participants. This procedure is included in most of the remaining exercises.

Exercise III provides practice in listening without judging or evaluating. In the first activity, each participant shares his or her perceived strengths with the other members, who then give feedback. Suggestions on how to give helpful feedback are provided for the participants. In the next step, members of subgroups practice listening to one another and paraphrasing what they hear. After a brief conceptual integration, a role-playing situation is enacted; it touches on some issues relevant to communication between generations. This activity is then discussed.

Exercise IV focuses on goals and issues related to membership in the group (and indirectly in other groups). The first half of the exercise deals with improving members' skill in observing the processes taking place in the group. The second half deals with each member's effectiveness as a group member and steps which he can take to become even more so. Action plans are made to accomplish this objective.

Exercise V focuses further on the feedback process, In the first step, evaluations are made by each member of his own feelings about self and the group on the dimensions of inclusion and influence. After this, each member receives feedback from the others through the use of metaphors. The members engage in activities designed to provide feedback regarding their relative influence in the group (The Influence Line) and their feelings toward each other. The last step is again an action plan.

Exercise VI provides men and women an opportunity to look at their respective roles and to discuss these in personal terms, In the first part of the exercise, the group is divided into two parts - men and women. In the separate groups, each individual lists adjectives that describe himself or herself and rates himself or herself on these adjectives, These adjectives are shared with others; each member then rates the other members on their chosen adjectives. This information is shared. Incidents are then shared which involve feelings of "manliness" and "womanliness". The total group reconvenes and males and females make up a descriptive list for their own sex and the other sex, and discuss the lists with the total group. The last step is an action plan in which manliness and womanliness are the central issues.

Exercise VII involves an examination of personal values, inconsistencies between stated values and behaviour, and an exploration of modes of initiating change. Participants begin by writing about their beliefs and accomplishments, and then about what they want to do in the near future. The results are shared with other participants. Members then compare their past behaviour with their present and future goals. Dyads are formed; each participant uses his own resources and those of another member to make specific plans for changing present behaviour or questioning current beliefs.

Exercise VIII allows members to evaluate changes in their attitudes and behaviour. They discuss ways of transferring what they have learned in the group to other situations. Who Am I: Part II is filled out by each participant. Then the identical questionnaire (Who Am I: Part I) completed during the first exercise is returned to the member for comparison to see if there are any changes in self-perceptions. Each participant then reexamines the two questionnaires for measured differences. The information is shared with the group. Final feedback is then given by each member about self, the other participants, and the group as a whole.

Step 2: QUESTIONNAIRE Who AM I Questionnaire

The questionnaires on the following two pages will give you a chance to look at some aspects of your personal and interpersonal styles. The questionnaire will help you to focus on some areas that you might like to discuss in the group. The questionnaire will take about fifteen minutes to complete.

For each of the characteristics listed on the two following pages, you will find a continuum of numbers from one to nine. After you have read each scale, write in the left column that number, from one to nine, which best describes your behavior as you now see it, (that is, your present actual behavior). Then, in the right column, write the number which best describes your behavior as you would like it to be, (that is, the way you would prefer it to be). If the meaning of some of the characteristics or terms on the questionnaire are not clear to you, decide for yourself how you wish to interpret them. [Read carefully each description of the continuum in the questionnaire, because in some instances, what you deem the most desirable behavior may not be on the extremes of the scale (1,9).]

Example: The first scale on the questionnaire is:

Closed 1:2:3:4:5:6:7:8:9 Open

If you see yourself now as a fairly closed and withdrawn person you may wish to enter a 2 or a 3 under "Actual". If, on the other hand, you would like to become more open, then you may want to enter a 6 or 7 under "Preferred".

TAKE TIME NOW TO DO THE QUESTIONNAIRE

PERSONAL STYLE

Self-Appraisal
Part 1

			Actual (the way you see yourself now)	Preferred (the way you would like to be)
Closed	1:2:3:4:5:6:7:8:9	Open	____	____
Spend most of my time alone	1:2:3:4:5:6:7:8:9	Spend most of my time with others	____	____
Seek help from others	1:2:3:4:5:6:7:8:9	Always solve problems for myself	____	____
Feel I have much control over what happens to me	1:2:3:4:5:6:7:8:9	Feel I have little control over what happens to me	____	____
Rigid	1:2:3:4:5:6:7:8:9	Flexible	____	____
Vague	1:2:3:4:5:6:7:8:9	Clear	____	____
Do not finish tasks	1:2:3:4:5:6:7:8:9	Finish tasks	____	____
Find many things to become involved with	1:2:3:4:5:6:7:8:9	Find little to become involved with	____	____
Am loveable	1:2:3:4:5:6:7:8:9	Am not loveable	____	____
Not confident	1:2:3:4:5:6:7:8:9	Self-confident	____	____

WHEN YOU HAVE FINISHED THIS PAGE, GO ON TO THE NEXT PAGE

INTERPERSONAL STYLE

			Self-Appraisal Part 1 Actual (the way you see yourself now)	Preferred (the way you would like to be)
Not listening	1:2:3:4:5:6:7:8:9	Listening	_____	_____
Submissive	1:2:3:4:5:6:7:8:9	Dominant	_____	_____
Indifferent	1:2:3:4:5:6:7:8:9	Caring	_____	_____
Warm	1:2:3:4:5:6:7:8:9	Cold	_____	_____
Phoney	1:2:3:4:5:6:7:8:9	Sincere	_____	_____
Not trusting	1:2:3:4:5:6:7:8:9	Trusting	_____	_____
Influential	1:2:3:4:5:6:7:8:9	Not influential	_____	_____
Not comfortable with conflict	1:2:3:4:5:6:7:8:9	Comfortable with conflict	_____	_____
Never act unless I feel sure others reactions will be favorable	1:2:3:4:5:6:7:8:9	Always act even when I am unsure about others reactions	_____	_____
Not cooperative	1:2:3:4:5:6:7:8:9	Cooperative	_____	_____

Wait here if you finish early. You might want to look back and make sure you said what you wanted.

APPENDIX J

Evaluation Questionnaire

1. Please circle one choice for each of the following:

a. Instructions & format were: Very Clear, Fairly Clear, Not Very Clear, Not at all Clear

b. Topics & content were: Very Clear, Fairly Clear, Not Very Clear, Not at all Clear

c. In general, the Exercises : Very Helpful, Fairly Helpful, Not Very Helpful, Not at all Helpful

d. Process and learnings were: Very Valuable, Fairly Valuable, Not Very Valuable, Not at all Valuable

e. Would you recommend this programme to a close friend?

Definitely Yes, Probably Yes, Not Sure, Probably Not, Definitely Not

2. a. What specific processes were most helpful for you? (e.g., receiving and giving feedback; opportunity to talk about one's own feelings; getting to understand people better; structure)

b. What specific processes were least helpful?

3. a. Place a tick mark beside the specific parts of exercises which were most helpful.

b. Place a cross beside the specific parts of exercises which were least helpful.

____Feedback sessions

____Influence Line

____Listening Trios

____Action Plans

____Other?

_____
(Please list.)

____Map and scroll activities

____"Who Am I" comparisons

____Sex-role Adjectives

____Role Play

____Time limits

____Contract Making

4. Comments:

APPENDIX K

Bennis' and Shepard's Theory of Group Development[1]

Phase I. Dependence–Power Relations[a]

	Subphase 1 Dependence-Submission	Subphase 2 Counterdependence	Subphase 3 Resolution
1. Emotional Modality	Dependence-flight	Counterdependence-fight. Off-target fighting among members. Distrust of staff member. Ambivalence.	Pairing. Intense involvement in group task.
2. Content Themes	Discussion of interpersonal problems external to training groups.	Discussion of group organization; i.e. what degree of structuring devices is needed for "effective" group behavior?	Discussion and definition of trainer role.
3. Dominant Roles (central persons)	Assertive, aggressive members with rich previous organizational or social science experience.	Most assertive counterdependent and dependent members. Withdrawal of *less* assertive independents and dependents.	Assertive independents.
4. Group Structure	Organized mainly into multi-subgroups based on members' past experiences.	Two tight subcliques consisting of leaders and members, of counterdependents and dependents.	Group unifies in pursuit of goal and develops internal authority system.
5. Group Activity	Self-oriented behavior reminiscent of most new social gatherings.	Search for consensus mechanism: Voting, setting up chairmen, search for "valid" content subjects.	Group members take over leadership roles formerly perceived as held by trainer.
6. Group movement facilitated by:	Staff member abnegation of traditional role of structuring situation, setting up rules of fair play, regulation of participation.	Disenthrallment with staff member coupled with absorption of uncertainty by most assertive counterdependent and dependent individuals. Subgroups form to ward off anxiety.	Revolt by assertive independents (catalysts) who fuse subgroups into unity by initiating and engineering trainer exit (barometric event).
7. Main Defenses	Projection Denigration of authority		Group moves into Phase II

Phase II. Interdependence–Personal Relations

	Subphase 4 Enchantment	Subphase 5 Disenchantment	Subphase 6 Consensual Validation
Emotional Modality	Pairing-flight. Group becomes a respected icon beyond further analysis.	Fight-flight. Anxiety reactions. Distrust and suspicion of various group members.	Pairing, understanding, acceptance.
Content Themes	Discussion of "group history" and generally salutary aspects of course, group, and membership.	Revival of content themes used in Subphase I: What is a group? What are we doing here? What are the goals of the group? What do I have to give up–personally–to belong to this group? (How much intimacy and affection is required?) Invasion of privacy vs. "group giving". Setting up proper codes of social behavior.	Course grading system. Discussion and assessment of member roles.
Dominant Roles (central persons)	General distribution of participation for first time. Overpersonals have salience.	Most assertive counterpersonal and overpersonal individuals, with counterpersonals especially salient.	Assertive independents.
Group Structure	Solidarity, fusion. High degree of camaraderie and suggestibility. Le Bon's description of "group mind" would apply here.	Restructuring of membership into two competing predominant subgroups made up of individuals who share similar attitudes concerning degree of intimacy required in social interaction, i.e. the counterpersonal and overpersonal groups. The personal individuals remain uncommitted but act according to needs of situation.	Diminishing of ties based on personal orientation. Group structure now presumably appropriate to needs of situation based on predominantly substantive rather than emotional orientations. Consensus significantly easier on important issues.
Group Activity	Laughter, joking, humor. Planning out-of-class activities such as parties. The institutionalization of happiness to be accomplished by "fun" activities. High rate of interaction and participation.	Disparagement of group in a variety of ways: high rate of absenteeism, tardiness, balkiness in initiating total group interaction, frequent statements concerning worthlessness of group, denial of importance of group. Occasional member asking for individual help finally rejected by the group.	Communication to others of self-system of interpersonal relations; i.e. making conscious to self, and others aware of, conceptual system one uses to predict consequences of personal behavior. Acceptance of group on reality terms.
Group movement facilitated by:	Independence and achievement attained by trainer-rejection and its concomitant, deriving consensually some effective means for authority and control. (Subphase 3 rebellion bridges gap between Suphases 2 and 4.)	Disenchantment of group as a result of *fantasied expectations of group life*. The perceived threat to self-esteem that further group involvement signifies creates schism of group according to amount of affection and intimacy desired. The counterpersonal and overpersonal assertive individuals alleviate source of anxiety by disparaging or abnegating further group involvement. Subgroups form to ward off anxiety.	The external realities, group termination and the prescribed need for a course grading system, comprise the barometric event. Led by the personal individuals, the group tests reality and reduces autistic convictions concerning group involvement.
Main Defences	Denial, isolation, intellectualization, and alienation.		

[1] cf. Hare, 1973, Pp. 276 - 279.

APPENDIX L

Schutz' Three-Dimensional Theory Of Interpersonal Behaviour[1]

Schutz' view is that everyone has three interpersonal needs: inclusion, control and affection. In the formation of a group the following sequence of events occur. First of all, from the beginning of the group until three intervals before it terminates, the predominant interaction area begins with inclusion followed by control and affection. This is a cycle which he feels may recur. Secondly, "the last three intervals prior to a group's anticipated termination follow the opposite sequence in that the predominant area of interpersonal behaviour is first affection, then control, and finally inclusion"(Hare, 1973, p.282). Also, Schutz feels that within the above phases, members tend to concentrate on their relations to the leader before turning to their relations with each other.

Phase I - Inclusion

Inclusion behaviour concerns feelings about being worthwhile and important. A person who is "undersocial" therefore has too little inclusion and tends to be withdrawn and introverted while unconsciously wanting others to notice him. An "oversocial" person tends to be extroverted. He shares the introvert's unconscious desire to be noticed but exhibits overt behaviour which is the opposite of the undersocial's. Therefore, in a group he tends to be an intense, exhibitionistic participant. A "social" person whose inclusion problems were successfully solved in childhood is comfortable with or without others and can therefore be a high or low participant.

The inclusion phase is the first to occur when the group forms. Group members are anxious to find out whether they will fit into the group as individuals or whether they are going to be left behind or ignored. Because of this anxiety members often "tend to exhibit individual-centred behaviour, such as overtalking, extreme withdrawal, exhibitionism " etc. (Schutz, 1973, p.51). At the same time, group members are implicitly deciding how much they will give to the group in terms of contact, interaction and communication. After resolving the degree of commitment exhibited by the leader, concern tends to shift to the degree of commitment manifested by fellow group members.

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1 Adapted from Hare, 1973 and Schutz, 1973.

Therefore, members carefully observe the degree of participation of other members including "silent and withdrawn members" and those who have "apparently come to watch" (Schutz, 1973, p.53).

Phase II - Control

Schutz' control phase corresponds roughly to the dependence phase of Bennis' and Shepard's theory. Behaviour which deals with control is concerned with the decision-making process between people in the areas of power, influence, and authority. The control phase becomes prominent once the inclusion phase has been worked through. Leadership struggles, competition and discussion of procedure, decision-making and responsibility characterize group behaviour. Members try to establish themselves in the group with the optimum responsibility, power and dependency that makes them feel comfortable. The struggle for power is first directed against the leader who is viewed in an ambivalent manner. This control issue then shifts to other group members where a sibling-like struggle takes place for the approval of the leader followed by individual bids by various group members to take over the informal leadership of the group.

Phase III - Affection

This phase corresponds roughly to the inter-dependence phase of Bennis and Shepard (Hare, 1973). Affection involves close, personal emotional feelings between two people and, unlike inclusion and control, must be a dyadic relationship. Group members who are "underpersonal" express and receive little affection, avoid close ties with others, and consciously try to maintain emotional distance. Unconsciously they do seek a satisfactory affectional relation. They may even go to the extreme of being antagonistic in order to avoid emotional closeness or involvement or use the subtle technique of being superficially friendly to everyone.

Group members who are "overpersonal" try to become very close to others and in return expect others to seek to be close to them. They overtly attempt to gain approval, to be extremely personal, ingratiating, intimate, and confiding" (Schutz, 1973, p.45). Personal group members who have successfully resolved affection relations in childhood are comfortable both in situations requiring close emotional interaction as well as those requiring emotional distance. These

members are capable of giving genuine affection and also of tolerating the dislike of others.

The affection phase is characterized by "expressions of positive feelings, direct personal hostility, jealousies, pairing off, and in general, heightened emotional feeling between pairs of people" (Schutz, 1973, p.54). The primary anxieties of group members are now concerned with not being liked, not being close enough to people, and overintimacy. The first affection issues revolve around the leader and whether he is liked or not. "The issues of jealous, unrequited love, exchange of affection, and sexual attraction now dominate" (Schutz, 1973, p.55). Although all the members of the group do not necessarily like each other, they have deeper feelings towards each other than at the outset of the group and can therefore communicate better.

Schutz' theory of group development emphasizes the fact that although certain interactional areas are more prominent at certain points in the life of the group, all three areas are always present to a greater or lesser degree. Also, there are some group members who do not always go along with the central group issue but find one dimension so potent for them that it transcends whatever the current issue may be. Schutz explains the developmental phenomena in his group development model by comparing it to a tyre that is being changed. As the mechanic changes the wheel "each bolt is tightened just enough to keep the wheel in place. Then the bolts are tightened further, usually in the same sequence, until the wheel is firmly in place. Finally, each bolt is gone over separately to secure it fast" (Schutz, 1973, pp. 55-56). He compares the need areas to these bolts which must be worked on until they have been sufficiently resolved to allow the group to concentrate on the work at hand. These need areas are then returned to and worked on later until they are more satisfactorily resolved.

APPENDIX M

Tuckman's Stages in Group Development[1]

Stage 1 Forming.

- *Group structure:* Testing and dependence. An attempt by group members to discover what behaviors are acceptable in the group, based on the reactions of the therapist. Members look to the therapist for guidance and support in this new and unstructured situation. (With anti-social individuals, there may be a prestage of resistance, silence, and hostility.)
- *Task activity:* Orientation and testing. At this stage, the group members make indirect attempts to discover the nature and boundaries of the task. These attempts are evident in the following kinds of activities: (a) discussion of irrelevant and partially relevant issues, (b) discussion of peripheral problems, (c) discussion of immediate behavior problems, (d) discussion of symptoms, (e) griping about the institutional environment, and (f) intellectualization. Also, group members make more direct attempts at orientation toward the task as illustrated in: (a) search for the meaning of therapy, (b) attempts to define the situation, (c) attempts to establish a proper therapeutic relationship with the therapist through the development of rapport and confidence, (d) mutual exchange of information, and (e) suspicion of and fearlessness toward the new situation which must be overcome.

Stage 2 Storming.

- *Group structure:* Intragroup conflict. Group members now become hostile toward one another and toward the therapist as a means of expressing their individuality and resisting the formation of group structure.
- *Task activity:* Emotional response to task demands. Emotionality is expressed by the group members as a form of resisting the techniques of therapy or of sensitivity training groups which require that they "expose" themselves. They also challenge the validity and usefulness of the training.

Stage 3 Norming.

- *Group structure:* Development of group cohesion. Group members accept the group and accept the idiosyncracies of fellow members. Harmony is of the maximum importance, and task conflicts are avoided to ensure harmony.
- *Task activity:* Discussing oneself and other group members. The self and other personal characteristics are discussed. Information is acted on in such a way that alternative interpretations of the information can be made. The openness of members to each other is characteristic.

Stage 4 Performing.

- *Group structure:* Functional role-relatedness. The group members work together on the task with a minimum of emotional interaction. This is made possible by the fact that the group as a social entity has developed to the point where it can support rather than hinder the task processes through the use of function-oriented roles.
- *Task activity:* Emergence of insight. Group members show insight into their own problems, an understanding of their own abnormal behavior, and, in many cases, modifications of their behavior in desired directions.

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[1] cf. Hare, 1973, Pp. 284 - 285.