THE EFFECTS OF SELF-MANAGEMENT STRATEGIES AS INITIAL TRAINING AND AS SECONDARY TRAINING FOR AFFECTIVE SELF-DISCLOSURE OF UNDERGRADUATE MALES

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This is to certify that the

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ABSTRACT

THE EFFECTS OF SELF-MANAGEMENT STRATEGIES AS INITIAL TRAINING AND AS SECONDARY TRAINING FOR AFFECTIVE SELF-DISCLOSURE OF UNDERGRADUATE MALES

By

Nancy Lee Voight

Self-management strategies were used in the present study as primary or secondary treatment procedures for training 36 undergraduate male volunteers in self-disclosure of affect. Three training conditions were used--goal-directed practice, self-reinforcement, and no-treatment control. The two treatment groups utilized programmed texts which defined the target behavior and outlined a three-week personal change project for which a person would develop a shaping plan, establish weekly goals, record daily progress on cards, and contract for change. The self-reinforcement group administered reinforcers to themselves when they met goals. Subjects were tested after three weeks on an audio response test and three pencil-and-paper measures. All subjects were previously exposed to the measures in a comparison study. The level of treatment in the comparison study was used as a blocking variable for the present study.

Two-way multivariate analysis of variance techniques were used for hypothesis testing. The five dependent variables were amount of affect, quality of affect, anxiety, skill, and attitude. Amount and quality scores were derived from ratings made by two trained raters from audio tape recordings of simulated interactions with best friends. The criteria for quality had five subscales: reference, time orientation, appropriateness of affect, reason given, and specificity of reason. Hoyt inter-rater reliability was .99 for amount and .99 for quality. Anxiety was self-reported as the subjects responded to the audio stimulus situation. Skill was measured by a multiple-choice discrimination test with a Hoyt reliability of .87. Attitude was measured by responses on a one to seven Likert-type scale which was designed to assess reactions and opinions to disclosure of affect. Hoyt reliability was .84 for this test. All measures and criteria were developed especially for this study and the companion research. Three hypotheses were tested at alpha level .05. Only two were supported. As predicted, no significant interaction was found between the blocking variable, prior treatment, and the present treatments. Also as predicted, the effects of self-reinforcement and goal-directed practice were equivalent. However, the third hypothesis was not supported. This hypothesis predicted significant differences between no-treatment control and self-reinforcement or goal-directed practice. Although no differences were

significant, observation of group means showed that the goal-directed practice group scored best on all measures, and self-reinforcement was second on all but anxiety.

Supplemental tests were run to explore other dimensions not included in formal hypothesis testing. Multivariate analysis of variance and alpha level of .05 were used when significance testing was done. Two analyses tested the three hypotheses using reduced or transformed variables. The three most highly correlated variables--amount, quality and skill--were used in one analysis. In the other, a mean quality score was used in place of quality and amount. These two analyses yielded results consistent with the results of hypothesis testing. In addition, repeated measures multivariate analysis of variance was used to assess differences among groups on eight subscale dimensions of amount, quality, skill, and anxiety. These dimensions covered all combinations of initiator-respondent, positive-negative affect, and male-female partner. A significant multivariate and univariate interaction was found for quality on the feeling dimension. For amount, univariate significance was found for the same dimension.

On another supplemental test, the independent variable was the subject's total training experience including prior treatment. In this one-way multivariate test, the <u>both treatments</u> group was significantly better than other groups. No difference was found between <u>prior</u>

treatment and self-management or between these two and the neither treatment group. The latter finding was contrary to prediction.

Finally, open-ended responses to a debriefing questionnaire were categorized. Subjects reported gains in awareness and improvement of skills. However, only 80% reported that they always did their change project, and only 54% of self-reinforcement and 29% of the goal-directed group met their goals most or all of the time.

Results of the study suggested need for revision and further study. The combination treatment seemed promising, but the self-management packages alone needed strengthening. Also subject attrition caused a reduced sample size, and increased size would have produced a more powerful design. In retrospect, it also seemed that amount and quality were the best measures and that the other measures could have been omitted. In conclusion, it appeared that self-management could be useful in combination with other treatments and that either goal setting or self-reinforcement would be useful. However, stronger treatment and methodology should be used to determine fully if self-management itself is valuable in training for self-disclosure of affect.

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CHAPTER I

INTRODUCTION AND REVIEW OF THE LITERATURE

Introduction

Males in this culture have been socialized in ways which inhibit their expression of emotion and emotional reactions (Lynn, 1964). This concern can be conceptualized as a need to increase verbalized affect and develop clearer affect statements.

According to social learning theory and recent research, some of the ways to institute changes in verbal behavior include behavioral modeling, cognitive modeling with self-statements, practice in goal-directed behavior, and positive reinforcement. The latter two, practice and reinforcement could be used as primary training methods or as secondary training or follow-up procedures for short-term modeling or cognitive treatments.

Purpose

The overall purpose of this study was to assess the results of using social learning change strategies and

behavioral measurement techniques in self-disclosure research. The study investigated the effects of the self-management strategies of goal-directed practice and self-reinforcement both as treatments for changing verbal affective self-disclosure and as secondary treatments given a social learning treatment or a cognitive treatment. Differences in amount and quality of verbalized affective self-disclosure were primarily measured by behavioral tests rather than by traditional pencil-and-paper tests.

Importance

Interest has recently been expressed in the application of behavioral change strategies to humanistic goals (Thoresen, 1974; Thoresen & Mahoney, 1974). Self-management strategies have been suggested as methods well suited for this purpose; however, no reported study has used self-management for altering or maintaining affective self-disclosure statements. In Maslow's terms (1954), self-disclosure may be a component in satisfying one's need for understanding. It also aids in communication of risk-statements, a component in transcendent behavior (Jourard, 1968). However, much of the prior self-disclosure research has yielded ambiguous or contradictory results. In a recent review, Cozby (1973) cites inadequate pencil-and-paper measures and poor situational control as possible

sources of research confusion. Thoresen (1974), speaking of humanistic goals in general, noted that they are often loosely defined and subject to ambiguity in interpretation. The present study introduced multiple variables (the major ones being behaviorally tested) as well as clear operational definition, and control of situational variables. The study was focused on the affective component of self-disclosure.

In addition to the desirability of combining humanistic and behavioral concepts, it is valuable to investigate methods of self-management for both treatment and follow-up. Treatment effects were important as the first application of self-management to this area. As a secondary treatment, self-management could help to alleviate a continued problem of short-term treatments, the loss of effect during follow-up.

Finally, a researchable self-management issue was addressed. Self-reinforcement has been assumed to be the critical element in the chain of self-monitoring, self-evaluation, and self-reinforcement. However, the possibility remained that goal-directed practice, which leads to a positive self-evaluation, could be as effective as formal self-reinforcement contingencies applied to goal-directed practice (Kanfer, 1970).

Generalizability

The findings of this study might have impact beyond the present situation. Generalization would be limited to college students. However, as much research deals with university students, findings from this study could be generalized to other single male college students. Within this population, replications would be possible to explore:

1. use of self-management as a follow-up procedure for other short-term treatments
2. use of self-management as a treatment for other affective concerns
3. use of the complete self-management package and the social learning and cognitive structuring packages (Highlen, 1975) as adjuncts to other treatments designed to develop general social skills or desirable personal growth group or therapy behaviors

Summary

The present study utilized some new treatment and measurement methods with self-disclosure research and controlled for several variables which have had confounding effects in prior studies. Also, the efficacy of two self-management packages was tested in both primary and secondary treatment situations. As these were new areas of inquiry regarding affective self-disclosure, results may be of interest to future researchers.

Review of Related Literature

Self-Disclosure

Self-disclosure, as defined by Pearce and Sharp (1973), encompasses verbal interactions in which one person voluntarily tells another any information about himself or herself which the other is unlikely to know or discover from other sources. These communications can include both past and present content and can consist of sharing events, values, or feelings (Benner, 1968). Several psychological theorists have considered self-disclosure important for full personality functioning (Fromm, 1947, 1956; Goffman, 1959; Horney, 1936, 1950; Jourard, 1959, 1964; Rogers, 1957). It would appear that development of self-disclosing capacities, then, would be an element in one's personal growth.

In the past seventeen years, researchers have studied self-disclosure in order to understand its components and the characteristics of the self-disclosing person. Many of these studies have yielded ambiguous results which are difficult to interpret because of four consistent problems in self-disclosure studies:

1. content ambiguity--Self-disclosure can be cognitive, attitudinal, or affective. It can also be past- or present-oriented. Many studies deal with these three elements as a set, and this may obscure certain differences.

2. situational context--Self-disclosure appears to be very situation-bound, and it is difficult to generalize from lab or test situations to actual behavior.

3. measurement validity--The majority of early studies used pencil-and-paper report measures such as the Jourard Self-Disclosure Questionnaire. There is, however, no strong evidence of the validity of this measure (Benner, 1968; Hurley and Hurley, 1969).

4. statistical analysis--It is not uncommon for correlational studies to be done relating certain variables to self-disclosure. Aside from the measurement difficulty cited above, sometimes very small and possibly meaningless differences have been reported as significant statistically and these are then cited as "proof" of a significant relationship.

Contradictory findings have resulted. As this inconsistency is consistent, it is not the intention of this review to critique methodologically all prior self-disclosure research. Rather, the more stable prior findings will be discussed briefly to form a tentative description of both the components of self-disclosure and the characteristics of a self-disclosing person. Concepts and findings will be related to a social learning framework.

Theoretical input on self-disclosure. Writings of modern psychologists have covered two domains which are related to self-disclosure. One domain deals with the

negative effects of alienation and estrangement from others. These conditions are hypothesized to be factors in modern neuroses (Fromm, 1956; Horney, 1936). The other domain represents the positive aspects of transparency and sharing which were once equated with mental health (Jourard, 1959). However, research studies failed to demonstrate positive correlations between self-disclosure and mental health Cozby, 1973). Jourard (1964) then hypothesized that a curvilinear relationship exists between self-disclosure and mental health, and that some high disclosers were indiscriminate and made others anxious with their instant intimacy. These high self-disclosers may well be having difficulty with situation discrimination and are sharing with others irregardless of the nature of their personal relationship. In learning theory terms, the response has been generalized to inappropriate situations, apparently because the person misinterpreted antecedent events.

In relation to alienation and estrangement neuroses, the playing of roles (Goffman, 1959) and games (Berne, 1964) may be a factor. People conceal their most intimate feelings and thoughts, and this may be a factor in their recognition of their own separateness from others. Polansky and Brown (1969) indeed conceive of the desire for self-concealment as a defense against separation anxiety. They hypothesize that a low-discloser wants to be exactly the same as the other person, and that low-disclosers are

reminded of their separateness when they do disclose. The response described here appears to be an anticipation of negative consequences which elicits an avoidance response. It may be that this avoidance response is a component of neuroses.

In relation to positive mental health, self-disclosure has been linked to the self-actualization process. In order to be transcendent and commit oneself to experiencing, one should be open, alert, and transparent (Jourard, 1964). Transparency implies a spontaneous fusion of feeling and action as well as a willingness to commit oneself to others through self-disclosure. In addition, the self-actualized person glories in his/her separateness or uniqueness because of self-acceptance. In learning terms, this relates to self-observation, self-evaluation, and self-reinforcement.

Theoretical writings, then, focus on two dimensions--avoiding neuroses and attaining self-actualization. Both of these dimensions can be related to self-disclosure. Although the amount, intimacy level, and situational components of "normal" self-disclosure are not discussed, it seems that amount alone is not related linearly to positive mental health. Individuals who would increase their self-disclosure, then, could follow the following learning framework:

1. development of the response
2. attention to situational cues

3. extinction of irrational anxiety
4. self-observation
5. self-evaluation
6. self-reinforcement

It is this framework which has been used in the present study as well as in the companion research by Highlen (1975).

The components of self-disclosure. Self-disclosure has been related to situational and relationship components such as reciprocity, liking, intimacy, social approval, time, and personality of those who are interacting (Cozby, 1973). Reciprocity and social approval seem to be the best supported of these components. Both are relationship variables in that they deal with concepts which must be examined in the light of a relationship. They are also situation-bound in that relationships vary in intimacy and power. What is appropriate for an individual in one relationship may not be appropriate in another.

Reciprocity has been examined by Jourard and associates (1959b, 1960, 1963), as well as Bundza and Simonson (1973), Ehrlich and Graever (1971), Levinter and Senn (1967), Levin and Gergin (1969), Tognoli (1969), and Sayicki (1972). Despite methodological differences, most of these report that one's self-disclosure in a dyad is to some degree a function of the other's self-disclosure. It also appears that high self-disclosing therapists and

others can elicit increased self-disclosure from low-disclosers. Trust, reinforcement, and modeling have all been hypothesized to account for the reciprocity effect; however, none have been adequately researched at this time.

Social approval as a component of self-disclosure can be easily understood from a learning context. Behaviors which are socially reinforced, especially by significant others, are likely to be repeated. Thibaut and Kelley (1959) hypothesize that each individual has a repertoire of alternative responses and that he/she will choose among alternatives based on the expectation of rewards or punishment from others. Argyle and Kendon (1967) see this not so much as a striving for reward but as a desire for equilibrium so an individual can balance anxiety and rewards in making a self-disclosing statement.

Support for social approval as a component of self-disclosure came from experimental studies--the majority of which were limited to self-referenced affect, which made them especially pertinent for the present study. The major variable has been a difference in reinforcement schedule or reinforcing response. Taylor et al. (1969), in a study not limited to affect, found that continuous positive reinforcement and delayed continuous positive reinforcement were related significantly to longer duration and depth of self-disclosure than either continuous negative or later negative conditions. In studies dealing with affect in the counseling interview, Crowley (1970), Barnabei (1972), and

Auerswald (1972) all utilized high-level simulation situations and behavioral measures. Crowley conditioned client positive and negative self-referenced affect using counselor restatement as a social reinforcer. Crowley found that positive affect was conditioned while negative affect was not. Barnabei (1972) used non-contigent counselor reflections, probes, confrontation, and free-style responding and noted the effect on self-referenced affect. As could be expected, non-contingent reinforcement did not produce differences in affect emission. Auerswald (1972) used restatement and interpretations as reinforcers for production of affect and found that interpretation served as a more powerful reinforcer for her population. These studies, then, indicate that:

1. social approval can reinforce self-disclosure and increase it, and,
2. in therapy, counselor statements can be contingent reinforcers to modify self-disclosure within the interview.

In regard to research dealing with components of self-disclosure, then, several variables may be important. At present, both reciprocity and social approval appear to be significant elements. Within social approval, specific affect research has demonstrated that reinforcement from others can influence affective responses.

Characteristics of the self-disclosing person. Cozby (1973) in a review of self-disclosure literature has cited studies relating to family patterns, sex, race, cultural factors, mental health, and personality characteristics in describing the disclosing person. Although no characteristic has been clearly defined, the self-discloser is more likely to be female and middle class in this culture. The general tendency to do research on college students may bias this description, however.

Cozby contended that family patterns appear to be more influential in determining the object of one's self-disclosure than the extent of self-disclosure. Social class rather than race may be influential in determining self-disclosure (Jaffee & Polansky, 1962; Tulkin, 1970). Cozby believed that this may be a function of social class differences in reinforcement of verbalizations during a child's development. A modeling effect may also be operating. Findings regarding mental health have been discussed previously. Currently, research on personality correlates has proved inconclusive.

The one characteristic which is most consistently found is that females tend to disclose more than males (Pederson & Breglio, 1968). Although a number of studies have reported no sex differences (Certner, 1973; Mulcahy, 1973; Plog, 1965; Vondracek & Marshall, 1971) no study has reported male disclosure greater than female. Considering

the present state of self-disclosure research, Cozby (1973) concluded that this may actually support a sex difference. If so, this would be consistent with sociological theory. Balswick and Peek (1973), for instance, stated that the learning of male sex role results in a male's thinking that he should not be emotionally expressive. Lynn (1964) noted that boys are taught their sex role by punishment for girl-like behaviors in the absence of a positive male model and without clear direction. This results in inconsistent socialization for males, hostility towards females, and anxiety regarding sex-typed behavior. Studies which have found females to be more self-disclosing have frequently included intimacy level as a dependent variable in addition to amount (Davis, 1973; Green, 1973; Jourard & Lasakow, 1958; Pederson & Higbee, 1969; and Sousa-Poza et al., 1973). Kopfstein and Kopfstein (1973) reported no sex differences in intimacy level, but their study used intimacy questions asked of another, which may represent a somewhat separate construct. The use of a social learning treatment and self-disclosing feeling statements as the dependent variable make the Green study (1973) of special interest.

The information on characteristics of self-disclosers is contradictory and vague. Although sex may be a variable (and it is the most consistently supported one), contradictory evidence can be cited regarding it, also.

In conclusion, self-disclosure cannot be fully described from the literature. Theorists believe self-disclosure can work against alienation and, thus, neurosis. Other theorists believe it is a component in self-actualization. Apparently self-disclosure is reciprocal and sensitive to rewards-costs expectancies in a given relationship. It is difficult to support any particular personal characteristics of self-disclosers, although sex and sex-role learning may be variables. Many self-disclosure studies have research flaws stemming from content ambiguity, situational context, measurement validity, and statistical analysis.

Input from this review of self-disclosure literature has been incorporated into the present research in the following ways:

1. situations and relationship factors will be controlled by limiting to best male and female friend
2. sex differences will be controlled by limiting the study to males
3. behavioral measures and inferential statistics will be used
4. only the affective component will be measured

Self-Management Strategies

Behavioral humanism. Thoresen (1974) has noted that self-management techniques can be used to reach

humanistic ends by behavioral means. Humanistic tenets include a focus on awareness of self and feelings, communication, transcendence and growth, freedom, individual self-determination, and responsibility for one's own behavior (Thoresen, 1974; Thoresen & Mahoney, 1974). In May's terms (1969) one can develop Will by setting goals and engaging in behaviors to reach that goal. Learning theory, as well as self-disclosure research, would indicate that positive reinforcement contingencies increase the probability that behaviors will be increased. The essence of self-management, according to Mahoney (1972), is that an organism makes a response to modify the probability of another response. In other words, the person is his/her own change agent and controls the target behavior.

In terms of the current study, which sought to utilize self-management strategies to modify or maintain affective self-disclosure responses, aspects of behavioral humanism which are relevant are:

1. a focus on present, feeling state responses
2. individual standards for performance and self-evaluation
3. contracting for change and assuming responsibility for change
4. self-reinforcement
5. personal growth through self-disclosure

The specific treatment packages used in this study are outlined in Chapter II. Experimental clinical studies and theoretical formulations which relate to the content of the packages will be reviewed here.

Goal-directed practice. As noted above, May (1969) cites goal setting and goal-directed behavior as characteristic of Will. Stieper and Wiener (1965) have identified goal setting as an important factor in traditional counseling processes. In two theoretical models, self-management is described as a three-component process: (a) self-monitoring or self-awareness, (b) self-evaluation or standard reaching, and (c) self-reinforcement (Bandura, 1971; Kanfer, 1971). It is the self-evaluation component which is equivalent to the goal-directed treatment. In order to self-evaluate, a person must know precisely what behaviors to evaluate, must commit him/herself in light of that personal standard. The importance of standard setting and realistic self-evaluation has been stressed by Bandura (1971). The establishment of a poor self-concept (Rogers, 1957) may well be related to expectations of others which are too high or too vague. This leads to internalized high standards which make positive self-evaluation impossible. By changing this process in terms of a person's standards of progress in practicing self-disclosing, the goal-directed practice provides experiences in positive self-evaluation.

Research in goal-directed practice has been scanty, although one component, the self-monitoring process, has been acknowledged both as a self-observational or awareness-recording device and as a possible change technique itself (Goldfried & Merbaum, 1972; Kazdin, 1974; Mahoney & Thoresen, 1974; Tharp & Wetzel, 1968; Thoresen & Mahoney, 1974). Contracting for increasing self-disclosure is reported to be successful in group counseling by Ribner (1974). Thoresen and Mahoney (1974) note that comparing performance to a personal standard constitutes self-evaluation. Kanfer and Phillips (1970) note that perhaps standards are traditionally vague, and a person may easily slip into negative evaluations or external evaluations in the absence of a clear criteria. Daily goal-setting can help facilitate positive self-evaluation by providing a clear-cut standard. If an individual develops objective internal standards, then, these standards should be resistant to change by external forces (Festinger, 1954). Therefore, goal-directed practice may lead to internalized positive self-evaluation in regard to affective self-disclosure.

Three reported research studies deal directly with self-evaluation or goal setting. When compared to self-monitoring in the management of obesity, goal-setting did not significantly improve performance (Mahoney, 1972). Social reinforcement appeared to be superior to a combination

of self-observation and goal-setting in a group study by Kolb, et al. (1968). Stuhr (1972) used a training procedure for eliciting personal feeling questions and instituted training and practice in self-management as follow-up. Results indicated that performance only slightly decreased after two weeks, but the exact role of self-evaluation processes was unclear. Also, other follow-up treatments were not compared for relative efficacy. Despite disappointing results, it can hardly be said that the four studies constitute a condemnation of self-evaluation treatments. Additional research is clearly called for.

Goal-directed practice has been traditionally considered important for change. Standard setting and self-evaluation are connected in goal-directed practice because a goal constitutes a clear standard against which to measure performance. If the goal were met, a positive self-evaluation could occur. Research results on goal-setting as a treatment technique have been negative. As these studies are few in number and do not deal with goal-setting as a follow-up, further research seems justified. In addition, Kanfer (1970) notes that at least partial independence exists between self-evaluation and self-reinforcement, one of the treatments to which it will be compared.

Self-reinforcement. In the context of changing behavior in vivo, one has to realize that external

reinforcement may not automatically occur. In fact, because of the homeostatic mechanisms in interpersonal systems, initial responses to change may be negative, and the person may have difficulty implementing the change. In Kanfer and Karoly's terms (1972), the individual is in a situation in which it is possible to engage in a high-probability behavior (non-self-disclosure), but wishes to make a low-probability response (an affective self-disclosure statement). Self-reinforcement may provide the person with a reward expectancy sufficient to elicit the low-probability response.

Self-reinforcement is closely related to personal growth. In order to be responsible for oneself, one must be sensitive to feedback from others, but must rely on oneself for self-reinforcement in conflict situations. For this to occur, a person may need to value self-reinforcement over external reinforcement (Dollard & Miller, 1950). Self-reinforcement can also provide a means by which one can modify or learn divergent behaviors which are not commonly reinforced socially, but have value in expressing uniqueness.

Two aspects of self-reinforcement will be considered here--self-reinforcement as treatment and as follow-up techniques. Examples of behaviors studied will also be reported.

In a study by Rehm and Marston (1968), self-reinforcement was compared to a control group and to a

non-specific therapy group. The self-reinforcement group demonstrated significantly greater reduction in anxiety. Several well-designed studies have compared self-reinforcement with external reinforcement in a variety of settings. It would appear that the two reinforcement processes are equivalent. Bandura (1969) believes that self-reinforcement may be more powerful than external means because it eases transfer of training and hence maintenance and generalization. Self-reinforcement has shown slight superiority over external techniques for controlling disruptive children (Bolstad & Johnson, 1972). Equivalence has been demonstrated in dealing with college study habits (Jackson & Van Zoost, 1972), academic performance (Glynn, 1970), motor tasks (Hall, 1973), verbal discrimination performance (Unmacht & Obitz, 1974), and memory (Bellack & Tillman, 1974). Thus, self-reinforcement appears to be supported as a treatment strategy. It would be preferred over external reinforcement in cases involving humanistic goals or the desirability of establishing maintenance effects.

As a secondary technique, self-reinforcement has not been fully studied. Bandura (1969) and Kanfer (1970) write that self-reinforcement should facilitate both persistence of behavior change and generalization. In fact, it seems to be a natural way to demonstrate changes in vivo which have been established in counseling situations. Too often such a transition is not made and treatment effects quickly

fade. Two studies which deal with self-reinforcement as a follow-up technique have been reported. In 1962, Marston and Kanfer trained subjects in a nonsense syllable discrimination task to a 60 percent accuracy criterion. On brief follow-up trials, an external reinforcement group improved performance, a self-reinforcement group maintained performance levels, and an extinction group declined in accuracy. In a non-comparative follow-up, Kaufman and O'Leary (1972) used self rewards as an auxiliary device to encourage maintenance effects. Unfortunately, no other treatment was run, so it is difficult to use results of this study.

Summary

In reviewing research and theoretical writings on self-disclosure and self-management, it appears that both the topic and the technique need further study and clarification. Although self-disclosure seems to be a component in positive mental health and striving for humanistic goals, the role of affective self-disclosure is unclear. Affect, however, seems to be controlled by social learning variables and would be responsive to reinforcement and positive self-evaluation. Therefore, primary and secondary treatments for affective self-disclosure which utilize goal-directed practice as a method for creating positive self-evaluation or self-reinforcement for making appropriate

affect statements could be effective. Their relative efficacy is difficult to predict. Since both treatments utilize a self-management framework, they are consistent with humanistic goals for the self-directed person.

CHAPTER II

EXPERIMENTAL DESIGN AND PROCEDURES

Overview

Experimental procedures were used in this study to assess the effects of goal-directed practice and self-reinforcement strategies on the affective self-disclosure of 36 single undergraduate males. Eighteen of the subjects had previously received training in affective self-disclosure through the training modes of social modeling and cognitive structuring (Highlen, 1975). For these subjects, the self-management strategies were considered to be secondary procedures. The remaining 18 subjects had received attention placebo or no-treatment conditions from Highlen (1975). For these subjects, self-management was considered to be the primary treatment for affective self-disclosure. The self-management strategies were presented in programmed text format, and each subject developed an individualized change program and change contract before the finished training. A no-treatment-control condition (traditional follow-up) was also utilized. All subjects were tested after three weeks' time, and scores were

computed on five dependent measures. All measures were devised especially for this study and the companion study by Highlen (1975). Three measures were pencil-and-paper measures testing attitudes, skill in discrimination, and self-reported anxiety in simulated dyadic interactions. The remaining two measures, amount of affect and quality of affective self-disclosure, involved the recording of the subjects' actual responses made in simulated dyadic interactions with their best male or female friends. Typed transcripts were made from the recorded responses and these transcripts were rated by trained raters.

This chapter will outline the experimental design and procedures used to administer treatment, gather data, and analyze results.

Research Hypotheses

Because of the exploratory nature of this research, it was difficult to develop expectations of results since such expectations involved broad extrapolations from vaguely related studies. However, it was predicted that no interaction effect would be demonstrated between goal-directed practice, self-reinforcement and no-treatment control, and levels of the prior treatment, the blocking variable. In addition it was predicted that the main effects of goal-directed practice and self-reinforcement would be equivalent and either would be superior to the no-treatment control condition.

Hypotheses, then, were:

1. No interaction effect will be demonstrated between levels of prior treatment and levels of present treatment.

2. The main effects of goal-directed practice and self-reinforcement will be equivalent.

3. The main effect of no-treatment control will be less than the main effects of either goal-directed practice or self-reinforcement.

Definition of Terms

The following terms were used consistently throughout this study. To facilitate understanding, they were defined as follows:

1. affective self-disclosure--voluntary verbal statement made as an initiator or respondent in a dyadic interaction which expresses the speaker's emotions in feeling terms, is present-oriented, and self-referenced (using the pronoun I).

2. amount of affect--the number of responses containing at least one verb, adverb, or adjective affect word which expresses emotion in the context of the response.

3. quality of affect--the quality of a statement previously classified as affect under the definition for amount of affect. Quality is determined by ratings on the following five categories: reference, time orientation, appropriateness of affect, reason, and specificity of reason (see Appendix H).

4. concomitant anxiety--anxiety level self-reported on a 1-7 scale as a person engages in affective self-disclosure in simulated dyadic interactions.

5. self-disclosure skills--the ability to discriminate appropriate affective self-disclosure as measured by responses to a multiple choice paper-and-pencil test.

6. attitudes towards self-disclosure--evaluative responses regarding affective self-disclosure as measured by a pencil-and-paper instrument.

7. prior treatment--any one of the four treatment conditions and tests which are already completed. These treatments defined by Highlen (1975) are:

   a. social modeling package--a one-hour video tape presentation with instruction on affect self-disclosure and modeling examples of appropriate and inappropriate interactions with best friends
   b. cognitive structuring package--a one-hour video tape presentation identical to the social modeling package except for the addition of covert rehearsal
   c. attention placebo--a one-hour audio relaxation tape
   d. no-treatment control--other than during testing, no contact with the subjects

8. present treatment--any one of these treatment packages in this study used as primary or secondary training experiences.

a. self-reinforcement

b. goal-directed practice

c. no-treatment control

9. self-reinforcement--a self-management package including operationalized definition, description of procedure, goal setting, principles of shaping, inventorying of reinforcers, choice of reinforcers, principles of self-reinforcement, a model of practice, self-managed goal-directed practice with monitoring, and self-reinforcement.

10. goal-directed practice--a self-management treatment package including operationalized definition, description of procedure, goal setting, principles of shaping, a model of practice, self-managed goal-directed practice with monitoring.

11. no-treatment control--no contact with the subjects except testing.

12. self-management--any response made by an organism to modify the probability of another response (Cautela, 1969).

13. self-control--the process through which an individual becomes the principal agent in guiding, directing, and regulating those features of his own behavior that might eventually lead to desired positive consequences (Goldfried & Merbaum, 1972).

Research Design Over Time

Subjects volunteered and received treatment on a staggered schedule encompassing nearly three weeks. However, each subject had a three-week waiting period before testing. As subjects volunteered, they were assigned to treatment groups by a previously determined random schedule. This insured both that random assignments to prior treatment occurred and that subjects were randomly assigned to present treatment from prior treatment blocks.

The study took the form of a post-test only experimental design with randomized blocking, as represented in Figure 1.

T1	R X1 O R X2 O R X3 O
T2	R X1 O R X2 O R X3 O
T3	R X1 O R X2 O R X3 O
T4	R X1 O R X2 O R X3 O

Figure 1. Post-test only design over time with randomized blocks.

The X's represent levels of present treatments. T's represent levels of prior treatment; R is random assignment; O is post-testing. The solid line between groups is indicative of random assignment.

This design, as described by Campbell and Stanley (1963), presents no threats to internal validity. A no-treatment control group was included in both prior and present treatment. Generalization is limited to similar groups which have received prior treatment and multi-component testing but no other threats to external validity were inherent in the design.

Design Over Variables

The variable matrix was a two-factor fully crossed design with multiple dependent measures and equal numbers of observations per cell. The independent variables were T = prior treatment, a blocking variable, and X = present treatment. The design is illustrated in Figure 2.

The dependent variables were:

1. amount of affect--measured by ratings of the subject's verbal responses in 16 simulated dyadic interactions with best male and female friends. The criteria for measuring this variable are in Appendix H.

2. quality of affective self-disclosure--measured by ratings of the subjects verbal responses which had previously been rated as affect. The criteria for measuring the five categories of this variable are in Appendix H.

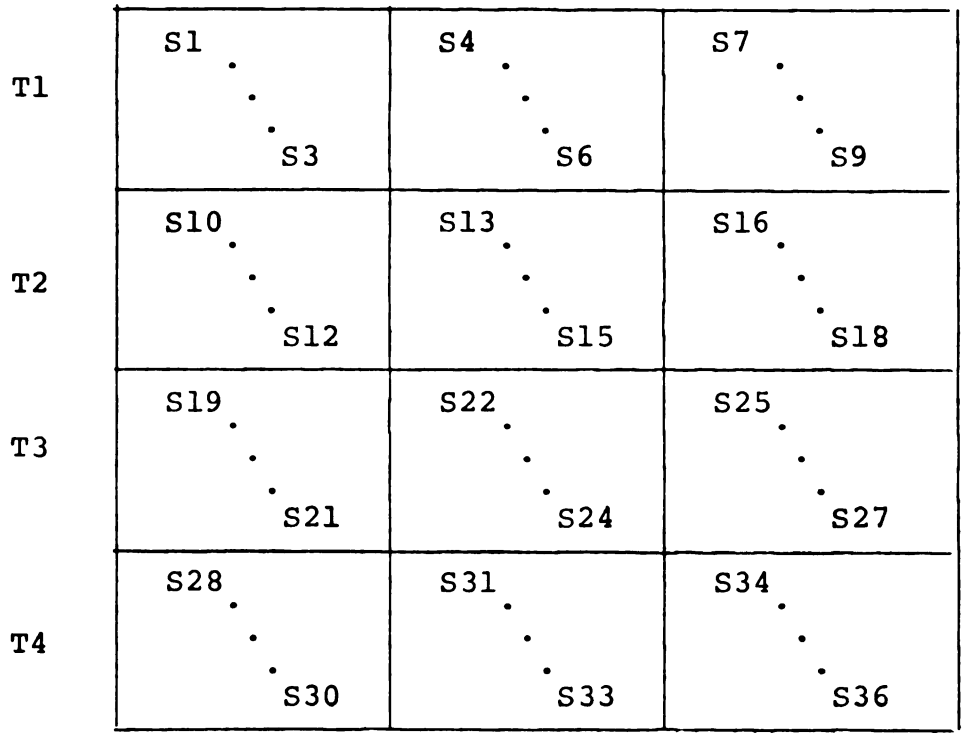

Figure 2. Two-factor fully crossed design across variables. Equal n's per cell.

3. concomitant anxiety--measured by the subject's self report of anxiety on a 1-7 scale. The anxiety was reported for each situation on the verbal test. The anxiety scale is located in Appendix G.

4. affective self-disclosure skills--measured by multiple choice responses to a pencil-and-paper measure designed to test discrimination of appropriate affective self-disclosure in situational contexts. This measure is located in Appendix I.

5. attitudes toward affective self-disclosure--measured by evaluations given on a seven point scale regarding reactions to one's own self-disclosure. This measure is located in Appendix J.

Procedures

Population and Sample

Subjects were drawn from a pool of single undergraduate male volunteers who were enrolled at Michigan State University in the Spring term, 1975. They ranged from freshman to senior in class rank and from 18 to 26 years old. The average age was 21.5 years. Prior to the study advertisements were placed in the Michigan State News, a daily campus newspaper, to solicit volunteers (see Appendix A). In addition, posters were displayed in numberous dormitories (see Appendix B). As volunteers called, they were randomly assigned to a prior treatment group and to a present treatment group. The random assignment procedure was determined prior to assignment of subjects so that early volunteers would not be clustered in any one group.

When newspaper advertisements and dormitory posters failed to produce sufficient numbers of volunteers, subjects were solicited by a paid recruiter who went to various dormitories and contacted people with information about the project. After three weeks, recruiting was halted when the total number of subjects equaled 52.

All subjects in this study had been previously tested by Highlen (1975) using the five dependent measures. In addition, 18 had received short-term videotape training on affective self-disclosure.

Subjects were aware of the time commitment of the study and that it required two sessions separated by a three-week period. They were also fully aware of the topic of the training, and all had expressed an interest in developing their ability to express feelings more effectively.

Prior to their final testing appointments, all subjects were contacted by mail and informed that a choice of three reinforcers (money, a plant, or a bottle of wine) would be available after completing the testing and a debriefing questionnaire. This letter is included in Appendix C. The value of the reinforcers averaged $1.00 each. Because of the attrition of five subjects and the need for equal n's per cell, subjects were randomly discarded from treatment groups and usable n reduced to 36. At the final appointment, subjects who had not received a self-management treatment package were given one. Also each was offered the opportunity to list his summer address and receive a copy of the treatment results.

Treatment

Subjects received one of three treatments. The first was the self-reinforcement group. In Phase 1, a programmed text was presented to each subject individually. This programmed text is in Appendix D. Given variations in reading time, instruction varied in length from 45 to 75 minutes. Instruction was divided into seven units, with

tests for understanding following the first six units. Provision was made for recycling if the subject's understanding did not meet criteria of 90% for each unit. A flowchart diagram of the Phase 1 programmed text is presented in Figure 3.

At the end of Phase 1, subjects showed their change contracts to an experimental assistant, reviewed the content of the programmed test, and discussed their own self-reinforcement projects with the assistant. Assistants were instructed only to give suggestions if a subject misunderstood content or the nature of the change project. No alterations were made in change contracts or self-reinforcement project plans. Subjects then returned their programmed texts and handed in their contracts.

During Phase 2, subjects were instructed to use the packet of cards they prepared while working on the programmed text to record when they meet their goals received reinforcement. In addition they were to record the number of feeling statements made to males and females and whether their experience with expressing affect that day had been good, bad, or neutral. Copies of sample cards are included in Appendix E.

The goal-directed practice group also received a two-phase treatment. In Phase 1, diagrammed in Figure 4, subjects completed a programmed text on goal-directed behavior. Reading time varied from 30 to 60 minutes. As

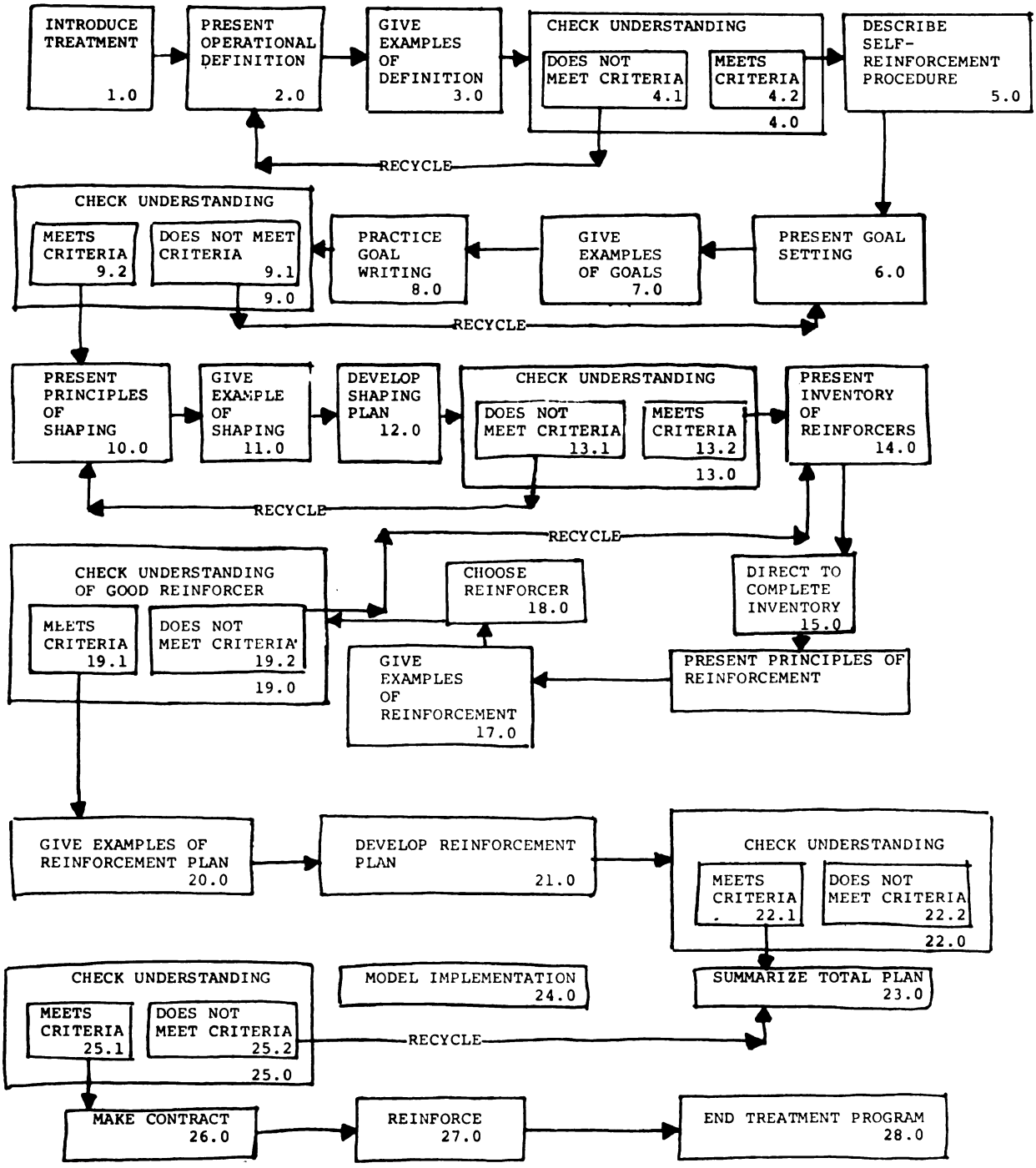

Figure 3. Flow-chart diagram of self-reinforcement treatment program.

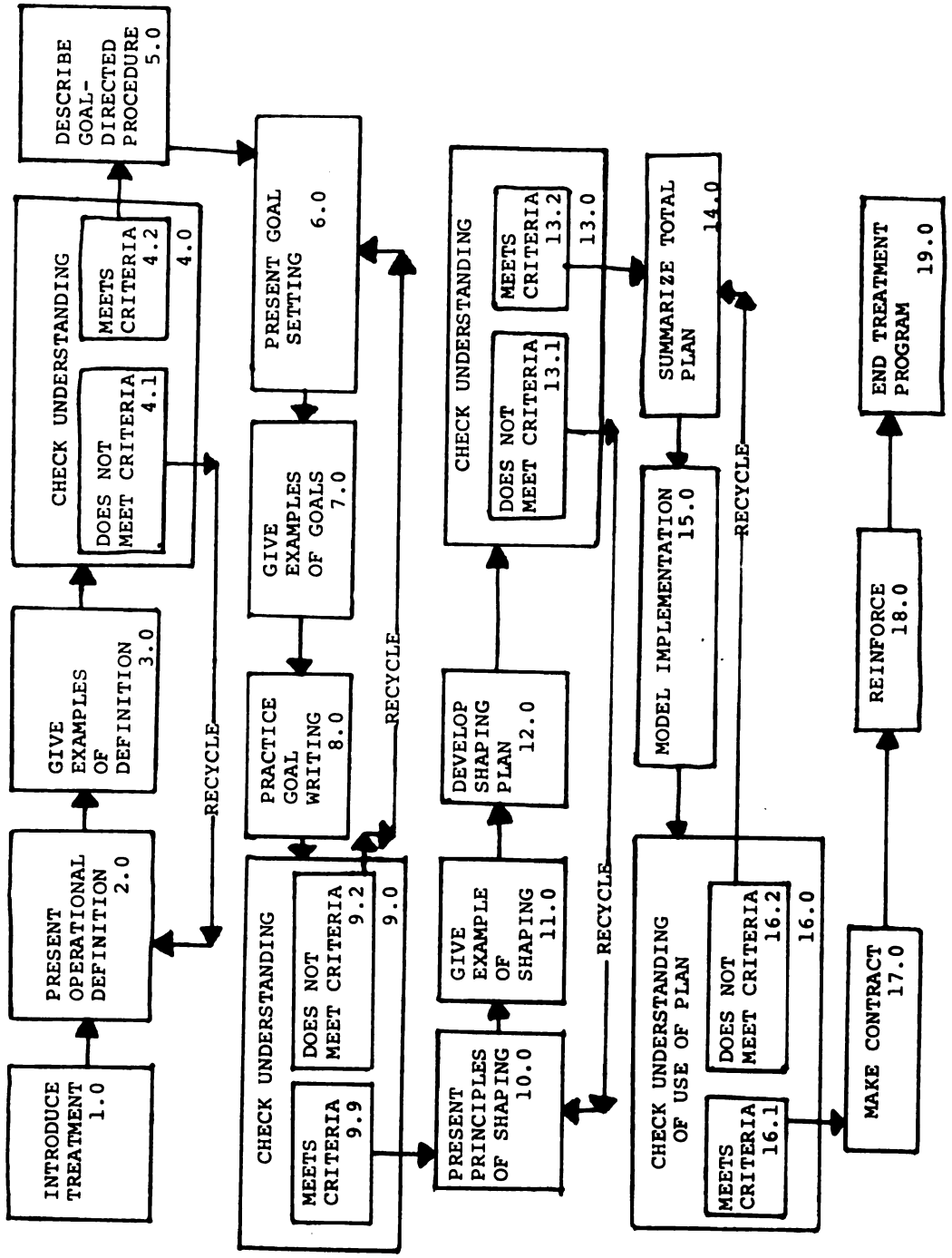

Figure 4. Flow-chart diagram of goal-directed practice program.

in self-reinforcement, provision was made for recylcing and mastery learning. Each subject also discussed his goal-directed practice project, change contract, and the instruction content with an assistant. Conditions were the same as they were with the self-reinforcement group. Through the instruction, subjects developed a self-management plan as well as a concept of the definition of verbal affective self-disclosure; but no instruction in self-reinforcement principles was given. Each subject had a recording booklet to note daily goals achieved, their reactions, and the number of statements to males and females. This group also contracted to meet goals and record in their booklets for three weeks. The goal-directed group had all the components to make accurate self-evaluations and a self-management procedure designed to yield positive self-evaluations, but no provision had been made for them to self-reinforce.

The essential components of both treatment packages followed the Bandura (1971) and Kanfer (1971) models for self-management. Self-observation was facilitated by a clear operational definition. Graduated self-imposed goals and contracting for change were seen as elements in self-evaluation. In the self-reinforcement condition, choice of reinforcers and self-determined reinforcement plans were used to plan for self-reinforcement.

The no-treatment control group was dismissed following their prior treatment posttest and advised to return for follow-up in three weeks.

At the final testing time, four procedures were used:

1. All subjects were posttested.

2. Subjects who have received both prior treatment-social learning/cognitive structuring and present treatment-self-reinforcement/goal-directed practice were debriefed using a questionnaire and feedback sheet.

3. Subjects from prior treatment-attention placebo/no treatment control were randomly assigned to a group treatment of either social learning or cognitive structuring.

4. Subjects from present treatment-no treatment control were administered either self-reinforcement or goal-directed practice. Assignment was random.

Instrumentation and Data Collection

Two measurement procedures were used to yield data for the five dependent variables. One procedure involved a behavioral test which measured amount of affect and quality of verbal affective self-disclosure as well as self-reported concomitant anxiety. The second procedure, pencil-and-paper testing, included a skill test and an attitude test. Both procedures had been previously administered to the subjects as part of their prior treatment.

The two pencil-and-paper tests were pretested on a population of 20 male undergraduate volunteers from a psychology class at Olivet College, a small liberal arts college 30 miles from Michigan State University. Volunteers were offered extra class credit for taking the two tests. Hoyt reliability coefficients were computed for the pre-test (Guilford, 1954). The reliability for the skill test was .31, and the reliability for the attitude test was .83.

All measures were then administered to a pilot test group of 20 male college graduates who had received prior treatment. Reliability was again computed for the skills and attitude tests using Hoyt's formula. Reliabilities were .91 for skills and .86 for attitude. Both of these measures were then revised following item analysis with procedures described in Mehrens and Lehmann (1973). Some poor items were omitted and many foils on multiple choice items were rewritten.

The audiotape recordings of the pilot test subjects' responses for amount and quality were transcribed and used to train the raters used in the actual study. The raters, two female high school English teachers, held bachelor's degrees and both had over 30 hours towards a master's degree. Both were employed in the same school. They had been close friends for six years. They were paid for two training sessions and were paid $1.00 per transcript during the actual test. For training of raters, the following teaching methods were used:

1. instruction on criteria
2. discussion of criteria
3. modeling of use of criteris with transcripts
4. guided practice using criteris with transcripts
5. discussion and clarification
6. reliability check
7. discussion of reliability check
8. revision of criteria
9. final reliability check for training

The first reliability check, on two transcripts, yielded Hoyt coefficients of 1.00 for amount, and .09 for quality. Within quality subscales, the coefficients were:

1. reference = .51
2. time orientation = .00
3. appropriateness of affect = .00
4. reason present = .84
5. specificity of reason = 1.00

Following revision of criteria and further training of the raters, a second reliability check was run on two transcripts. This yielded a Hoyt coefficient of 1.00 for amount and .99 for quality. At this rating, quality subscale coefficients were:

1. reference = 1.00
2. time orientation = 1.00
3. appropriateness of affect = 1.00
4. reason present = .85
5. specificity of reason = .99

Copies of the final measures as well as the rating criteria are in the appendices. The behavioral test consisted of 16 stimulus audio tape situations (see Appendix F). Eight involved male partners and eight females. Situations equally represented the subject in the role of initiator and as respondent. The situations presented positive and negative emotions equally. Subjects were instructed to consider the taped voices those of their best male friend or best female friend to control for situation intimacy level. After each stimulus, subjects responded into a second recorder. A 15-second time limit was imposed. On a paper scale, subjects circled the number (one through seven) which represented their anxiety regarding self-disclosure on that stimulus and in that situation. The one-seven scale was in a Likert-type scale format (see Appendix G).

Following the behavioral test, typescripts were made of the subjects' responses and sentences were unitized using a modification of Auld and White's (1956) rules.

In the unitizing for this study, all "thank you" phrases were omitted because they were classified as incomplete units. For measuring amount of affect, a list of feeling words developed by Crowley (1970) and expanded by Auerswald (1972) was used (see Appendix H). The raters rated the typescripts by giving a score of one to a response which included at least one affect unit and a score of zero to responses which had no affect units. These scores were totaled across responses for each subject.

Quality ratings were made according to the criteria outlined in Appendix H. Five separate ratings were made as follows:

1. reference - scoring range, 0-12
2. time orientation - scoring range, 0-6
3. appropriateness of affect - score 0 or 8
4. reason present - score 0 or 5
5. specificity of reason - score 0 or 8

Using the criteria for amount and quality, the trained raters scored subject typescripts. Eight randomly selected typescripts were chosen to be rated for the reliability check for inter-rater reliability for the actual study. Hoyt reliability coefficients were .99 for amount and .99 for quality. Quality subscale reliabilities were:

1. reference = .99
2. time orientation = .98
3. appropriateness of affect = .97
4. reason present = .98
5. specificity of reason = .99

Scores on the quality variable were totaled for each individual. A total was also computed for the anxiety measure. The behavioral measure, then, yielded three numerical totals which correspond to three dependent variables: amount, quality, and anxiety. The mean score for quality was 346.36 with a standard deviation of 102.39. Scores ranged from 0 to 582. A perfect score would have been 624.

The mean score for amount was 10.28 with a standard deviation of 2.83. Scores ranged from 1-16, which was a perfect score. For anxiety, the mean score was 46.67 with a standard deviation of 12.13. The range of scores was from the minimum possible, 16, to 64. It was possible to score 112.

The paper-and-pencil tests involved skill and attitudes. The skill test was a four-foil multiple choice measure with correct responses scored as one point and incorrect responses scored as zero (see Appendix I). Some distractors were cognitively oriented, and some involved blaming or other-referenced affect. Question stems were equally divided between positive and negative stimuli, respondent and initiator situations, and male and female best friends as targets. Scores on the skill test were totaled to develop one score for each individual. The Hoyt reliability coefficient computed for the skill test in this experiment was .87. Skill mean score was 10.78 with a standard deviation of 5.42. Scores ranged from 1-23, with 24 representing a perfect score.

The attitude test consisted of items measuring reactions or evaluations of statements about self-disclosure of affect (see Appendix J). Items on the attitude measure were rated on a seven-point Likert-type scale on a range from strongly agree to strongly disagree. All items were brief sentences. Scores were totaled following scale adjustment

to account for positive-cued questions (with "strongly agree" expected) and negative-cued questions (with "strongly disagree" expected). A Hoyt reliability coefficient of .84 was computed for the attitude scale. The mean score on the attitude scale was 145.94 with a standard deviation of 17.48. The actual range of scores was 99-198, and the possible range was 30-210.

Totals were used as data from all five measures. Totals were considered preferable to averages because less information was lost.

A debriefing questionnaire was developed to accomplish two purposes:

1. to gather additional anecdotal data from the subjects regarding the self-management experience
2. to assess reactions to the experiment

The debriefing questionnaire is included in Appendix K. All questions were open-ended and allowed the subject considerable freedom to respond.

Data Analysis

Data was analyzed using a two-way multivariate analysis of variance to test both interaction and main effects. The variables were arranged for the step-down *F* procedure in the following order:

1. amount
2. quality

3. skills

4. attitude

5. anxiety

Although not a part of hypothesis testing, other procedures were used to analyze additional data:

1. A one-way multivariate analysis of variance technique was used to explore differences on the five dependent variables. A new independent variable representing the subject's total experimental experience was formed for this analysis. Four amounts of training were compared. These were:

a. both treatments--subjects who received cognitive structuring or social modeling from Highlen (1975) as well as either goal-directed practice or self-reinforcement in the present study.

b. neither treatment--subjects who received either attention placebo or no treatment control from Highlen (1975) and no-treatment control in the present study

c. prior treatment--subjects who received either cognitive structuring or social modeling from Highlen (1975) and no-treatment control

d. self-management--subjects who received attention placebo or no treatment control from Highlen and goal-directed practice or self-reinforcement

2. A two-way multivariate analysis of variance was utilized to examine the most discriminating three

variables--quality, amount and skill apart from anxiety and attitude.

3. A repeated measures multivariate analysis of variance was used to examine the male-female, initiator-respondent, and positive-negative dimensions of the quality, skill, and anxiety measures.

4. A two-way multivariate analysis of variance was run using the subjects' mean quality score (quality total divided by amount total) instead of total quality score. Four dependent variables were used in this analysis. They were mean quality, skill, anxiety and attitude.

5. Frequency counts were computed on responses to the debriefing questionnaire.

Summary

The procedures outlined above can be expected to provide a valid test for interactional and treatment effect hypotheses on each dependent variable. With the pilot testing and behavioral measures, instrumentation in the present study should be both reasonably valid and reliable. Prior reviews of self-disclosure measures have called for such checks as well as for increased use of behavioral measures (Benner, 1968; Hurley and Hurley, 1969; Vondracek, 1969a; 1969b). The data analysis techniques should be strong enough to detect large differences if they exist although the number of subjects was small. Finally, the treatment packages were based on instructional theory and

behavior change theory. Mastery learning with provision for modeling, practice and recycling allowed all individuals to grasp essential components fully. These components are elements of self-management theory as described by Bandura (1971) and Kanfer (1971). It is expected that replication could be accomplished with relative ease.

CHAPTER III

RESULTS

Overview

Hypothesis test results are presented in this chapter along with the results of supplemental tests. The experiment was designed so that posttest measurement provided scores on five dependent variables for each of 36 single male undergraduates. The five dependent variables measured different aspects of self-disclosure of affect. These aspects were:

1. amount of affect
2. quality of affect
3. anxiety
4. skill
5. attitude

Scores for amount and quality of affect were totaled from ratings made by two trained raters on set criteria. Raters judged typed transcripts made from the subjects' recorded responses to sixteen simulated dyadic interactions. Concomitant anxiety was self-reported on a paper-and-pencil

measure as subjects responded to the situations. The anxiety score was totaled across situations.

The skill and attitude tests were pencil-and-paper measures assessing skill in discriminating quality affect statements and personal attitudes towards self-disclosure of affect. Totals were used as scores for these measures.

Two-way multivariate analysis of variance was used for hypothesis testing. A blocking variable, level of prior treatment was used. The main independent variable involved three levels of treatment. These were:

1. goal-directed practice
2. self-reinforcement
3. no-treatment control

Three hypotheses tests were run. All tests were done with alpha level set at .05. It was predicted that there would be no interaction effect. It was also predicted that goal-directed practice and self-reinforcement would be equivalent and that either would be superior to no-treatment control.

Supplemental data was gathered and analyzed to explore certain dimensions and comparisons not formally tested by hypotheses. A one-way multivariate analysis of variance was run comparing four levels of a transformed independent variable which corresponded to the subjects' complete training experience. The training amounts compared were:

1. <u>both treatments</u>--training in both experiments
2. <u>neither treatment</u>--no training

3. prior treatment--training from previous study only
4. self-management--training from present experiment only

This test also used an alpha level of .05 and all five dependent variables. It was predicted that Group One would be superior to Groups Two, Three, and Four. It was also predicted that Groups Three and Four would be equivalent and that either would be superior to Group Two.

The second supplemental test involved a duplication of hypothesis testing using only three dependent variables--amount of affect, quality of affect, and skill.

Third, the comparisons used in hypothesis testing were made across repeated measures formed on three dimensions in the amount of affect, quality of affect, anxiety, and skill tests. These dimensions were: initiator-respondent, positive-negative affect, and male-female interactant partner.

Fourth, hypotheses tests were duplicated substituting a mean quality of affect score for the total quality score and using all dependent measures except amount and quality.

Finally, descriptive statistics and frequencies were computed on subjects' open-ended responses to questions of relevance on a debriefing questionnaire.

All results from hypothesis testing and supplemental testing are contained in this chapter. Results are discussed and further explained in Chapter IV.

Hypothesis Testing

Test of Hypothesis 1

The first hypothesis predicted that there would be no interaction effect. The probability of a Type I error was set at .05 for the multivariate test. In univariate significance testing, alpha level was partitioned for the five dependent measures and each was tested at the .01 level. The results of this analysis are presented in Table 1. No differences were significant, so Hypothesis 1 was supported (F = 1.14 with 15.55.6 df). It stated:

> H_1: No interaction effect will be demonstrated between levels of prior treatment and levels of present treatment.

Test of Hypothesis 2

The second hypothesis predicted that effects of the two self-management procedures would be the same. The hypothesis stated:

> H_2: The main effects of goal-directed practice and self-reinforcement will be equivalent.

This hypothesis was tested by multivariate ($p < .05$) and univariate ($p < .01$) analyses of variance. The hypothesis of no difference was supported by the failure to reject the null form hypothesis at $p < .70$ (F = .6030 with 6,20 df). Results are presented in Table 2.

Table 1

Multivariate and Univeriate Analysis of Variance and Step-Down F Statistics, for Quality, Skill, Amount, Anxiety, and Attitude

Prior Treatment x Present Treatment Interaction
Cell Size N = 3

Multivariate F = 1.14 with 15,55.6 df, p < .35

Dependent Measures	Mean Squares Between	Univariate F 6,24 df	p	Step-Down F	p
Quality	4606.86	.44	.73	.44	.73
Skill	32.85	1.12	.36	1.58	.22
Amount	2.61	.33	.81	2.11	.13
Anxiety	178.02	1.21	.33	.91	.45
Attitude	281.69	.92	.45	.86	.48

Table 2

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Quality, Skill, Amount, Anxiety, and Attitude

Self-Reinforcement (n = 12) -
Goal-Directed Practice (n = 12) = 0

Multivariate F = .60 with 5,20 df, p < .70

Dependent Measures	Mean Square Between	Univariate F 1,24 df	p	Step-Down F	p
Quality	3765.03	.36	.55	.36	.55
Skill	4.17	.14	.71	.01	.93
Amount	4.17	.52	.48	.52	.48
Anxiety	337.50	2.29	.14	2.18	.15
Attitude	32.67	.11	.75	.06	.81

Test of Hypothesis 3

The third hypothesis was structured to test the effects of either treatment compared to no treatment. The hypothesis stated:

> H_3: The main effect of no-treatment control will be less than the main effect of either goal-directed practice or self-reinforcement.

This hypothesis was not supported by the multivariate analysis, and no significant differences were found between treatment and no treatment ($F = 1.00$ with 5,20 df; $p < .44$). Univariate analysis of variance using alpha level of .01 also demonstrated no significance. These results are presented in Table 3.

Table 3

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Quality, Skill, Amount, Anxiety, and Attitude

No-Treatment Control ($n = 12$) - Self-Reinforcement ($n = 12$) + Goal-Directed Practice ($n = 12$) = 0

Multivariate $F = 1.00$ with 5,20 df; $p < .44$

Dependent Measures	Mean Square Between	Univariate F 1,24 df	p	Step-Down F	p
Quality	51392.18	4.90	.04	4.90	.04
Skill	88.89	3.02	.10	.43	.52
Amount	40.50	5.06	.03	.39	.54
Anxiety	4.50	.03	.86	.00	.98
Attitude	382.72	1.25	.27	.02	.88

Additional Data

Further information regarding the results of hypotheses tests can be derived from observing the cell means and for goal-directed practice, self-reinforcement, and standard deviations no-treatment control. These data are presented in Table 4. On all dependent measures except anxiety, the goal-directed practice group means were the highest of the three groups. The low score on anxiety represented the best mean on this measure. Therefore the goal-directed practice group scored best on all five measures; self-reinforcement ranked second on all measures except anxiety.

In addition to the cell means, the correlation matrix for the dependent variables has been reported. This matrix is in Table 5. It appears that while quality and amount are highly correlated, both are only slightly correlated with attitude and skill, which are unrelated to each other. The anxiety measure is not correlated with any of the other four dependent variables.

Summary

Hypothesis tests supported two hypotheses and failed to support one. Multivariate analysis of variance techniques were used for the tests of all hypotheses and alpha level was set at .05. In addition to results of hypotheses tests, relevant observed cell means and the variable correlation matrix were reported.

Table 4

Observed Cell Means and Standard Deviations for Goal-Directed Behavior, Self-Reinforcement, and No-Treatment Control on Quality, Skill, Amount, Anxiety, and Attitude

Group	Quality Mean	Quality S.D.	Skill Mean	Skill S.D.	Amount Mean	Amount S.D.	Anxiety* Mean	Anxiety* S.D.	Attitude Mean	Attitude S.D.
Goal-Directed Behavior (n = 12)	385.6	96.61	12.33	6.05	11.42	2.54	43.17	10.17	149.4	13.56
Self-Reinforcement (n = 12)	360.5	76.75	11.50	5.74	10.58	1.91	50.67	6.02	147.1	19.20
No-Treatment Control (n = 12)	292.9	112.10	8.58	3.58	8.75	3.18	46.17	15.34	141.3	13.81

*Low score indicates low anxiety.

Table 5

Correlation Matrix for Quality, Amount, Anxiety, Attitude and Skill Dependent Variables

	Quality	Amount	Anxiety	Attitude	Skill
Quality	1.00				
Amount	.98	1.00			
Anxiety	.08	.10	1.00		
Attitude	.45	.49	.06	1.00	
Skill	.50	.42	.04	.05	1.00

Supplemental Testing

Overview

Supplemental analyses were designed to assess additional data which was available from the experimental procedures employed, the dependent measures used, and the debriefing questionnaire completed by the subjects. Because the present study was conducted in conjunction with one by Highlen (1975), it was possible to assess the differences at final posttesting (a three-week time differential from the posttesting by Highlen) between subjects who had received training in both studies, subjects who had received no training, subjects who received prior treatment only, and those who had received self-management only.

The nature of the dependent measures provided three additional tests which utilized group comparisons identical to those in hypothesis testing. In one of the three

analyses, the three most highly correlated measures--amount of affect, quality of affect, and skill--were used as the only three variables. In another, a mean score for quality of affect was computed and used instead of the total quality score. This new variable was used with three other variables--skill, attitude, and anxiety. The skill, anxiety, amount of affect, and quality of affect measures each contained items which could be analysed across dimensions of initiator-respondent, positive-negative affect, and male-female interactant. Because of this, repeated measures two-way multivariate analysis of variance techniques were used to assess differences among the testing contrasts for each of those four dependent measures.

Finally, responses to the open-ended debriefing questionnaire were categorized and are reported in this chapter. The debriefing questionnaire provided data regarding subjects' impressions of the value and benefit of their total training experience (including treatment by Highlen, 1975), their estimates of their relative facility across the initiator-respondent, positive-negative affect, and male-female interactant dimensions, and a report of the degree to which they actually fulfilled their self-management contracts.

These supplemental analyses, excluding debriefing questionnaire material, were tested with alpha level set at .05. Although formal hypotheses were not made,

comparisons were tested and are reported in a manner similar to hypothesis testing.

Test Across Total Training Experience

Test for both treatments. This analysis predicted that the final test results across five dependent variables would demonstrate that the combination of training from the Highlen (1975) experiment and the present study would be superior to either training experience alone or to neither training experience. One-way multivariate and univariate analysis of variance tests were run with multivariate alpha at .05 and univariate alpha at .01 each. The multivariate test was significant (F = 6.50 with 5,28 df; $p < .0004$). Two univariate tests were significant. These were skill (F = 8.03 with 1,32 df; $p < .0079$) and attitude (F = 11.2764 with 1,32 df; $p < .0021$). F-statistics for the univariate test and all other analysis results are presented in Table 6.

Test for equality of single treatments. This analysis predicted that the effects of prior treatment alone (tested three weeks after training) and self-management alone (tested at the end of the three-week practice period) would be equivalent. The prediction of no difference was supported, and the null form test statement was not rejected. Results are presented in Table 7.

Table 6

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Quality, Skill, Amount, Anxiety and Attitude

Both Treatments (n = 12) - Neither Treatment (n = 6) + $\frac{\text{Prior Treatment } (n = 6) + \text{Self-Management } (n = 12)}{3} = 0$

Multivariate F = 6.50 with 5,28 df; p < .0004

Dependent Measure	Mean Square Between	Univariate F 1,32 df	p	Step-Down F	p
Quality	43719.25	2.50	.12	2.50	.12
Skill	245.68	8.03	<.01	5.00	.03
Amount	55.13	4.26	.05	14.81	<.01
Anxiety	.50	.00	.95	.10	.75
Attitude	3726.72	11.28	<.01	4.24	.05

Table 7

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Quality, Skill, Amount, Anxiety, and Attitude

Prior Treatment (n = 6) - Self-Management (n = 12) = 0

Multivariate F = .79 with 5,28 df

Dependent Measure	Mean Square Between	Univariate F 1,32 df	p	Step-Down F	p
Quality	128.07	.01	.93	.01	.93
Skill	.44	.01	.90	.05	.83
Amount	.11	.01	.93	1.62	.21
Anxiety	205.44	1.42	.24	1.09	.30
Attitude	361.00	1.09	.30	1.17	.29

Test for superiority of single treatments over no treatment. This analysis predicted that the groups which received a single treatment would receive significantly higher scores than members of the neither treatment, prior treatment or self-management. This hypothesis was not supported (F = 1.39 with 5,28 df; $p < .26$). Results of the multivariate and univariate analyses are in Table 8.

Table 8

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Quality, Skill, Amount, Anxiety and Attitude

Neither treatment (n = 6) -

$$\frac{\text{Prior Treatment } (n = 6) + \text{Self-Reinforcement } (n = 12)}{2} = 0$$

Multivariate F = 1.39 with 5,28 df, $p < .26$

Dependent Measures	Mean Square Between	Univariate F 1,32 df	p	Step-Down F	p
Quality	52121.44	2.98	.09	2.98	.09
Skill	17.01	.56	.46	.13	.72
Amount	33.35	2.58	.12	.62	.44
Anxiety	280.06	1.94	.17	2.17	.15
Attitude	24.50	.07	.79	1.02	.32

Observed cell means were examined to further support directionality of differences from the three comparisons. When considering that low anxiety scores are better than

high ones, the both treatments group scored better on all measures except anxiety, on which the prior treatment mean was superior. Prior treatment and self-management scored better than the neither treatment group on skill, but only the prior treatment group was superior to neither treatment on attitude. Observed cell means are presented in Table 9.

Two predictions made regarding the comparison of effects among both treatments, neither treatment, prior treatment, and self-management were supported. Both treatments proved better than either treatment alone or no treatment on two variables, attitude and skill. The single treatments were equivalent, but they were not better than the neither treatment group.

Table 9

Observed Cell Means for Both Treatments, Neither Treatment, Prior Treatment, and Self-Management on Quality, Skill, Amount, Anxiety, and Attitude

Group	Quality	Skill	Amount	Anxiety*	Attitude
Both Treatments (n = 12)	395.64	14.50	12.00	46.83	160.33
Neither Treatment (n = 6)	241.00	7.50	7.33	52.50	137.00
Prior Treatment (n = 6)	344.85	9.67	10.17	39.83	145.67
Self-Management (n = 12)	350.56	9.33	10.0	47.00	136.17

*Low scores indicate low anxiety.

Multivariate Testing with Three Dependent Variables

The three most highly correlated measures were used in this analysis to explore effects of the reduced number of variables on the contrasts used for hypothesis testing. Results were similar to those for hypothesis testing with all five dependent variables. The two-way multivariate and univariate analysis of variance procedure was used with alpha level at .05 for multivariate and .016 for univariate tests. In analysis of the interaction between prior treatment and present treatment (goal-directed practice, self-reinforcement and no-treatment control), no significant interaction was found (F = 1.34 with 9,53.69 df; $p < .24$). This supported the original hypothesis. Results are presented in Table 10.

Table 10

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Quality, Amount, and Skill

Prior Treatment x Treatment Present Interaction Test size n = 3

Multivariate F = 1.45 with 9,53.69 df; $p < .24$

Dependent Measure	Mean Square Between	Univariate F 1,32 df	p	Step-Down F	p
Quality	4606.86	.44	.73	.44	.73
Amount	2.61	.33	.81	1.64	.21
Skill	32.85	1.12	.36	2.06	.14

The analysis followed the hypothesis that the main effects of self-reinforcement and goal-directed practice were equivalent. This prediction was also supported (F = .29 with 3,22 df; p < .83). Results of both multivariate and univariate tests are in Table 11.

Analysis was made to assess differences between goal-directed practice, self-reinforcement, and no-treatment control. Contrary to prediction, no significant differences were found. It has been hypothesized that either self-reinforcement or goal-directed practice would be superior to traditional follow-up, but this was not supported (F = 1.82 with 3,22 df; p < .17). Results are in Table 12.

Table 11

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Quality, Amount, and Skill

Goal Directed Practice (n = 12) -

Self-Reinforcement (n = 12) = 0

Multivariate F = .29 with 3,22 df; p < .83

Dependent Measure	Mean Square Between	Univariate F 1,24 df	p	Step-Down F	p
Quality	3765.02	.36	.55	.36	.55
Amount	4.17	.52	.48	.43	.52
Skill	4.17	.14	.71	.12	.74

Table 12

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Quality, Amount, and Skill

$$\frac{\text{No-Treatment Control } (n = 12) - \text{Goal-Directed Practice } (n=12) - \text{Self-Reinforcement } (n=12)}{2} = 0$$

Multivariate $F = 1.82$ with 3,22 df; $p < .17$

Dependent Measure	Mean Square Between	Univariate F 1,24 df	p	Step-Down F	p
Quality	51392.18	4.90	.04	4.90	.04
Amount	40.50	5.06	.03	.13	.72
Skill	88.89	3.02	.10	.69	.42

Hypothesis tests were duplicated using only the three dependent variables quality, amount, and skill. Consistent with results of testing using all five measures, Hypotheses 1 and 2 were supported in their null form, but Hypothesis 3 was not.

Repeated Measures

The questions and situations used for the quality of affect, amount of affect, skill, and anxiety tests were designed to yield subscale scores across three dimensions: initiator-respondent, positive-negative affect, and male female interactant. The combinations of these dimensions yielded eight new dependent variables. Four separate two-way multivariate and univariate analysis of variance tests were run. Each test corresponded to one of the original

measures--quality, amount, skill, or anxiety. The same comparisons used for hypothesis testing were made.

In the analysis for interaction, it was again predicted that no significant interaction would occur. This hypothesis was supported for multivariate tests of three of the four variables. These were quality (F = 1.36 with 48,87.71 df; $p < .11$), skill (F = .66 with 48,87.71 df; $p < .94$), and anxiety (F = .86 with 48,87.71 df; $p < .71$). For amount, however, an interaction, significant at the $p < .04$ level, was found (F = 1.54 with 48,87.71 df). For the univariate tests, only one dependent variable, initiator-negative feeling, was significant for amount (F = 6.30 with 6,24 df; $p < .005$) and also for quality (F = 5.83 with 6,24 df; $p < .0008$). Alpha levels were .05 for the multivariate test and .005 for the univariate test. Results of the interaction test are presented in Tables 13, 14, 15, and 16. Graphs were used to explore the significant univariate interactions for amount and quality on the positive-negative feeling dimension. The amount interaction is presented in Figure 5; the quality interaction is presented in Figure 6.

The test between training groups predicted that goal-directed practice and self-reinforcement would have equal effects. For the repeated measures two-way multivariate test, this prediction was supported for all four measures. With df 8 and 17 in each case, F ratios were:

Table 13

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Eight Subscale Dimensions of Quality

Prior Treatment x Present Treatment Interaction Test Cell Size n = 3

Multivariate F = 1.36 with 48,87.71 df; p < .11

Subscale Dimension	Mean Square Between	Univariate F 6,24 df	p	Step-Down F	p
constant	22334.71	2.09	.09	2.09	.09
role	271.17	.31	.92	.57	.75
sex	346.60	.67	.67	.70	.65
feeling	4465.72	5.83	.0008*	4.88	.00
role x sex	106.47	.63	.71	.67	.67
sex x feeling	125.06	1.12	.38	1.34	.29
role x feeling	324.69	1.87	.13	1.05	.42
role x sex x feeling	14.13	.46	.83	.97	.47

*Denotes significance.

Table 14

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Eight Subscale Dimensions of Skill

Prior Treatment x Present Treatment Interaction Test Cell Size n = 3

Multivariate F = .66 with 48,87.71 df; p < .94

Subscale Dimension	Mean Square Between	Univariate F 6,24 df	p	Step-Down F	p
constant	3.54	1.04	.42	1.04	.42
role	.11	.84	.55	.81	.57
sex	.08	.45	.84	.51	.57
feeling	.06	.33	.91	.72	.64
role x sex	.01	.40	.87	.13	.99
sex x feeling	.01	.53	.78	.39	.88
role x feeling	.03	1.34	.28	1.22	.34
role x sex x feeling	.01	1.30	.30	.96	.48

Table 15

Multivariate and Univariate Analysis of Variance and Step-Down *F* Statistics for Eight Subscale Dimensions of Amount

Prior Treatment x Present Treatment Interaction Test Cell Size *n* = 3

Multivariate *F* = 1.54 with 48,87.71 *df*; *p* < .04

Subscale Dimension	Mean Square Between	Univariate *F* 6,24 *df*	*p*	Step-Down *F*	*p*
constant	15.00	1.88	.13	1.89	.13
role	.33	.45	.84	.61	.72
sex	.38	.80	.58	.66	.68
feeling	3.50	6.30	<.005*	5.18	.00
role x sex	.11	.76	.61	.90	.52
sex x feeling	.15	1.45	.24	1.61	.20
role x feeling	.27	1.74	.15	1.33	.30
role x sex x feeling	.01	.45	.84	1.32	.30

*Denotes significance.

Table 16

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Eight Subscale Dimensions of Anxiety

Prior Treatment x Present Treatment Interaction Test Cell Size n = 3

Multivariate F = .86 with 48,87.71 df; p < .71

Subscale Dimension	Mean Square Between	Univariate F 6,24 df	p	Step-Down F	p
constant	161.81	1.10	.39	1.10	.39
role	3.58	.91	.50	.90	.51
sex	3.14	1.00	.45	.91	.50
feeling	5.25	.92	.50	.84	.56
role x sex	1.36	1.58	.19	1.36	.28
sex x feeling	.90	.72	.64	.28	.94
role x feeling	.87	1.45	.24	1.63	.20
role x sex x feeling	.14	.56	.76	.44	.84

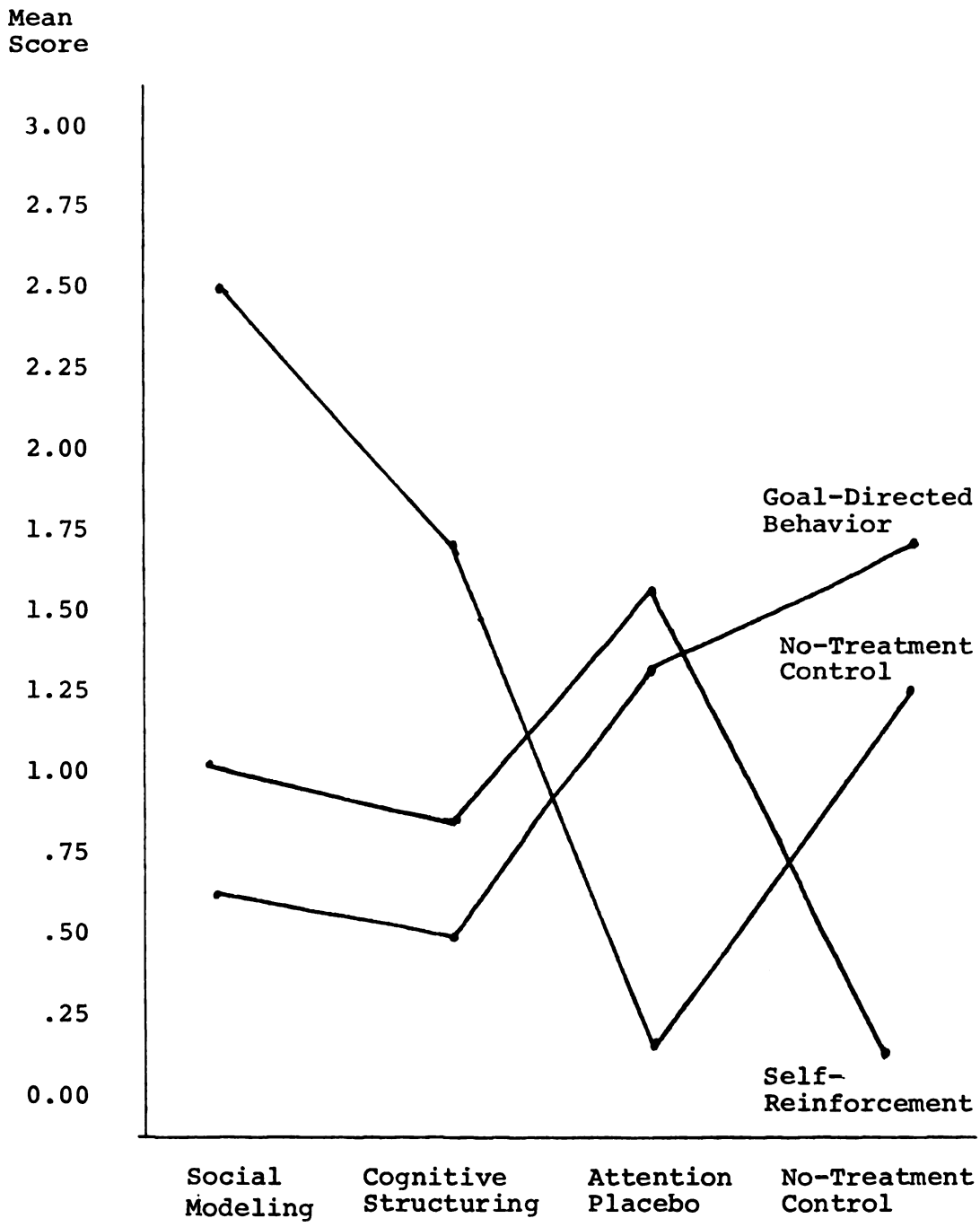

Figure 5. Interaction effect for amount: feeling dimension.

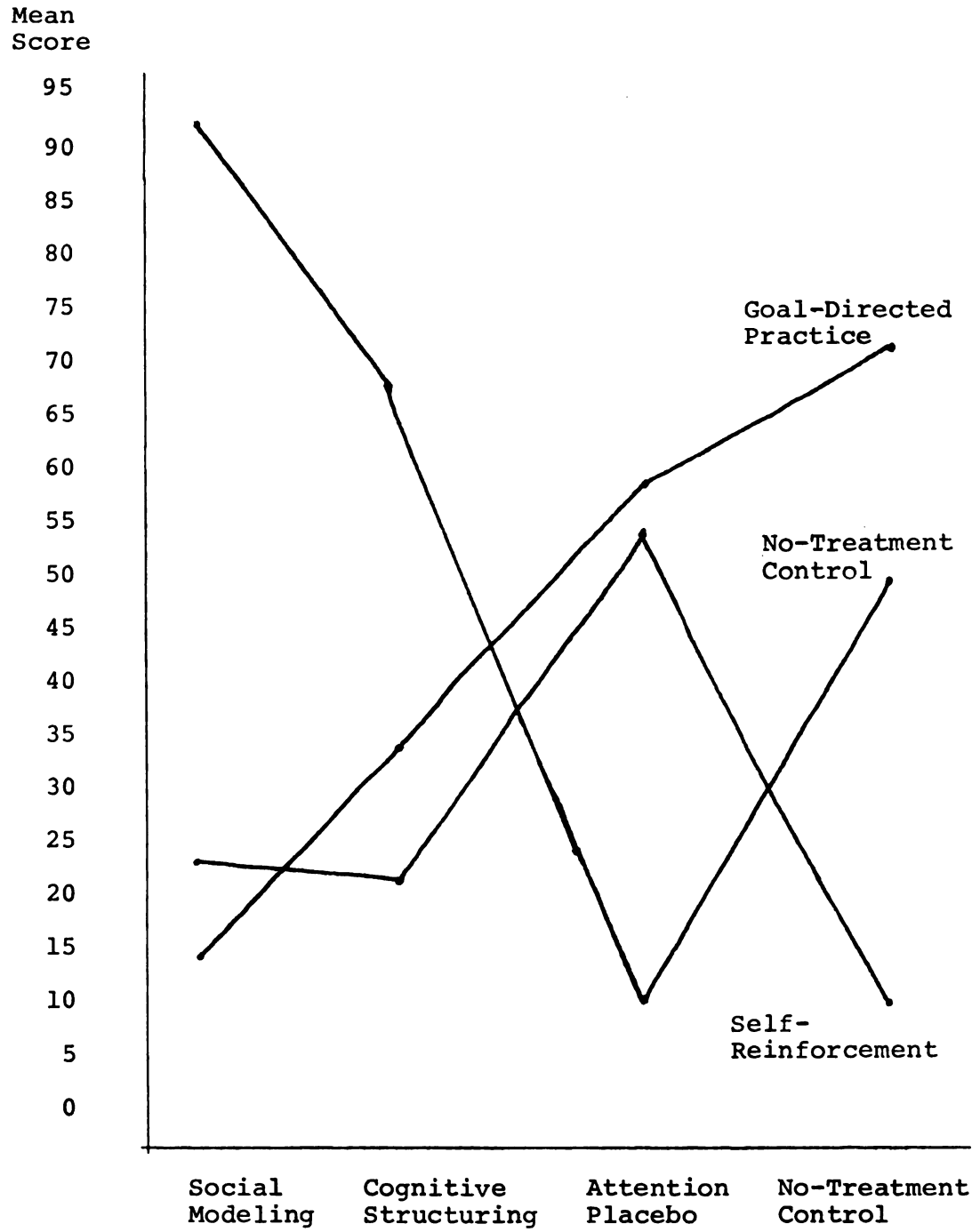

Figure 6. Interaction effect for quality: feeling dimension.

quality = 1.42 $p < .26$

skill = .26 $p < .97$

amount = 1.48 $p < .23$

anxiety = 1.09 $p < .42$

Alpha level for the multivariate test was .05. Alpha was partitioned for the univariate test and the level of .005 was used. Multivariate and univariate results for the test of no-difference across subscale dimensions between the goal-directed practice group and the self-reinforcement group are presented in Tables 17, 18, 19, and 20.

The final repeated measures analysis tested for differences across dimensions among no-treatment control, goal-directed practice, and self-reinforcement. If differences were found, it was predicted that either goal-directed behavior or self-reinforcement would be superior to no-treatment control. Multivariate differences were found for quality ($F = 2.83$ with df 16 and 34; $p < .005$) and amount ($F = 2.66$ with df 16 and 34; $p < .008$). However, because of the interaction effect reported previously, no univariate tests were significant at alpha level .005. Non-significant multivariate F ratios were reported for skill ($F = .64$ with 16 and 34 df; $p < .82$), and anxiety ($F = .85$ with 16 and 34 df; $p < .62$). Results are presented in Tables 21, 22, 23, and 24. The interaction effect complicated interpretation of significance testing for this comparison. Where differences did occur, they were interactional in form and did not rely solely on main effects.

Table 17

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Eight Subscale Dimensions of Quality

Goal Directed Practice (n = 12) - Self-Reinforcement (n = 12) = 0

Multivariate F = 1.42 with 8,17 df; p < .26

Subscale Dimension	Mean Square Between	Univariate F 1,24 df	p	Step-Down F	p
constant	4390.22	.41	.53	.41	.53
role	2496.96	2.88	.10	4.21	.05
sex	57.66	.11	.74	.30	.59
feeling	766.14	1.00	.33	.79	.38
role x sex	1.19	.01	.93	.36	.56
sex x feeling	288.77	2.59	.12	5.46	.03
role x feeling	9.44	.05	.82	.07	.80
role x sex x feeling	.84	.03	.87	.04	.85

Table 18

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Eight Subscale Dimensions of Skill

Goal-Directed Practice (n = 12) - Self-Reinforcement (n = 12) = 0

Multivariate F = .26 with 8,17 df; p < .97

Subscale Dimension	Mean Square Between	Univariate F 1,24 df	p	Step-Down F	p
constant	.40	.12	.74	.12	.74
role	.11	.82	.37	.77	.39
sex	.00	.01	.92	.03	.86
feeling	.06	.32	.58	.02	.89
role x sex	.01	.34	.51	1.14	.30
sex x feeling	.00	.17	.69	.11	.75
role x feeling	.02	1.10	.31	.20	.66
role x sex x feeling	.00	.18	.67	.02	.89

Table 19

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Eight Subscale Dimensions of Amount

Goal-Directed Practice (n = 12) - Self-Reinforcement (n = 12) = 0

Multivariate F = 1.48 with 8,17 df; p < .23

Subscale Dimension	Mean Square Between	Univariate F 1,24 df	p	Step-Down F	p
constant	4.17	.52	.48	.52	.48
role	4.17	5.66	.03	7.39	.01
sex	.04	.09	.77	.62	.90
feeling	.17	.30	.59	.06	.82
role x sex	.00	.00	1.00	.17	.68
sex x feeling	.26	2.59	.12	3.21	.09
role x feeling	.04	.27	.61	.05	.83
role x sex x feeling	.00	.10	.76	1.02	.33

Table 20

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Eight Subscale Dimensions of Anxiety

Goal-Directed Practice (n = 12) - Self-Reinforcement (n = 12) = 0

Multivariate F = 1.09 with 8,17 df; p < .42

Subscale Dimension	Mean Square Between	Univariate F 1,24 df	p	Step-Down F	p
constant	337.50	2.29	.14	2.29	.14
role	.04	.01	.92	.05	.83
sex	.00	.00	1.00	.00	.98
feeling	2.04	.36	.56	1.81	.19
role x sex	.67	.78	.39	.91	.35
sex x feeling	.01	.01	.93	.33	.57
role x feeling	2.04	3.39	.08	3.37	.08
role x sex x feeling	.01	.04	.84	.07	.79

Table 21

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Eight Subscale Dimensions of Quality

No-Treatment Control (n = 12) -

$$\frac{\text{Goal-Directed Practice } (n = 12) + \text{Self-Reinforcement } (n = 12)}{2} = 0$$

Multivariate F = 2.84 with 16,34 df; $p < .05$

Subscale Dimension	Mean Square Between	Univariate F 2,24 df	p	Step-Down F	p
constant	27412.55	2.57	.10	2.57	.10
role	1299.72	1.50	.24	2.66	.09
sex	656.75	1.27	.30	2.02	.16
feeling	2401.33	3.14	.06	3.06	.07
role x sex	401.93	2.37	.12	.49	.62
sex x feeling	158.89	1.42	.26	2.73	.09
role x feeling	313.01	1.80	.19	6.33	.01
role x sex x feeling	26.92	.88	.43	.31	.73

Table 22

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Eight Subscale Dimensions of Skill

No-Treatment Control (n = 12) -

$$\frac{\text{Goal-Directed Practice } (n = 12) + \text{Self-Reinforcement } (n = 12)}{2} = 0$$

Multivariate F = .64 with 16,34 df; p < .82

Subscale Dimension	Mean Square Between	Univariate F 2,24 df	p	Step-Down F	p
constant	6.91	2.03	.15	2.03	.15
role	.08	.61	.55	.51	.60
sex	.14	.76	.48	.63	.54
feeling	.27	1.43	.26	.12	.89
role x sex	.01	.19	.83	.61	.55
sex x feeling	.01	.29	.75	.18	.83
role x feeling	.01	.57	.57	.11	.90
role x sex x feeling	.01	.89	.42	1.60	.23

Table 23

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Eight Subscale Dimensions of Amount

No-Treatment Control (n = 12) -

$$\frac{\text{Goal-Directed Practice } (n = 12) + \text{Self-Reinforcement } (n = 12)}{2} = 0$$

Multivariate F = 2.66 with 16,34 df; p < .05

Subscale Dimension	Mean Square Between	Univariate F 2,24 df	p	Step-Down F	p
constant	22.33	2.79	.08	2.79	.08
role	2.11	2.87	.08	4.05	.03
sex	.58	1.24	.31	2.13	.14
feeling	1.44	2.60	.10	1.16	.33
role x sex	.34	2.39	.11	.65	.53
sex x feeling	.15	1.45	.25	1.62	.22
role x feeling	.47	3.05	.07	6.60	.01
role x sex x feeling	.05	2.00	.16	.54	.60

*Denotes significance.

Table 24

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Eight Subscale Dimensions of Anxiety

No-Treatment Control (n = 12) -

$$\frac{\text{Goal-Directed Practice } (n = 12) + \text{Self-Reinforcement } (n = 12)}{2} = 0$$

Multivariate F = .85 with 16,34 df; p < .62

Subscale Dimension	Mean Square Between	Univariate F 2,24 df	p	Step-Down F	p
constant	171.00	1.16	.33	1.16	.33
role	.08	.02	.97	.04	.96
sex	.03	.01	.99	.01	.99
feeling	8.58	1.51	.24	2.28	.13
role x sex	.44	.52	.60	.90	.42
sex x feeling	1.09	.88	.43	1.15	.34
role x feeling	1.05	1.74	.20	1.71	.21
role x sex x feeling	.02	.08	.92	.05	.95

The four two-way repeated measures multivariate analysis of variance tests using subscale dimension scores demonstrated a significant multivariate and univariate interaction relating to quality: feeling dimension, and a significant univariate interaction on amount: feeling. Thus, the no-interaction hypothesis was not supported. Because of the interaction, main effects were not consistent. No significant differences were found between goal-directed practice and self-reinforcement. Multivariage significance was found in the comparison of no-treatment control to goal-directed practice and self-reinforcement. However, no univariate significance was found due to the interaction.

Test with Mean Quality

By dividing the total quality score for each subject by the amount score, a new variable, mean quality, was formed which correlated .49 with quality (total) and .42 with amount. The complete correlation matrix is presented in Table 25. Two-way multivariate and univariate analysis of variance techniques were used to analyze data from four dependent measures: anxiety, attitude, skill, and mean quality. Tests were made for interaction and comparisons of treatment effects. Multivariate alpha level was established as .05; univariate alpha was .008.

Table 25

Correlation Matrix for Quality Total, Amount, Anxiety, Attitude, Skill and Mean Quality Dependent Variables

	Quality	Amount	Anxiety	Attitude	Skill	Mean Quality
Quality	1.00					
Amount	.98	1.00				
Anxiety	.08	.09	1.00			
Attitude	.45	.47	- .06	1.00		
Skill	.50	.42	- .03	.05	1.00	
Mean Quality	.49	.42	.07	.38	.27	1.00

The test for interaction yielded an F ratio of 1.64 with 12 and 55.85 df ($p < .11$). None of the univariate tests were significant. All multivariate and univariate results are presented in Table 26. As no interaction was predicted, these results support the hypothesis statement.

The prediction of no difference between goal-directed practice and self-reinforcement was supported by results using anxiety, attitude, skill, and mean quality as dependent variables ($F = .53$ with 4,21 df; $p < .71$). Results are presented in Table 27.

Table 26

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Anxiety, Attitude, Skill, and Mean Quality

Prior Treatment x Present Treatment Interaction Test n = 3

Multivariate F = 1.64 with 12,55.85 df; p < .11

Dependent Measure	Mean Square Between	Univariate F 3,24 df	p	Step-Down F	p
Anxiety	178.02	1.21	.33	1.21	.32
Attitude	281.69	.92	.45	.92	.45
Skill	32.86	1.12	.36	.99	.42
Mean Quality	78.15	2.35	.10	3.64	.03

Table 27

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Anxiety, Attitude, Skill, and Mean Quality

Goal-Directed Practice (n=12) - Self-Reinforcement (n=12) = 0

Multivariate F = .53 with 4,21 df; p < .71

Dependent Measure	Mean Square Between	Univariate F 1,24 df	p	Step-Down F	p
Anxiety	337.50	2.29	.14	2.29	.14
Attitude	32.67	.11	.15	.05	.83
Skill	4.17	.14	.71	.08	.79
Mean Quality	.00	.00	.99	.00	.97

In comparison of the no-treatment control group with the goal-directed practice group and self-reinforcement group, no significant differences were found (F = 1.04 with 4,21 df; $p < .41$). This was contrary to prediction and did not support the hypothesis. Results of the multivariate and univariate tests are in Table 28.

Duplication of hypothesis testing using three of the dependent variables with a new variable, mean quality, resulted in no significant interaction and no differences among main effects. These findings supported two hypotheses but failed to support the hypothesis of difference between no-treatment control and the average effects of goal-directed practice and self-reinforcement.

Table 28

Multivariate and Univariate Analysis of Variance and Step-Down F Statistics for Anxiety, Attitude, Skill, and Mean Quality

No-Treatment Control (n = 12) -

$$\frac{\text{Goal-Directed Practice (n=12)} + \text{Self-Reinforcement (n=12)}}{2} = 0$$

Multivariate F = 1.04 with 4,21 df; $p < .41$

Dependent Measures	Mean Square Between	Univariate F 1,24 df	p	Step-Down F	p
Anxiety	4.50	.03	.86	.03	.86
Attitude	382.72	1.25	.27	1.23	.28
Skill	88.89	3.02	.10	2.49	.13
Mean Quality	79.07	2.38	.14	.42	.52

Debriefing Questionnaire

The debriefing questionnaire, completed by subjects after final testing, asked for comments regarding the total training experience and experience in practicing the use of feeling statements. Responses were open-ended and were categorized for reporting purposes. Results reported are for those who received either goal-directed practice or self-reinforcement unless specifically stated.

In responding to an initial set of questions designed to assess self-reported outcomes, subjects reported that they gained in awareness and skill, and that they felt their relationships with others in their natural environment had improved. Frequency counts of categorized responses to these questions are presented in Tables 29, 30, and 31.

Subjects were asked two questions regarding their self-management projects. One asked if they actually did the project. Eighty % (10 of 13) of the self-reinforcement group responded in the positive. One person reported that he did it "most of the time," one "sometimes," and one did not do the project. Eighty-two % (14 of 17) of the goal-directed practice group reported completing the project and 18% (three subjects) did not. However,

Table 29

Frequency Count of Categorized Responses to "What Was of Most Value to You in the Training?"

Both Treatments	F	Self-Management	F
Audio test and anxiety test	1	Awareness	2
Awareness	4	Clear explanations	1
Definition of feeling statement	1	Daily appraisal	1
Evaluation of goal progress	1	Daily practice	4
Examples on videotape	1	Definition and method	1
Motivation to work on feelings	1	Goals achieved	1
Results achieved	2	Improved affect expression	1
Skill improvement	2	Programmed text	2
Training in openness	1	Reinforcement	1
Videotape	3		
	n = 17		n = 14

Table 30

Frequency Count of Categorized Responses to "Did You Learn Anything New About Yourself? If so, What?"

Both Treatments	F	Self-Management	F
Awareness of easy-going nature	1	Awareness of blaming	2
Can express feelings without being unmanly	1	Awareness of own quietness and nervousness	1
Communicate feelings less often than believed	8	Awareness of resistance to technique in affective domain	1
Competition from other men	1	Express positive affect to females; negative to males	1
Easier to talk to females	1	Feeling statements sometimes more effective	1
Nothing new	1	Hard to express feelings	1
Openness has positive results	2	Moods influence relationship	1
Positive self-image	1	Nothing new	3
		Owning feelings valuable	1
		Retreat to empathy from self-disclosure	1
		Value of expressing feelings	1
		When he pushes himself, he gets better results	1
	n = 16		n = 15

Table 31

Frequency Count of Categorized Responses to "How Do You Feel You've Benefited from the Experience?"

Both Treatments	F	Self-Management	F
Awareness	7	Awareness	1
Easier to make friends	1	Express self better	1
Improved communication	4	Expression of feelings; not repression	1
Know people better	4	Improved communication	2
Learned about self	1	Improved relationships	2
Method constantly in his mind	1	Owning of feelings	1
Personal reactions more precise	1	Practice	1
Trust others more	1	Reflection and action on openness	2
		Skill improvement	1
	n = 20		n = 12

when asked if they regularly met their goals, only 8% (one) of the self-reinforcement group and 29% (five) of the goal-directed practice group responded that they always met their goals. Forty-six % (6 of 13) of the self-reinforcement group met their goals most of the time. Eight % (1 of 13) of self-reinforcement met goals "sometimes" as did 12% (2 of 17) of the goal-directed practice group. Thirty-eight % of the self-reinforcement group (5 of 13) and 59% (10 of 17)

of the goal-directed practice group did not regularly meet their goals. The frequency counts are presented in Table 32.

Table 32

Frequency Counts of Subjects Who Did Their Self-Management Project and Met Goals Regularly

Self-Reinforcement n = 13		Goal-Directed Practice n = 17	
Did project	F	Did project	F
yes	10	yes	14
mostly	1	mostly	0
sometimes	1	sometimes	0
no	1	no	3
Regularly met goals		Regularly met goals	
yes	1	yes	5
mostly	6	mostly	0
sometimes	1	sometimes	2
no	5	no	10

Finally subjects were asked to judge whether it was easier for them to initiate or respond, express positive or negative feelings, and share feelings with male or female partners. Results for all four groups are presented in Table 33. Across groups the consensus was that respondent roles and positive emotions were easier, but that they could express affect to members of both sexes with equal ease.

Table 33

Frequency Counts of Preference for the Role of Initiator or Respondent, the Expression of Positive or Negative Affect and Male or Female Partners

	Both Treatments n = 15	Neither Treatment n = 4	Prior Treatment n = 5	Self-Management n = 15
Initiator	5	1	1	3
Respondent	10	3	1	9
Neither	0	0	3	1
Positive	13	3	4	9
Negative	0	0	0	0
No preference	2	0	1	3
Female	8	1	1	3
Male	4	0	1	5
No preference	3	3	3	7

Results from the debriefing questionnaire provided information from the subjects about their reactions to the entire training experience. Subjects reported increases in awareness and skills. Most completed their self-management projects, but many failed to meet their goals regularly. Across groups, subjects reported a preference for respondent role and positive affect, but no preference between male and female interactants.

Summary

Hypotheses tests supported two hypotheses and failed to support one. There was no interaction effect, and the main effects of goal-directed practice and self-reinforcement were equivalent. However, no significant

differences were found in comparing goal-directed practice and self-reinforcement with no-treatment control.

Supplemental tests indicated that these findings held when the dependent variables were reduced to three (quality, amount, and skill) or to four (anxiety, attitude, skill and mean quality). When repeated measures subscales dimensions were used as dependent variables, however, a significant multivariate and univariate interaction occurred around the feeling dimension for quality. On the same dimension, a univariate significance was found for amount.

No differences were detected between the two self-management groups on the repeated measures. Although multivariate differences were noted between no-treatment control and the self management groups, the interaction with prior treatment made this effect inconsistent.

Results were reported for four groups formed on the basis of a subject's total training experience. Significant differences were found between both treatments and the other groups on attitude and skill. Other comparisons between neither treatment, prior treatment, and self-management revealed no significant differences.

Finally, results of the debriefing questionnaire yielded impressions and judgments which may help with the interpretation of results. The interpretation, discussion, and implications follow in Chapter IV.

CHAPTER IV

SUMMARY, DISCUSSION AND IMPLICATIONS

Summary

The purpose of this research was to assess the effects of two self-management strategies used as primary training or as secondary procedures for training of males in self-disclosure of affect. The subjects were 36 undergraduate males enrolled at Michigan State University during the Spring quarter, 1975. All had participated in a prior study by Highlen (1975) which immediately preceded the present research. All subjects were tested in the prior study and half received one-hour videotape training in affect self-disclosure. Prior treatment involved four possible training conditions. These conditions were utilized as blocking variables.

A related purpose was to assess the application of behavioral change techniques to the achievement of humanistic goals. The target research behavior was conceptualized in humanistic terms as owning and sharing personal feelings with significant others. However the operational definition and self-management change techniques were taken from

behavioral theory and change methodology. As self-management essentially involves a person controlling his/her own change contingencies, it was considered especially appropriate for us in attaining humanistic goals because of the personal responsibility, freedom, and commitment inherent in self-change methods.

Finally, the research was designed to correct several flaws noted in prior self-disclosure studies which were reviewed in Chapter I.

1. content ambiguity--This research was limited to disclosure of affect in the present. Other studies had tended to treat cognitive and affective self-disclosure or past and present timing of disclosures as equivalent.

2. situational context--Testing for the present research was conducted in part with simulated interactions with best friends. Although this method was not as valid as measurement in actual situations, it was an improvement over pencil-and-paper measures. Also subjects practiced disclosing affect in their own environment with their best friends.

3. measurement validity--The simulated interaction test was considered superior to self-report questionnaires which have frequently been used in this field.

4. statistical analysis--Parametric inferential statistics were used in this study to compare treatment effects. Using a pre-set alpha level (.05) greatly reduced the chance of reporting small differences as significant ones.

Therefore, this study attempted to introduce a stronger methodology and new change techniques for training in affect self-disclosure. Differences among three treatments and interaction with prior treatment were studied in data analysis.

The study was designed as a posttest only with three levels of treatment and four levels of prior treatment, a blocking variable. Subjects were randomly assigned to blocks and randomly assigned from blocks to treatments. All subjects were volunteers. As volunteers were recruited over several days, training was staggered over three weeks, and all subjects received individual training. Each subject had a three-week waiting period before final testing. For the two self-management groups, this time was designated as the span of their individual change projects.

At their final appointment, subjects were tested and given small reinforcers for participating. After testing was completed, the control subjects were given treatment. Testing covered five dependent variables. These were amount of affect, quality of affect, anxiety, attitude, and skill. Amount and quality were measured by ratings of typescripts prepared verbatim from audiotape recordings. Anxiety was a concomitant self-report measure. Attitude and skill were measured from pencil-and-paper tests. Hoyt reliability for ratings was .99 for amount and .99 for quality. Reliability for the attitude test was .84; skill reliability was .87.

Two-way multivariate analysis of variance was used for hypothesis testing. Two hypotheses were supported in that no interaction was found and no significant difference was found between goal-directed practice and self-reinforcement. However, the third major hypothesis, which predicted that goal-directed practice and self-reinforcement were superior to the no-treatment control condition, was not supported.

Supplemental testing resulted in the findings of hypothesis tests remaining unchanged when only quality, amount, and skill were tested as well as when anxiety, attitude, skill and mean quality were used. On repeated measures multivariate and univariate analysis of variance using eight subscale dimensions of amount, quality, skill, and attitude as dependent variables, a significant multivariate and univariate interaction was found for quality on the feeling dimension. For amount, univariate significance was found for the same dimension. These interactions indicated quite a variance within present treatment groups on this dimension. Therefore, when significant differences were found between present treatment groups, the differences were largely attributed to interaction effects.

On another supplemental test, the independent variable was a subject's total training experience. In this one-way multivariate test, the <u>both treatments</u> group was significantly better than other groups. No difference

was found between prior treatment and self-management or between these two and the neither treatment group. The latter finding was contrary to prediction.

Finally, results of a debriefing questionnaire were described. It seemed from these responses that the subjects gained in awareness and in skills. However, subjects also reported that only 80% always did their change projects. Also, only 29% of the goal-directed group met their goals most or all of the time; in the self-reinforcement group, this was 54%.

The purpose, methodology, and results of this research were presented as summary and background for further consideration of the results and what they mean.

Limitations

Three major limitations were considered relevant to understanding this research. These limitations concern validity and soundness of measures, nature of the subjects and subject attrition, and the design and methodology of the study.

Validity. Three matters of validity need to be discussed. The first is a general one which relates to any study of self-disclosure. How can a researcher or practitioner be sure that the verbalization or responses of an individual represent disclosures of self and not parroting of the phrases of others, a script, or other artificial

communication? It is most difficult to tell. This presented a problem in the present research. In the audiotape test from which amount and quality were measured, standard situations were used for all subjects. Interactions were simulated and some subjects did report that they would have preferred interacting with another person. To some extent, the artificial nature of the simulation must have affected the authenticity of the subjects' self-disclosure.

A related validity question is one which relates to all the dependent measures. Although tested for reliability, none of the measures was tested for concurrent or predictive validity. With this question unsettled, it is hard to interpret results completely.

The third possible threat to validity is that two scores were derived from ratings. With raters, although reliability was high, the possibility of consistent ratings which were too high or too low exists. Raters were carefully trained, however, which lessens the probability of this as a serious limitation. Nevertheless, it should be considered.

Subjects. Subjects in this experiment were undergraduate male volunteers from a large state university. Generalization of results must necessarily be limited to such populations. It is important to note that results cannot validly be extended to non-volunteer populations. Also subjects received tangible reinforcers for their

attendance at final testing. Although they did not know reinforcement would be offered until shortly before their appointment day, it is entirely possible that the offer of reinforcement influenced their decision to attend that session. In addition, all subjects in this research were previously tested with the same measures and half of them had been previously trained. The effect of testing may be a limitation, as well as the fact that the subjects were quite aware of their involvement in special experimental conditions.

Another aspect of limitations related to subjects in subject attrition. The loss of subjects resulted in the loss of statistical power because cell size for hypothesis testing was reduced. Also, subjects were randomly dropped from all groups until equal cell sizes were achieved, the subjects who did not return belonged overwhelming to the no-training conditions of prior treatment or the traditional follow-up groups. It is difficult to account for differences between those who dropped out and those who stayed except in terms of possible differences in interest and motivation. Therefore, it is conceivable that the subjects in either of the no-treatment groups were more interested and motivated than other subjects. This certainly would constitute a limitation to the study.

Design. Some limitations are inherent in the posttest only design. The primary one, according to Campbell and Stanley (1963) is a limit or generalization to other groups which participate in special experimental conditions. Because of previous testing, there could be a reactive effect of testing.

A final limitation was the choice of five multiple measures. As quality and anxiety were the variables of major interest, it might have been better to use only these two measures. This would have altered the univariate alpha level and increased power.

The limitations of this study include possible threats to validity as well as problems connected with subjects and design. These limitations, which may have decreased power and precision, may be partially responsible for the failure to achieve statistical significance.

Discussion of Results

Results of hypothesis testing were very interesting. All seemed consistent with predictions and observed cell means except the contrast between traditional follow-up and the average of goal-directed practice and self-reinforcement (see Table 4). Except for anxiety and attitude, it seems possible that the trend of change would favor detection of differences if the power and precision of the test were both higher or if treatments were made more potent. The smaller differences between goal-directed

practice and self-reinforcement make it seem unlikely that such changes would produce significant differences in terms of this contrast. Therefore, it appears that the two treatments do have equivalent effects. If this is true, economy is gained through use of the goal-directed practice package as it is the shorter one to complete and the cards require somewhat less recording.

A factor to be considered in discussing hypothesis test results is the fact that not all self-management subjects fulfilled their change contracts. Insufficient motivation and unrealistic goals may account for many of the difficulties. It is worth noting that several more of the self-reinforcement groups actually met their goals, which was a condition for reinforcement. This seems to indicate a rationale for possible use of self-reinforcement, despite the fact that treatment effects were equivalent. Therefore, with college males the addition of reinforcement to a goal-directed change program for affective self-disclosure does not significantly change the treatment effect, but the reinforcement may serve as additional incentive to meet goals.

As for the supplemental tests, the one testing effects of the total training experience was the one of most interest to this researcher. The groups receiving <u>both treatments</u> scored better than all other groups, and significant differences were found. This seems to support the contention underlying this research that short-term

treatments are best combined with change-oriented secondary treatment programs if results are to be maintained.

The failure to detect differences between either single treatment and neither treatment is difficult to understand. Observed cell means indicate that the neither treatment group scored lower. The lack of significance may be related to possible attrition bias in the neither treatment group. Low power and precision should also be considered as possible causes.

The other supplemental tests provided little new information. The interaction on the quality and amount repeated measures tests are difficult to explain. On the feeling dimension, positive feelings are preferred by the sample, as indicated by their responses to the debriefing questionnaire. However, this preference was uniform, and the interaction effect denotes lack of uniformity. Possibly, individual differences are overly represented because of small cell size. The possibility also remains that of those who practiced self-disclosure of affect in their own environments, some may have had very unpleasant experiences with only positive or only negative emotions.

The debriefing questionnaire lends some final light on results. As noted in Chapter I, Bandura (1971) and Kanfer (1971) both conceptualize a chain of (a) self-monitoring or self-awareness, (b) self-evaluation, and (c) self-reinforcement. It was one of the intentions of

this study to compare the last two. However, responses on the debriefing questionnaire most clearly indicate that self-awareness was a major result. Other gains for subjects included improved skills and better interpersonal relationships.

In summary, it seems possible that some differences were not detected because of insufficient power, small cell size, and differential subject attrition. The equivalence of goal-directed practice and self-reinforcement would probably hold even if these limitations were corrected. This is the first experimental evidence to suggest that the achievement of goals is inherently reinforcing for college students. This reinforcing effect is probably related to positive self-evaluations which come from reaching goals. On the other hand, although the groups scored similarly on all measures, many more of the self-reinforcement group regularly met their goals during their change projects. As there is no reason to believe that self-reinforcement goals were more realistic than those set by the goal-directed group, it seems likely that reinforcement served as motivation for meeting goals. Therefore it appears possible that self-reinforcement in this study proved to be a motivator only and that overt self-reinforcement was not a necessary condition for change. In this context, the positive feedback gained from a self-evaluation of goal achievement could be considered a covert self-reinforcer which was at least as effective as overt self-reinforcement.

Of the supplemental tests, the most important and interesting is the significant differences between both treatments and all other conditions. This combination of modeling plus self-management and cognitive structuring plus self-management is similar to many two-phase behavioral strategies used in counseling practice. As the subjects' change projects were totally unsupervised, this combined treatment cost in experimenter time was limited to production of the learning packages. Although this researcher chose to supervise the experiment personally, an assistant or clerk could easily supervise up to six subjects at a time. Thus, both treatments do not require large amounts of professional time to administer. Audiotape and videotape equipment are necessary, however. Still, both treatments are effective and relatively inexpensive.

Implications of the Study

Few clear implications can be drawn from this research. Many results were not statistically significant and others were contradictory. It is apparent that both treatments proved most effective, that no interaction occurred between prior treatment and no-contact control treatments, and that goal-directed practice and self-reinforcement produced equivalent results. Implications from these results are primarily:

1. support for the contention that multi-phase change strategies are more effective than one-shot short term treatments

2. support for the benefit of further research into the relationship between goal-achievement and self-reinforcement

In terms of the stated purposes of this study, there are further implications. The assessment of the effects of self-management is, in this researcher's opinion, incomplete due to research limitations and merits further study. In terms of the application of behavioral methods to humanistic research and the correction of earlier research flaws, much has been accomplished. Behavioral strategies, though not yet proven effective, have been used to train subjects in self-disclosure of affect. New measures, although currently untested for validity, were able to provide medium level simulation tests with controlled content and intimacy level. It would seem that these accomplishments support the use of behavioral techniques and measurement in self-disclosure research.

Suggestions for Future Research

As this research was conducted without many concrete prior findings, much of the preceding section has indicated directions for future research. In general, the desirability of continued use and development of behavioral

measures and behavioral techniques for accomplishing humanistic goals has been given some support by this research. Specifically, however, suggestions for future research include:

1. comparison of the effects of goal achievement and self-reinforcement as primary treatment in analogue studies

2. further study of self-management strategies as secondary treatment procedures with short term interventions

3. study of affect self-disclosure patterns among women (calls frompotential female subjects indicated that they believed they were better than men in amount but not in quality).

Future researchers would be wise to reduce to only two dependent variables, amount and quality. In addition, a cell size of at least five should be considered minimum.

In Retrospect

A dissertation is meant to be a learning experience, and this researcher would alter several aspects of her study if it were repeated. These alterations include:

1. subject selection--It would be preferable to have a large pool of quasi-voluntary subjects, such as introductory psychology students offered extra credit. This would have saved time and money. In addition, the attrition of subjects would have been controlled.

2. size of sample--Sample size would be increased to 60.

3. dependent measures--Only quality of affect and amount of affect would be used.

4. treatment packages--More explanation and development of the rationale and validity of the target behaviors would be given.

5. change project cards--On each weekly goal card, the definition of the target would be repeated.

6. supplemental tests--All supplemental tests except the test for total training experience and the debriefing questionnaire would be omitted. These changes would provide a sounder, more economical research program.

Results of this research are not conclusive. As the research was in new areas, it is perhaps not surprising that it generated more questions than it answered. This researcher believes that both affect self-disclosure and self-management are areas where further research is merited. She trusts that her study will prove valuable to others in designing future studies.

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APPENDICES

APPENDIX A

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POSTER ADVERTISEMENT

IMPROVE YOUR COMMUNICATION SKILLS

A short-term research/training program will be conducted during the remainder of the term. The program will focus on the expression of feelings to others. If you are a single, male undergraduate, you qualify for this program. There will be 2 sessions, and total time commitment will be approximately 4 hours. Sessions will be arranged according to free time in your class schedule. All materials will be provided, and there is no charge for this training.

IF YOU ARE INTERESTED,

CALL: 355-1755

OR

353-3798

OR

372-8913

ANYTIME.

APPENDIX C

LETTER TO SUBJECTS

LETTER TO SUBJECTS

Dear

Your next appointment for Communication Skills Training is scheduled for at in room 250 Erickson Hall. If you have been working on a self-management project, please bring your cards in with you. Otherwise, all materials will be provided.

It is VERY IMPORTANT to us that you come in for this appointment. In fact, we have planned to present some tangible rewards for your attendance. You have a choice of money, a bottle of wine, or a plant. If you need to change the time of your appointment or have any other problem, please call one of us soon. Otherwise we'll see you at your appointment time.

Thank you for your cooperation!

Phone numbers: 355-1755
353-3798
372-8913

Pam Highten
Nancy Wright

APPENDIX D

SELF-MANAGEMENT PROJECTS

SELF-MANAGEMENT PROJECTS

The self-management process you will learn in this booklet will help you practice new communication methods in your own environment. The procedure is individualized so you can:

a. adapt the project to your own needs

b. decide how much you want to change

c. set your own pace for practicing

d. fit the new communication methods into your own daily routine

You will learn the process and plan your project today. The project will last three weeks as you practice at home. After the project, you will be asked to return for a follow-up appointment.

This text is programmed for individually-paced learning. When you come to a *, it means there is a question which follows. All questions which are numbered and have a * are keyed to answers which follow each set of questions. You can cover the answers and then check with your responses to get feedback on your progress as you go along. On the Check Understanding quiz at the end of each section, a criterion level for success is given. If you

do not reach the criteria level for success is given. If you do not reach the criteria at first, reread the section until you meet the criteria.

In order to run your own self-management project, you will need to understand the process so well that you could literally teach another person to do it. After you finish reading this pamphlet, an assistant will come in and you will explain the self-management process to him or her.

OK? Settle back and work through the programmed pamphlet. First the communication skill will be defined. Then the process of goal setting will be presented and you will set a goal for yourself. Finally you will learn the principles of shaping, develop a shaping plan, a change contract, and record your goals, and shaping plan on daily goal cards which you'll use at home.

SECTION ONE

Definition

The communication skill you will focus on is making clear statements of your feelings. Such statements can help your friends know you better and understand you and the reasons for your feelings. In this way, you will be communicating better with each other. Better communication will occur when you express your feelings in ways that help the interaction continue rather than block the communication. The best feeling statements to make to continue communication are ones in which you label a feeling, identify it as

your own, and give a reason for the feeling without blaming another person. Usually both positive and negative feelings are best discussed in the present, or how you feel now.

One key to good feeling statements is OWNING the feeling. This means that you make it clear that you take responsibility for your own feeling. No one makes you feel the way you do. If you blame the other person, communication is usually blocked because he/she gets defensive. Note the subtle difference between "You disgust me." (blaming) and "I'm disgusted with you." (owning). Therefore, it is best to use statements with I or my as part of the subject, like "I feel depressed," or "My mood is sad."

rule: You own your feelings when you use statements with I or my as part of the subject.

Another key to effective communication is labeling and verbalizing feelings. Emotions can be expressed non-verbally, as well, but non-verbal expressions are more ambiguous and hard for others to interpret. If you want to be sure to be understood, you need to verbalize feelings, also. Feelings can be expressed verbally by verbs (like, enjoy, hate, frustrate) by adjectives (happy, angry, excited, sad) or adverbs (joyfully, badly).

rule: Label feelings with verbs, adjectives, or adverbs.

It is better to deal with the here and now when you express feelings. The more spontaneous you can become at

recognizing, labeling, owning, and expressing feelings in the present, the better your communication of emotion will be. Therefore, present time is usually better than past time. If you are happy now, it's good to say that instead of "I felt happy," which sounds like the feeling doesn't affect you anymore.

rule: Use present time when expressing feelings.

Another key to good communication of feelings is giving a clear specific reason. This is the event, interaction, situation, or thought which triggered the feeling in you. Usually the more specific you can be, the clearer the reason is. If you are miserable because your stereo was stolen, it's better to say that than to say you're miserable because of your stereo. Look for the part of the situation which brings on the feeling. Therefore, people can understand what cues your reactions. This is helpful for three reasons:

a. it opens communication and you can discuss the part of the situation which elicited feelings.
b. it gives the other person information to shape their future behavior.
c. the person is less likely to over react and believe the feeling applies to their self instead of their behavior.

rule: Give a specific reason for the feeling.

*1. What is a good feeling statement?

a. It uses _____ or _____ in the subject.

b. It is in _____time.

c. A verb, adverb, or adjective expresses _____.

d. A part of a situation, event, interaction, or thought is given as the _____ for the feeling.

ANSWERS:

1. a. I my

b. present (now)

c. feeling (emotion)

d. reason

Examples of Good Feeling Statements

The following are examples of good feeling statements. They use I or my as the subject, are in present time, express feelings, and give a reason for the feeling. Examples are given of both positive feelings and negative feelings. The feeling word is underlined.

a. I am really angry because you slapped me.

b. My feelings are hurt. It seemed like you were flirting with another guy.

c. I'm so excited! I get to go to Spain this summer!

d. You're so understanding; I really love talking to you.

Note that the reason can come right before or after the feeling, and it can be part of another sentence.

Check Understanding I

Remember, answers are on the answer sheet. If you get seven of the eight statements correct, go on to the next section. If not, review this section.

Place a check in front of all statements which are good feeling statements.

*_____2. You hurt me when you said that.

_____3. I get excited when I talk to you.

_____4. I was sad yesterday.

_____5. I'm really glad that you came to visit me.

_____6. You hit me pretty hard, and I'm surprised.

_____7. I feel badly because I expected an A and got a C.

_____8. You said you liked me, and I feel really good about that.

_____9. I'm happy about that.

ANSWERS:

2. no-blames another
   I not the subject
   Past time

3. yes

4. no-past time
   no reason

5. yes

6. yes

7. yes

8. yes

9. no-reason vague

If you got seven of eight correct, you understand the definition of the skill you will work on. Next, goal

setting, the first step in the self-management process, will be presented.

SECTION TWO

Goal-Directed Behavior

Now that you understand what to work on, let's move to how you will do it. The process will involve setting goals and working to meet them. A goal is important in the process because:

a. a goal gives you something to work towards
b. when you've reached your goal, you know you've achieved something

Over the next three weeks, you will be making feeling statements daily to meet goals you have set for yourself. You will record on cards when you meet your goals.

The Goal-Directed Process

Think now of the definition of a feeling statement which you learned in Section One. How many of these statements do you make per day now? How many did you make today? What about yesterday? Think of the average and write it here _____. It is not unusual to average 0 to 1. Now, think into the future. After three weeks of practice, how many would you like to be making per day? Write that number here _____.

The number you just wrote is your final goal--the number of feeling statements you'll make each day to close

friends after three week's practice. Before you commit yourself to the goal, ask yourself some questions:

a. is the goal too large?
    1. do you have enough time to make that many statements each day?
    2. do you see your close friends enough to be able to meet your goal?
    3. can you really imagine yourself making that many feeling statements each day?

If you answer NO to any of these questions maybe your goal is too large.

b. is the goal too small?
    1. is it only one?
    2. does it seem so easy that you could do it right away?
    3. is it very close to your average now?

If you answer YES to any of these questions, maybe your goal is too small.

Examples of Final Goals

a. In three weeks, I shall be making five feeling statements each day to close friends.
b. I make no feeling statements now. In three weeks I want to be making three each day.

Practice Goal Writing

A goal is for you to use and is a personal thing. It depends on your average number of feeling statements

now as well as your interest and how many statements of feeling you'd really like to make at the end. Think over or reread the material in this section and make a commitment to a goal. In three weeks, how many feeling statements do you want to be making to close friends each day? This is your final goal. Write it here _____.

Check Understanding II

Answers follow immediately after this understanding check. If you get three of four correct, go on to Section III. If not, review this section.

*10. Your final _____ is the number of feeling statements you'll make each day after three weeks.

11. You know you've achieved something when you've met your _____.

12. If a person is making one feeling statement a day now, all his friends live in Cincinnati and he sets a final goal of 25 statements a day in three weeks, there's a chance his goal is too _____.

13. A goal is personal. Only _____ really know if your goal is right.

ANSWERS:

10. goal

11. goal

12. large

13. you

Did you get at least three correct? Then it's time to learn how to meet goals gradually.

SECTION THREE

Principles of Shaping

Shaping, as it applies to this project, is the process of breaking down a big job into little jobs or small steps which are easier to make. When changes are gradual, both you and your friends have time to adapt to the change. Also your chances of success are better if you work in small steps rather than jump from where you are now to your final goal.

You will be working on your project for three weeks. The shaping process involves setting three weekly goals that are three steps toward reaching your final goal. Step One should be a small step, maybe just one each day of Week One. If Step One is three feeling statements per day, this is your goal for each day of the first week.

During the second week of your project, set your weekly goal (Step Two) closer to the final goal. This will be a middle point--somewhere between the small step, Step One, and the final goal, Step Three. Again, each day of Week Two, your daily goal will be the same.

Week Three is Step Three, and your daily goals will be the same as your final goal.

Shaping in this project, then, involves deciding on:

a. a first step--which is small and close to your present average. The number of statements you want to make during Step One is your daily goal for each day of Week One.

b. a second step--which is between your first step and your final goal. Each day of Week Two, you will make the same number of feeling statements.

c. a third step--which is the same as your final goal. Each day of the third week, your daily goal will be the same as your final goal.

Special case: If your final goal is two statements per day, make Step One and Step Two both one feeling statement daily. Then make two statements each day during Week Three.

Example of Shaping

If a person is making two feeling statements a day now and has set a final goal of six feeling statements daily, his shaping plan might be:

Step One--During the first week, I will make four feeling statements to close friends each day.

Step Two--During the second week, I will make four feeling statements to close friends each day.

Step Three--(final goal)--During the third week, I will make six feeling statements to close friends each day.

Develop Shaping Plan

Based on what you know about shaping, you can now make a shaping plan for your project. Write your answers to the following questions.

What is your average daily number of feeling statements now? _____

What is your final goal? _____

What is a small first step? _____

Step One: During the first week, you want to make _____ feeling statements to close friends each day.

What is a middle number of statements? _____

Step Two: During the second week, you want to make _____ feeling statements to close friends each day.

What is your final goal? _____

Step Three: During the third week, you want to make _____ feeling statements a day.

Check Understanding III

Answers follow this section. If you get five of six correct and are satisfied with your shaping plan, go on to Section IV. If you miss two or are not satisfied with your shaping plan, review this section.

*14. Taking small steps to gradually reach a final goal is called _____.

15. How many steps are there in this project? _____

16. The _____ step should be small and close to your present daily average number of feeling statements.

17. During Week _____, your daily goal should be between Step One and the final goal.

18. Daily goals in Week Three are the same as the _____ goal.

19. Each daily goal during a week is (the same, different than) each other daily goal for the week (Circle the correct answer).

ANSWERS:

14. shaping
15. three
16. first
17. two
18. final
19. same

If you missed more than one, review Section III. You now know about the definition of a good feeling statement about goals, and about making a shaping plan. These are the principles you need for your self-management project. Next, you'll learn the techniques you'll use at home.

SECTION FOUR

Reinforcement

When you are working on your project, you are changing a habit system which you learned over a number of years in which you did not regularly express your feelings in ways which aided communication. Learning occurs when you are rewarded (reinforced) for doing or saying certain things and punished or ignored for others. Young children learn to communicate by modeling or copying the speech patterns of their families. When the children copy their parents' patterns well, they are praised, or verbally reinforced. This makes the children want to learn more. Often young

children of both sexes act out their emotions and express their feelings freely. However, boys in early elementary school start getting punished instead of praised for expressing feelings. They are spanked and teased and naturally they learn not to express feelings so often. If communication of feelings can be learned initially through reinforcement and later unlearned through punishment, it can probably be relearned with reinforcement. Therefore, whether you are learning a new communication skill or increasing one you already have, it is best to reinforce or reward yourself as change. Reinforcers can be events, material things, activities, thoughts, or people which bring you pleasure. Try to think of five reinforcers now and write them here:

a.

b.

c.

d.

e.

Reinforcement Inventory

Did you have difficulty thinking of reinforcers? Many people do. To help you think of other ideas for reinforcers, fill out the two reinforcement surveys which follow.

What kinds of things do you like to have?

What are your major interests?

What are your hobbies?

What people do you like to be with?

What do you like to do with these people?

What do you do for fun, for enjoyment?

What do you do to relax?

What do you do to get away from it all?

What makes you feel good?

What would be a nice present to receive?

What would you buy if you had an extra five dollars?

REINFORCEMENT SURVEY SCHEDULE

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The items in this questionnaire refer to things and experiences that may give joy or other pleasurable feelings. Check each item in the column that describes how much pleasure it gives you nowadays.

	Not at All	A Little	A Fair Amount	Much	Very Much
Section I					
1. Eating					
a. Ice Cream	____	____	____	____	____
b. Candy	____	____	____	____	____
c. Fruit	____	____	____	____	____
d. Pastry	____	____	____	____	____
e. Nuts	____	____	____	____	____
f. Cookies	____	____	____	____	____
2. Beverages					
a. Water	____	____	____	____	____
b. Milk	____	____	____	____	____
c. Soft drink	____	____	____	____	____
d. Tea	____	____	____	____	____
e. Coffee	____	____	____	____	____
3. Alcoholic Beverages					
a. Beer	____	____	____	____	____
b. Wine	____	____	____	____	____
c. Hard liquor	____	____	____	____	____
4. Beautiful Women	____	____	____	____	____
5. Beautiful Men	____	____	____	____	____
6. Solving Problems					
a. Crossword puzzles	____	____	____	____	____
b. Mathematical problems	____	____	____	____	____
c. Figuring out how something works	____	____	____	____	____
7. Listening to Music					
a. Classical	____	____	____	____	____
b. Western Country	____	____	____	____	____
c. Jazz	____	____	____	____	____
d. Show Tunes	____	____	____	____	____
e. Rhythm and Blues	____	____	____	____	____
f. Rock and Roll	____	____	____	____	____
g. Folk	____	____	____	____	____
h. Popular	____	____	____	____	____
8. Nude Men	____	____	____	____	____
9. Nude Women	____	____	____	____	____

	Not at All	A Little	A Fair Amount	Much	Very Much
10. Animals					
a. Dogs					
b. Cats					
c. Horses					
d. Birds					
11. Watching Sports					
a. Football					
b. Baseball					
c. Basketball					
d. Track					
e. Golf					
f. Swimming					
g. Running					
h. Tennis					
i. Pool					
j. Other					
12. Reading					
a. Adventure					
b. Mystery					
c. Famous People					
d. Poetry					
e. Travel					
f. True Confessions					
g. Politics and History					
h. How to-do-it					
i. Humor					
j. Comic Books					
k. Love Stories					
l. Spiritual					
m. Sexy					
n. Sports					
o. Medicine					
p. Science					
q. Newspapers					
13. Looking at Interesting Buildings					
14. Looking at Beautiful Scenery					
15. T.V., Movies or Radio					
16. Like to Sing					
a. Alone					
b. With Others					
17. Like to Dance					
a. Ballroom					
b. Discotheque					
c. Ballet or Interpretive					
d. Square dancing					
e. Folk Dancing					

		Not at All	A Little	A Fair Amount	Much	Very Much
18.	Performing on a Musical Instrument					
19.	Playing Sports					
	a. Football					
	b. Baseball					
	c. Basketball					
	d. Track and Field					
	e. Golf					
	f. Swimming					
	g. Running					
	h. Tennis					
	i. Pool					
	j. Boxing					
	k. Judo or Karate					
	l. Fishing					
	m. Skin-diving					
	n. Auto or cycle racing					
	o. Hunting					
	p. Skiing					
20.	Shopping					
	a. Clothes					
	b. Furniture					
	c. Auto parts and supply					
	d. Appliances					
	e. Food					
	f. New car					
	g. New place to live					
	h. Sports equipment					
21.	Gardening					
22.	Playing Cards					
23.	Hiking or Walking					
24.	Completing a Difficult Task					
25.	Camping					
26.	Sleeping					
27.	Taking a Bath					
28.	Taking a Shower					
29.	Being Right					
	a. Guessing what somebody is going to do					
	b. In an argument					
	c. About your work					
	d. On a bet					

		Not at All	A Little	A Fair Amount	Much	Very Much
30.	Being Praised					
	a. About your appearance..	____	____	____	____	____
	b. About your work.....	____	____	____	____	____
	c. About your hobbies.....	____	____	____	____	____
	d. About your physical strength.....	____	____	____	____	____
	e. About your athletic ability.....	____	____	____	____	____
	f. About your mind.....	____	____	____	____	____
	g. About your personality.	____	____	____	____	____
	h. About your moral st strength.....	____	____	____	____	____
	i. About your understanding of others.....	____	____	____	____	____
31.	Having People Seek You Out for Company.....	____	____	____	____	____
32.	Flirting.....	____	____	____	____	____
33.	Having Somebody Flirt with You.....	____	____	____	____	____
34.	Talking with People Who Like You.....	____	____	____	____	____
35.	Making Somebody Happy.....	____	____	____	____	____
36.	Babies.....	____	____	____	____	____
37.	Children.....	____	____	____	____	____
38.	Old Men.....	____	____	____	____	____
39.	Old Women.....	____	____	____	____	____
40.	Having People Ask Your Advice.....	____	____	____	____	____
41.	Watching Other People.....	____	____	____	____	____
42.	Somebody Smiling at You....	____	____	____	____	____
43.	Making Love.....	____	____	____	____	____
44.	Happy People.....	____	____	____	____	____
45.	Being Close to an Attractive Man.....	____	____	____	____	____
46.	Being Close to an Attractive Woman.....	____	____	____	____	____
47.	Talking About the Opposite Sex.....	____	____	____	____	____
48.	Talking to Friends.....	____	____	____	____	____
49.	Being Perfect.....	____	____	____	____	____
50.	Winning a Bet.....	____	____	____	____	____
51.	Being in Church or Temple..	____	____	____	____	____
52.	Saying Prayers.....	____	____	____	____	____
53.	Having Somebody Pray for You.....	____	____	____	____	____
54.	Peace and Quiet.....	____	____	____	____	____

Section III -- Situations I Would Like To Be In

How much would you enjoy being in each of the following situations?

1. You have just completed a difficult job. Your superior comes by and praises you highly for "a job well done." He also makes it clear that such good work is going to be rewarded very soon.

not at all ( ) a little ( ) a fair amount ( ) much ( ) very much ( )

2. You are at a lively party. Somebody walks across the room to you, smiles in a friendly way, and says, "I'm glad to meet you. I've heard so many good things about you. Do you have a moment to talk?"

not at all ( ) a little ( ) a fair amount ( ) much ( ) very much ( )

3. You have just led your team to victory. An old friend comes over and says, "You played a terrific game. Let me treat you to dinner and drinks."

not at all ( ) a little ( ) a fair amount ( ) much ( ) very much ( )

4. You are walking along a mountain pathway with your dog by your side. You notice attractive lakes, streams, flowers, and trees. You think to yourself, "It's great to be alive on a day like this, and to have the opportunity to wander alone out in the countryside."

not at all ( ) a little ( ) a fair amount ( ) much ( ) very much ( )

5. You are sitting by the fireplace with your loved one. Music is playing softly on the phonograph. Your loved one gives you a tender glance and you respond with a kiss. You think to yourself how wonderful it is to care for someone and have somebody care for you.

not at all ( ) a little ( ) a fair amount ( ) much ( ) very much ( )

6. As you are leaving your place of worship, a woman turns to you and says, "I want you to know how much we appreciate all that you did for us in our time of trouble and misery. Everything is wonderful now. I'll always remember you in my prayers."

not at all ( ) a little ( ) a fair amount ( ) much ( ) verymmuch ( )

A Now place a check next to the number of the situation that appeals to you most.

Section IV

List things you do or think about more than:

5	10	15	20 times a day

Principles of Reinforcement

If you reward or reinforce yourself following an activity, you will be more likely to engage in that activity again. With the communication skill, making feeling statements, you will find it easier to learn if you reinforce yourself for meeting your goals. Reinforcement, technically is using a very positive stimulus to increase the chances of another

Principles of Reinforcement

If you reward or reinforce yourself following an activity, you will be more likely to engage in that activity again. With the communication skill, making feeling statements, you will find it easier to learn if you reinforce yourself for meeting your goals. Reinforcement, technically is using a very positive stimulus to increase the chances of another stimulus happening in the future. When you study an hour, you take a break. This relaxation reinforces studying. Usually reinforcement should occur very soon after the learning you wish to encourage, in this case, meeting your goals. Another very important point is that the reinforcement must be contingent upon (depend on) the meeting of your goals. You must deny yourself the reinforcer if you don't meet the goal. "Grandma's Law" was the same principle, "Eat your vegetables and you can have ice cream." Grandma knew what she was doing. She wanted to encourage vegetable eating so she made receipt of a reinforcer, ice cream, dependent on vegetable eating. In the case of vegetable eating, Grandma provided the reinforcement. Other people may reinforce you for making feeling statements but for this project, you want to reinforce yourself, too. In that way you are self-managing. You are changing your own communication pattern by gradually increasing feeling statements and reinforcing yourself for making them. Depending on the reinforcer you choose, you can reinforce yourself for meeting each daily goal or for meeting several goals, like six out of seven days a week.

Examples of Reinforcement

a. You meet your goal six of the seven days of the first week and buy yourself a new record.
b. You have a midnight snack each day you meet your goal.
c. You watch television an extra half hour each night if you've met your goal.
d. You go to a movie if you've met your daily goals each day for a week.
e. You play a game of pinball each day you meet your goal.

Choose Reinforcers

From your list, the inventories, or any other thoughts you have, choose three reinforcers for yourself. Be sure you are willing to use the reinforcer ONLY if you meet your goals and will NOT use it if you DON'T meet your goals. The reinforcer can be for every day or for once weekly. Write your three choices here and circle daily or weekly.

a. _____ daily weekly
b. _____ daily weekly
c. _____ daily weekly

Check Understanding IV

Look at your reinforcers and ask yourself these questions:

a. Are they possible? _____

b. Can I give them to myself? _____

c. If they cost money, can I afford them? _____

d. Will I use them only if I meet my goals? _____

e. Are they really pleasant for me? _____

f. Is it worth working on the project to get these reinforcers? _____

If you answered NO to any of these questions, review Section IV and choose other reinforcers. A reinforcer will only work if you can control when you use it. Next, let's look at making a specific reinforcement plan which will work for you.

SECTION FIVE

Reinforcement Plan

You have some choices with your reinforcement plan. One that has already been mentioned is that you can reinforce yourself every day for meeting daily goals or you can reinforce yourself once each week for making six or all seven daily goals. Which would work best for you, daily or weekly? _____

Another choice is whether you want to change reinforcers each week or use the same reinforcer for all three weeks. This does not affect how often you get reinforcement. It only affects the variety of reinforcers. For example, if you choose records as your only reinforcer weekly, you could buy a different record each week and still be using just one kind of reinforcer. Or, you could reinforce with a record

for week one, a movie for week two, and a concert forweek three. Which do you prefer? To use one kind of reinforcer each week (or every day of each week) or to change reinforcers each week? Circle SAME or DIFFERENT.

Write your reinforcement plan now. Fill in your plan under daily or weekly reinforcement.

Daily Reinforcement:

Each day of Week One, I will reinforce myself with _____

Each day of Week Two, I will reinforce myself with _____

Each day of Week Three, I will reinforce myself with _____

Weekly Reinforcement:

After meeting _____ of my daily goals during Week One, I will reinforce myself with _____.

After meeting _____ of my daily goals for Week Two, I will reinforce myself with _____.

After meeting _____ of my daily goals for Week Three, I will reinforce myself with _____.

Check Understanding V

a. What is/are your reinforcer(s)? _____

_____

b. Are you using daily or weekly reinforcement? _____

c. Does your reinforcer change each week? _____

d. When you you reinforce yourself? _____

If you do not know the answer to any of these questions, review Section V. If you know them all, you understand your reinforcement plan. By this time you know the

principles of self management--the definition of a good feeling statement, how to set goals, how to use shaping and reinforcement. Now you'll learn the techniques to use at home.

SECTION SIX

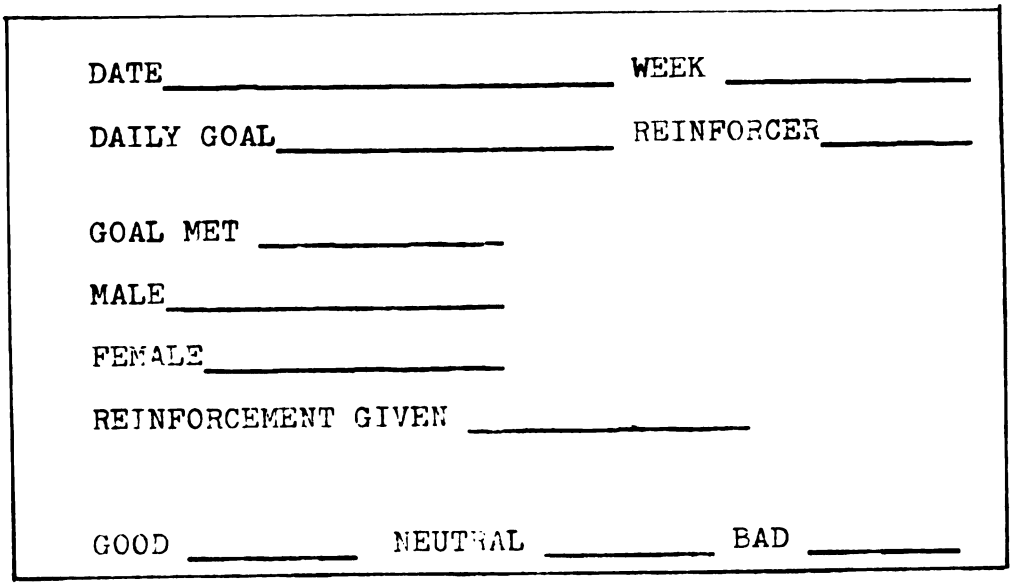
Summary of Project

At your table or desk, you will find a small booklet of cards. You will use these to record your daily goals, note when you reach goals, mark if you expressed your feelings to a male or female, tell if it went well or badly, check that you reinforced yourself. The steps in filling out the cards are:

a. Turn to the card (#1) which says "Final Goal" at the top. Record your final goal on this card.

b. On the next card (#2) write tomorrow's date, your goal for Step One (Week One) and your reinforcement plan for Week One.

The next seven cards are for Week One. They each should look like this:



c. Write tomorrow's date on the first card and date the rest of the cards for the first week. Write your first week's goal (Step One goal) on each card for the week.

1. If you have a DAILY reinforcement plan, write the reinforcer on each card.
2. If you have a WEEKLY reinforcement plan, write the reinforcer on the card for the seventh day (card #9).

d. After the seven cards for Week One, there will be a card numbered 10. Write the date one week from tomorrow on card #10 and record your second week (Step Two) goal and reinforcement plan on this card.

e. Date the seven cards for Week Two and write in the daily goal and daily reinforcer (if used) for each day of Week Two. If a weekly reinforcement plan is used, write the reinforcer on card #17.

f. On card #18, write your final goal, the date two weeks from tomorrow, and your third week reinforcement plan.

g. Date each card for Week Three and write your final goal on each one. If you use a daily reinforcer, write it on each card; if not, write your reinforcer on card #25.

h. On card #26, write in the date of your follow-up appointment. If you are unsure of the date, speak with one of the assistants before you leave. Bring your goal card booklet to the follow-up appointment.

i. Flip through the cards and see if you have dated each one correctly and have recorded the goals according to your shaping plan and reinforcers according to your reinforcement plan.

Each day during the project, look at your daily goal cards and place a check in the blank next to GOAL MET if you made or exceeded your goal for that day. Estimate the number of feeling statements made to your close male friends that day and write that number in the blank next to MALE. Do the same for your close female friends. If you are using daily reinforcement, put a check next to REINFORCEMENT GIVEN after you have reinforced yourself. If you are using weekly reinforcement, check REINFORCEMENT GIVEN on the day you reinforce yourself. Then put a check next to GOOD if you think your experience with feeling statements went WELL that day. Check NEUTRAL if your experience was NEITHER GOOD NOR BAD, and check BAD if your experience went BADLY.

Although you will use your goal card booklet the next three weeks, you will not be able to keep this pamphlet that you're reading now. Therefore, a review of the project may be helpful.

First, the communication skill you will be practicing was defined as clear statements of your feelings. A good feeling statement:

1. has an accurate feeling word which labels an emotion (either positive or negative feelings).
2. is personal (has I or my as part of the subject).
3. is expressed in present time.
4. has a specific, non-blaming reason for the feeling.

Next, you set a final goal so you'd have something to work towards was the number of feeling statements to be made each day of the third week of the project. Then, to make change more gradual, you set a first step and a middle step which were your goals for Weeks One and Two. You then chose a reinforcer and made a reinforcement plan for rewarding yourself.

As you work on your project, you'll record meeting your goal, the number of statements made to male and female best friends, when you reinforce yourself, and how your day's experience with the project went.

The Project in Action: An Example

A person is working on his project. His daily goal is three clear statements of feelings. Today he made four feeling statements but one had no reason, so he only counted three as good ones. One was to his best friend who is his male roommate. Two were to his closest female friends. He reinforced himself with a game of pinball. He was happy with his practice with feelings today and thinks it is helping him communicate better. His card for today looks like this:

DATE May 15, 1975 WEEK 2

DAILY GOAL 3 REINFORCER pinball

GOAL MET ✓

MALE 1

FEMALE 2

REINFORCEMENT GIVEN ✓

GOOD ✓ NEUTRAL _____ BAD _____

Check Understanding IV

Answers are on the answer sheet. Review the pamphlet or this section if you miss more than two questions. Go on to the final section when you can answer thirteen of fifteen questions correctly.

*20. Good feeling statements are in _____ time.

21. _____ or _____ is the subject of the statement.

22. A specific, non-blaming _____ is given for the feeling.

23. Feeling statements can express positive or _____ emotions.

24. A _____ gives you something to work for, a way to know you've achieved something.

25. A shaping plan sets a higher goal for each _____.

26. There are _____ steps in your shaping plan.

27. The third week goal is the same as your _____ goal.

28. The reward you give yourself for meeting your goals is called a _____.

Check each of the following if you record it on your daily goal card.

_____29. Whether goal was met

_____30. Number of steps in the shaping process

_____31. Number of statements to males

_____32. Number of statements to females

_____33. When you reinforce yourself

_____34. Whether the day's experience was good, bad, or neutral.

ANSWERS

20. present

21. I/my

22. reason

23. negative

24. goal
25. week
26. three
27. final
28. reinforcer
29. yes
30. no
31. yes
32. yes
33. yes
34. yes

Review Section I, if you missed questions 20-23; Section II if you missed 24; Section III for 25-27; Section IV for 28; and Section VI for 29-34. Miss only two? Then you understand the project. Next step is contracting for change.

SECTION SEVEN

Make Contract

Please fill out the following change contract and sign your first name and last initial. Date it and check to see if your follow-up appointment time is recorded. Then tear it out and give the contract to an assistant as you leave.

CONTRACT

During the next three weeks, I will be working on talking about personal feelings and my reasons for them. I will be talking with my best male and female friends and recording my goal per day and daily or weekly reinforcement on cards.

The first week I'll make _____ statements per day and reinforce myself with _____ each _____ (day or week)

The second week I'll make _____ statements per day and reinforce myself with _____ each _____ (day or week)

The third week I'll make _____ statements per day and reinforce myself with _____ each _____ (day or week)

Follow-up Appointment on _____

Thank you for participating in this project. With practice, you'll find it easier and easier to meet your goals and increase your communication skills. Good luck with your practice. If you should run into trouble, call the number listed on the last card of your goal booklet. Please do not discuss your project with other participants in the program.

Now you will have a chance to review the project by telling someone else exactly how to do it. Call in one of the assistants now.

SECTION FOUR

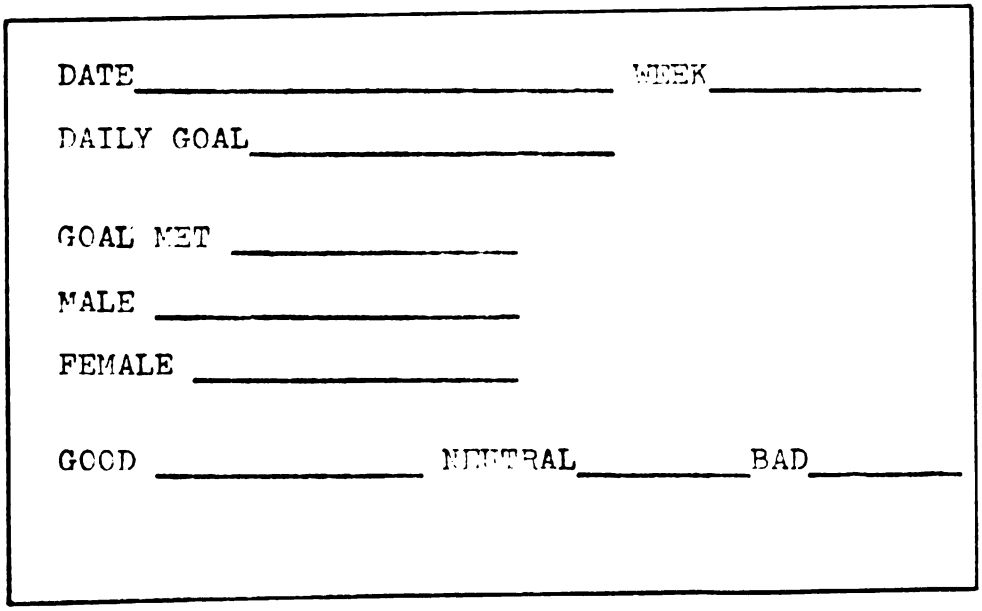
Summary of Project

At your table or desk, you will find a small booklet of cards. You use these to record your daily goals, note when you reach goals, mark if you expressed your feelings to a male or female friend, and tell if it went well or badly. First, you need to fill out the cards, writing in your own self-management plan. The steps in this process are:

a. Turn to the card (#1) which says "Final Goal" at the top. Record your final goal on this card.

b. On the next card (#2) write tomorrow's date and your goal for Step One (Week One).

c. The next seven cards are for Week One. They each should look like this:



Write tomorrow's date on the first card and date the rest of the cards for the first week. Write your first week's goal (Step One goal) on each card for the week.

d. After the seven cards for Week One, there will be a card numbered 10. Write the date one week from tomorrow on card #10 and record your second week (Step Two) goal on this card.

e. Date the seven cards for Week Two and write in the daily goal for each day of Week Two.

f. On card #18 write your final goal and the date two weeks from tomorrow. Date each card for Week Three and write your final goal on each one.

g. On card #26, write the date of your follow-up appointment. If you are unsure of the date, speak with one of the assistants before you leave. Bring your goal card booklet to the follow-up appointment.

h. Flip through the cards and see if you have dated each one correctly and have recorded the goals according to your shaping plan.

Each day during the project, look at your daily goal cards and place a check in the blank next to GOAL MET if you made or exceeded your goal for that day. Estimate the number of feeling statements made to your close friends that day and write that number in the blank next to MALE. Do the same for your close female friends. Put a check

next to GOOD, if you think your experience with feeling statements went well that day. Check NEUTRAL if your experience was neither good nor bad, and check BAD if your experience went badly.

Although you will use your goal card booklet the next three weeks, you will not be able to keep this pamphlet that you are reading now. Therefore, a review of the project may be helpful.

First, the communication skill you will be practicing was defined as clear statements of your feelings. A good feeling statement:

a. has an accurate feeling word which labels an emotion (either positive feelings or negative feelings)
b. is personal (has I or my as part of the subject)
c. is expressed in present time
d. has a specific, non-blaming reason for the feeling

Next you set a final goal so you'd have something to work towards. This was the number of feeling statements to be made each day of the third week of the project. Then, to make change more gradual, you set a first step and a middle step which were your goals for Weeks One and Two.

As you work on your project you'll record meeting your goal, the number of statements made to male and female best friends, and how your day's experiences with the project went.

The Project in Action: An Example

A person is working on his project. His daily goal is three clear statements of feelings. Today he made four feeling statements, but one had no reason, so he only counted three as good ones. One was to his best friend who is his male roommate. Two were to his closest female friends. He was happy with his practice with feelings today and thinks it is helping him to communicate better. His card for today looks like this:

DATE May 15, 1975 WEEK 2

DAILY GOAL 3

GOAL MET ✓

MALE 1

FEMALE 2

GOOD ✓ NEUTRAL _____ BAD _____

Check Understanding IV

Answers follow this section. Review the pamphlet or this section if you miss more than two questions. Go on to the final section when you can answer eleven of thirteen questions correctly.

24. A _____ gives you something to work for, a way to know you've accomplished something.

25. The shaping plan sets a higher goal for each _____.

26. There are _____ steps in the shaping plan.

27. The third week goal is the same as your _____ goal.

Check each of the following if you record it on your daily goal card.

_____28. Whether goal was met

_____29. Number of statements to males

_____30. Number of steps in the shaping plan

_____31. Number of statements to females

_____32. Whether the day's experience was good, bad, or neutral.

ANSWERS

20. present
21. I/my
22. reason
23. negative
24. goal
25. week
26. three
27. final
28. yes
29. yes
30. no
31. yes
32. yes

Review Section I if you missed questions 20-23; Section II if you missed 24; Section III for 25-27; and Section IV for 28-32. Miss only two? Then you understand the essentials of self-management. Next step is contracting for change.

SECTION FIVE

Make Contract

Please fill out the following change contract and sign your first name and last initial. Date it and check to see if your follow-up appointment time is recorded. Then tear it out and give the contract to an assistant as you leave.

CONTRACT

During the next three weeks, I will be working on talking about personal feelings and my reasons for them. I will be talking to my best male and female friends and recording meeting my goal each day on cards.

The first week I'll make _____ statements per day.

The second week I'll make _____ statements per day.

The third week I'll make _____ statements per day.

SIGNED _____

DATE _____

Follow-up appointment on _____

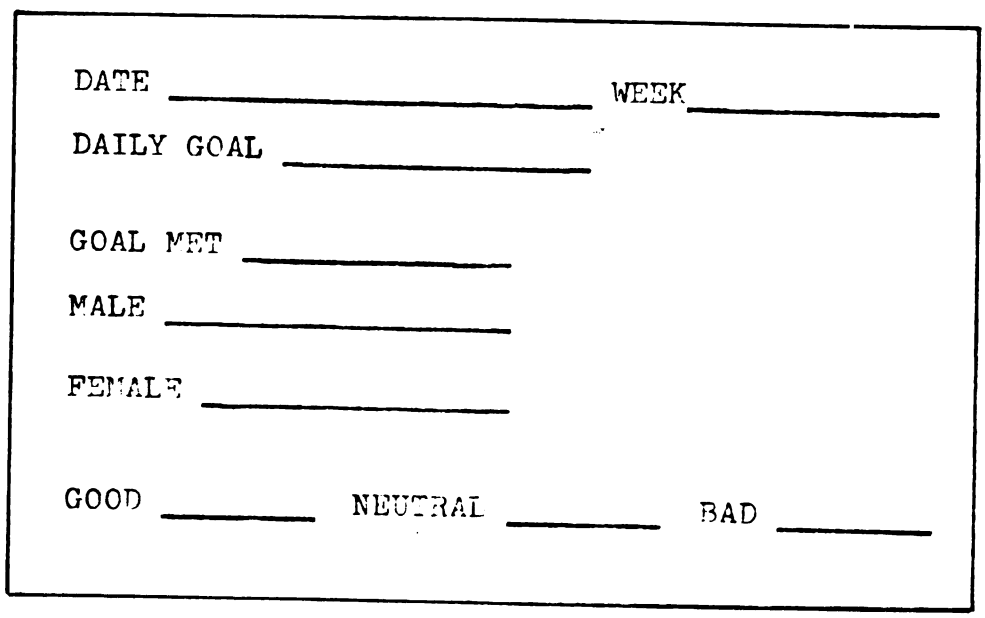
Thank you for participating in this project. With practice, you'll find it easier and easier to meet your goals and increase your communication skills. Good luck with your practice. If you should run into trouble, call the number listed on the last card of your goal booklet. Please do not discuss your project with other participants in the program.

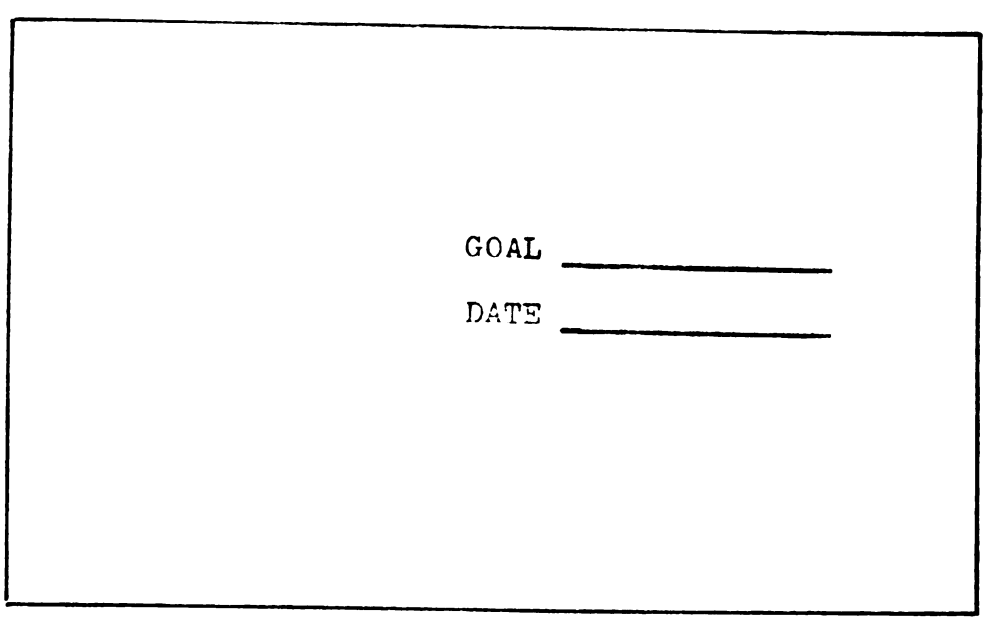
Now you will have a chance to review the project by telling someone else exactly how to do it. Call in one of the assistants now.

APPENDIX E

SAMPLE GOAL CARDS

SAMPLE GOAL CARDS





WEEK ONE GOAL _____

DATE _____

REINFORCEMENT PLAN _____

_____

_____

WEEK TWO GOAL _____

DATE _____

REINFORCEMENT PLAN _____

_____

_____

WEEK THREE GOAL _____

DATE _____

REINFORCEMENT PLAN _____

_____

_____

DATE _____ WEEK_____

DAILY GOAL _____REINFORCER _____

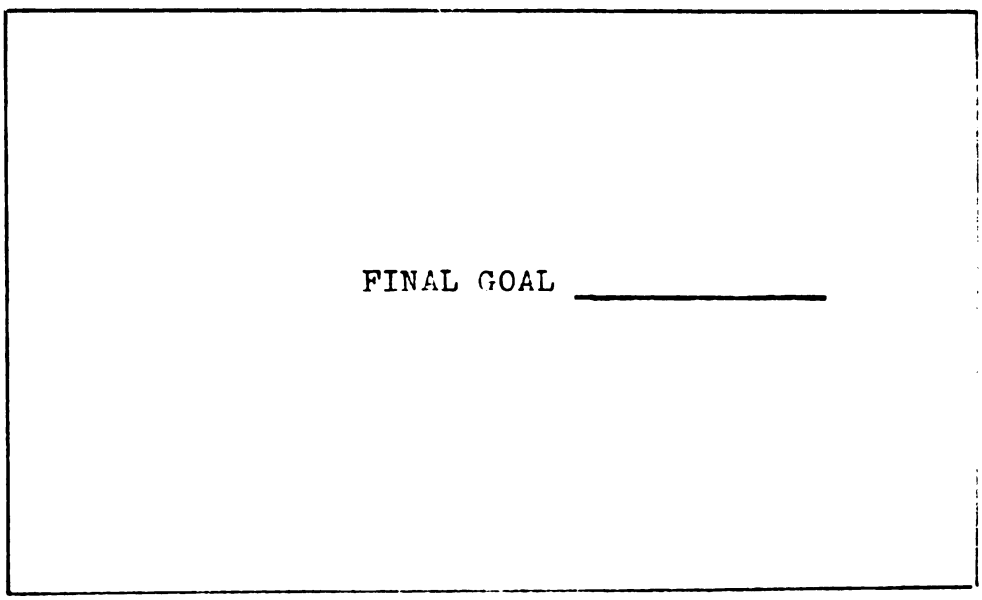
GOAL MET _____

MALE _____

FEMALE _____

REINFORCEMENT GIVEN _____

GOOD _____ NEUTRAL _____ BAD _____


FINAL GOAL

APPENDIX F

AUDIO PERFORMANCE TEST

AUDIO PERFORMANCE TEST

In this part of the training program, you will be recording your responses to typical situations which arise in people's lives. Try to imagine that you are actually in the situation and are talking to one of your very close friends.

INSTRUCTIONS

1. There are two tape recorders and a paper titled: Anxiety Scale in front of you. One recorder contains this tape which describes 16 different situations. Following each situation, there is a pause on the tape.

2. During the pause after each situation you are to do 2 things:

   a. Talk into the microphone on the second recorder and say exactly what you would say if you were in the situation.

   b. Think about how nervous or anxious you would be if you had actually said your response to a close friend. On the anxiety scale paper, rate your nervousness on a 1 to 7 scale. The scale is printed on the anxiety scale paper and is as follows:

      1--extremely calm and relaxed
      2--calm and relaxed
      3--somewhat calm
      4--somewhat nervous
      5--nervous
      6--very nervous
      7--terrified

For each situation, then, after you have recorded your response, circle the number on the anxiety scale for that situation which tells how nervous you would be if you actually made the response.

Remember:

1. Listen to the description of the situation given on recorder #1.
2. Record your response on Recorder #2.
3. Rate your nervousness on the anxiety scale paper.
4. Make sure you respond to all sixteen situations and record your anxiety level for each.

If you have questions, call an assistant in now. There will be a pause on the tape for you to do this. (10 second pause)

Please do not adjust either tape recorder during this presentation. If a technical problem occurs, go to the door and ask an assistant for help. (pause)

Not let's try an example situation. Remember to make your response immediately following the example and then rate your anxiety level on the scale in front of you.

Example Situation: Your best male friend has borrowed your notes for an important class. He told you he would return them 2 days ago, but he didn't. You have a test in this class tomorrow and desperately need your notes back to study for the exam. Finally, you find him in his room. You go up to him and say . . . (15 second pause)

If you have any questions, please ask the assistant now. The first situation will be presented in 15 seconds. (15 second pause)

Situation 1: You're giving a party, and the behavior of one of your best female friends has become increasingly objectionable and obnoxious over the course of the evening. You're upset with her behavior, so you go over to her and say . . . (15 second pause)

Situation 2: A female friend is taking a carpentry course and has really struggled with it. Secretly, you think it's kind of a crazy thing for her to do, but for your birthday she brings you a really sharp coffee table that she made. After she gives you the gift you say . . . (15 second pause)

Situation 3: You are shopping with your best female friend. A clerk accidentally short changes you and runs half way across the mall to return your 20¢. Since this has been a rotten day for you, the clerk's concern almost restores your faith in people. You turn to your friend and say . . . (15 second pause)

Situation 4: Once again, you're having dinner with your best female friend. Oftentimes when you're talking she taps her water glass with her fingers. This habit of hers is annoying, and you're even wondering if she's listening to what you're saying. You turn to her and say . . . (15 second pause)

Situation 5: Your best male friend has finally convinced you to go to a play with him. Much to your surprise as the play ends, you find that you've enjoyed it immensely. You turn to him and say . . . (15 second pause)

Situation 6: Your best friend works next to you at your summer assembly line job. He has been very lax the last few days, and both of your production quotas have fallen behind because of it. The supervisor stops you after work and warns you that you are replaceable. You then go to your friend and say . . . (15 second pause)

Situation 7: You have a big evening planned at your apartment, and your roommate is going away. After a long day, you come home to find the apartment spotlessly clean, and your grocery shopping done. You go up to your roommate and say . . . (15 second pause)

Situation 8: A tornado watch has been announced, and you and your best friends are crowded together in the basement of your hall. They are all laughing and joking, but you have a real phobia about storms. Your closest male friend is sitting next to you. You turn to him and say . . . (15 second pause)

For the next 8 situations you will be responding to something said by another person. I shall describe a situation, and then a male or female voice will talk. You are to imagine that the voices are those of your best male or female friends and that you are actually in the situation and talking to them.

Situation 9: You have worked your ass off preparing a really exotic dinner for a special date. Your date calls and says: "Gee, I'm really sorry, but I can't come over for dinner tonight cuz I have a really bad cold." Crushed, you respond to her by saying . . . (15 second pause)

Situation 10: You are a volunteer in a program for retarded children. Your best female friend comes to the center one night for an Open House and sees how well you work with the children. As you are driving home together she says, "I'm really impressed by your concern and caring for the children. It's really neat that you're so sensitive to their needs." You say to her . . . (15 second pause)

Situation 11: You took your best female friend with you to visit some old friends from home whom she didn't know. You thought the afternoon was pleasant and that everyone got along well. On the way home, however, your girlfriend is extraordinarily quiet and refuses to respond to your attempts at conversation. Finally, she says: "I wish you hadn't treated me like that back there." Unsure of what she means, you say . . . (15 second pause)

Situation 12: Your best female friend's parents have just filed for divorce. Your friend is really upset and feels torn between them. You and she talk several hours and you assure her that she can still love both of them. She's visibly relieved and says "Thank you so much. I really needed to talk to someone and you've helped me a lot." You reply . . . (15 second pause)

Situation 13: You're camping with your best male friend. It's night, and you're sitting togehter by the fire watching the stars. He turns to you and says . . . "Hey! Isn't this fantastic?! Thanks for asking me to come. Listen, I think you're one hell of a guy--I really care for you a lot." You respond by saying . . . (15 second pause)

Situation 14: Your summer job involves working in teams of two. Your male partner, who has been on the job several years, says to you one morning: "I used to hate this job, but you've made it not only bearable but fun. I'm really happy you're my partner." You respond by saying . . . (15 second pause)

Situation 15: Your roommate repeatedly borrows your razor without asking. This weekend, he took it along when he left campus. He returns Sunday evening and blithely says: "Thanks for letting me use your razor." Stroking the stubble on your face, you reply . . . (15 second pause)

Situation 16: It's the worst day of your life. When you get home even your dog rejects you. Looking bright and cheerful, your roommate comes in and says: "Hey man, how's it goin?" and you say . . . (15 second pause)

You have now completed this phase of the program. Please go to the door and ask the assistant to stop both tape recorders and give you instructions for the next phase.

APPENDIX G

ANXIETY SCALE

INSTRUCTIONS: For each situation, circle the number on the anxiety scale which best describes how nervous you would actually feel if you were saying your response to one of your best male or female friends.

EXAMPLE SITUATION

1	2	3	4	5	6	7
very calm and relaxed	calm and relaxed	somewhat calm	somewhat nervous	nervous	very nervous	terrified

SITUATION ONE

1	2	3	4	5	6	7
very calm and relaxed	calm and relaxed	somewhat calm	somewhat nervous	nervous	very nervous	terrified

SITUATION TWO

1	2	3	4	5	6	7
very calm and relaxed	calm and relaxed	somewhat calm	somewhat nervous	nervous	very nervous	terrified

SITUATION THREE

1	2	3	4	5	6	7
very calm and relaxed	calm and relaxed	somewhat calm	somewhat nervous	nervous	very nervous	terrified

SITUATION FOUR

1	2	3	4	5	6	7
very calm and relaxed	calm and relaxed	somewhat calm	somewhat nervous	nervous	very nervous	terrified

SITUATION FIVE

1	2	3	4	5	6	7
very calm and relaxed	calm and relaxed	somewhat calm	somewhat nervous	nervous	very nervous	terrified

SITUATION SIX

1	2	3	4	5	6	7
very cal and relaxed	calm and relaxed	somewhat calm	somewhat nervous	nervous	very nervous	terrified

SITUATION SEVEN

1	2	3	4	5	6	7
very calm and relaxed	calm and relaxed	somewhat calm	somewhat nervous	nervous	very nervous	terrified

SITUATION EIGHT

1	2	3	4	5	6	7
very calm and relaxed	calm and relaxed	somewhat calm	somewhat nervous	nervous	very nervous	terrified

SITUATION NINE

1	2	3	4	5	6	7
very calm and relaxed	calm and relaxed	somewhat calm	somewhat nervous	nervous	very nervous	terrified

SITUATION TEN

1	2	3	4	5	6	7
very calm and relaxed	calm and relaxed	somewhat calm	somewhat nervous	nervous	very nervous	terrified

SITUATION ELEVEN

1	2	3	4	5	6	7
very calm and relaxed	calm and relaxed	somewhat calm	somewhat nervous	nervous	very nervous	terrified

APPENDIX H

AMOUNT AND QUALITY RATING CRITERIA

AMOUNT AND QUALITY RATING CRITERIA

Instructions for Rating Amount of Affect

Amount of Affect: A subject's verbal response to a stimulus situation is either classified as affect being present or absent.

1--Affect Present: In order for a unit within a response to be classified as containing affect, the following criteria must be met:

a. An affect word given in the Guide List of Affect Words (Crowley, 1970; Nye, 1971) or suggested by definitions of affect (English & English, 1958; Goldenson, 1970) must be present; and

b. the affect word must be used as a verb, adverb, or adjective.

Any one unit of the subject's total response to a stimulus situation which meets these criteria is sufficient for rating the entire statement as having affect present.

Examples:

I feel sad.

You're being obnoxious.

She's lovely.

0--Affect Absent: No one unit of the subject's total response to a stimulus statement meets the criteria specified for affect present.

Examples:

I'm an optimist. (Affect word used as noun.)

I feel like getting drunk. (Cognitive statements which express thought or fact rather than feelings and emotions).

I flunked that exam.

A response to a stimulus situation is composed of one or more units. Each unit which has an affective component will be scored for:

I. Reference
II. Appropriateness of Affect
III. Time Orientation
IV. Reason
V. Specificity of Reason

Scores for each affective unit within a response will be averaged to create one score for that response. A total of these response scores will be computed for each subject.

I. REFERENCE. The person or situation identified as being responsible for the affective component of the statement.

12 pts.--Self-Active. The nominative or possessive case self-reference singular personal pronoun used as subject or modifier of subject (I, my) must explicitly occur in the statement.

Examples:

I feel angry.

My feelings are hurt.

4 pts.--Self-Passive. The objective or possessive case self-reference singular personal pronoun used as recipient of affect or modifier of the recipient (me, my) must explicitly occur in the statement. The subject of the statement can only refer to the general situation and not to a particular person. It must be clear that the affect refers to the self and not to the situation.

Examples:

This confusion upsets me.

Getting a good grade makes my day happier.

2 pts.--Plural Active-Passive. The nominative, objective, or possessive case self-reference plural personal pronoun used as subject recipient, or modifier of either (we, us, our) must explicitly occur in the statement or be evident from a compound usage (e.g., You and I). When used as recipient or recipient modifier, the subject of the statement can only refer to the general situation and not to a particular person.

Examples:

We are really happy together.

Arguing makes us angry.

Drinking makes our life miserable.

Our frustration increases daily.

She and I are happy. (Or You and I, He and I)

This hurt you and me. (Or her and me, him and me)

1 pt.--General Active-Passive. General terms which may include the speaker are used to define reference, and the individual participates only by implication. The term can be the subject. If used as recipient, the subject of the statement can only refer to the general situation and not to a particular person.

Examples:

People (including me) are sad at times like this.

One (me also) cannot always be happy.

Rejection hurts anyone (me too).

3 pts.--Implicit Self-Reference. The recipient of the affective is implied but not explicitly stated. Reference is understood from the content of the statement. The subject can only be the general situation, not a specified person.

Examples:

It feels good (to me) when we talk like this.

This really hurts (me).

When the affect definitely refers to the situation and not to the person, score zero (0) for Reference.

Examples:

That was really excellent.

0 pts.--Other Reference. Another person is made responsible for the affect. A self-referenced pronoun may be used to indicate the recipient, but the subject of the affective component of the statement is identified as another person or another person's actions.

Examples:

You make me happy.

Professor Jones excites me when I attend his classes.

You calling me a dummy really hurts.

This/That's a good table.

II. TIME ORIENTATION. The verb tense of the affective component of the statement.

6 pts.--Present. The action occurs in the present time and is expressed by the present tense of the verb. Present tense linking verbs (is, am, are, become) are included.

Examples:

I am happy. He makes me sad.
I feel good. I am feeling sad.

3 pts.--Present Perfect. The action or linkage occurred in the past but continues to the present. A past tense verb or participle form is used with a present tense helping verb (have, has)

Examples:

I have been happy. He has made me mad.
I have been feeling bad. I have felt great lately.

1 pt.--Past and Past Perfect. The action or linkage occurred in the past and is completed. The helping verb had may be included with the past participle or past tense verb.

Examples:

I was happy. He made me mad.
I felt bad. I had felt good lately.

1 pt.--Future and Future Perfect. The action or linkage will occur in the future. The helping verb have may be included with will/shall and as participle or past tense form of the verb.

Examples:

I shall be happy. He will make me mad.
He will feel good. I'll have been happy a long time by then.

III. APPROPRIATENESS OF AFFECT. The emotion expressed is consistent with the affect presented in the stimulus situation.

8 pts.--YES. According to the Guide List of Affect Words (Crowley, 1970; Nye, 1971) or words suggested by definitions of affect (English & Goldenson, 1970; English, 1958) the affect expressed falls into the same general category (love, fear, anger) as the stimulus situations.

Example:

Stimulus is classified as presenting LOVE and affect is classified as representing LOVE.

0 pts.--NO. According to the Guide List of Affect Words (Crowley, 1970; Nye, 1971) or words suggested by the definitions of affect (English & English, 1958; Goldenson, 1970) the affect expressed does not fall into the same general category (love, fear, anger) as the stimulus situations.

Example:

Stimulus is classified as presenting ANGER and affect is classified as representing FEAR.

IV. REASON. A rationale for the affect.

5 pts.--YES. A cognitive statement, demonstrative pronoun (this, that, these, those) or other reference to the stimulus situation which notes a reason for the affect expressed is explicitly stated as either a part of the unit which includes the affective component or as a separate statement in the unit which immediately precedes or follows the affective component. Note: In some cases a second affect unit may be the reason for the first affect unit. In these cases, score the second affect unit as the reason. Then score the second affect unit for the 5 quality measures.

Examples:

Cognitive statement within a unit:
My feelings are hurt BECAUSE YOU DON'T WANT TO BE WITH ME RIGHT NOW.
Cognitive statement in preceding/following unit:
My feelings are hurt/ I DON'T THINK YOU WANT TO BE WITH ME RIGHT NOW.
Demonstrative pronoun:
Within unit--
THAT hurts my feelings/
I'm really pleased with you BECAUSE OF THAT
Preceding/following unit--
THAT does it/ I'm frustrated with you now/
Other stimulus reference--
YOUR SAYING WHAT YOU DID hurts my feelings/
OUR DISCUSSION exhilarates me/
I'm anxious about PROFESSOR JONES' CLASS
Since OUR FIGHT, I've been doing some thinking/
I'm really still confused, however/

0 pts.--NO. No rationale for the affective component is explicitly stated within the unit and the rationale is not in the unit which immediately precedes or follows the affect unit.

Examples:

/I'm still really confused/
/My feelings are hurt/
/You hurt my feelings/
/I'm excited today/
/I'm upset/ I'm depressed/ You stood me up/
affect 1 affect 2 reason
(here there is no reason for affect 1)

V. SPECIFICITY OF REASON. The degree to which the specific component(s) of the stimulus situation which evoked the affect is explicitly verbalized in the response.

8 pts.--Specific Component. One or more of the specific components of the stimulus situation is identified as a reason for the affect.

Example Stimuli situations:

a. You have just flunked a midterm exam in a required course. It's worth 50% of your final grade and you're sure you're going to fail the class. Your best friend comes up and asks how you're doing and you say . . .

b. You are saying good night to a friend after a pleasant evening at the movies and drinking at a bar. You say . . .

Examples using the stimulus situations:

a. I'm depressed BECAUSE I JUST FAILED AN EXAM

b. TALKING WITH YOU was really fun/ I like GETTING DRUNK WITH YOU.

5 pts.--General Class. The entire stimulus situation or the class of situations of which it is a part is identified as the reason for the affect.

Examples using the stimulus situations:

a. I'm feeling shitty ABOUT SCHOOL.

b. TAKING TESTS gets me down.

c. I like BEING WITH YOU.

d. DRINKING is fun to me.

2 pts.--Implied Class. The entire stimulus situation or the class of situations of which it is a part is identified by a demonstrative or indefinite pronoun (this, that, these, those, it) or a word which strongly denotes such a pronoun as the reason for the affect.

Examples using the stimulus situations:

a. IT was really shitty.
b. THIS was fun, wasn't it?

1 pt.--Generalized Additional Class. The reason for the affect is identified as a different and much broader class of stimulus situations than that to which the stimulus situation belongs.

Examples using the stimulus situations:

a. LIFE is hell.
b. I just love BEING WITH PEOPLE.

0 pts.--Absent Reason. No rationale for the affective component is explicitly stated within the unit and the rationale is not in the unit which immediately precedes or follows the affect unit.

Examples using the stimulus situations:

a. I feel depressed.
b. This was a good evening/ It's late/ I'm feeling pretty happy.

Scoring Check List

AMOUNT

1. Check for affect word in unit
2. Check affect unit for expression of feeling
3. Check if affect is verb, adverb, or adjective
4. Underline affect unit
5. Rate other units in response
6. Score response 1 and record as amount on transcript if any unit receives YES on points 1, 2, and 3

QUALITY

1. Use only responses which have received a 1 for Amount
2. Score EACH UNIT in the response independently
3. Refer to Criteria for scoring, rating each underlined affect unit for:
   - Reference
   - Time Orientation
   - Appropriateness of Affect
   - Reason Given
   - Specificity of Reason
4. Record scores on Rating Sheet for each unit

Supplemental Criteria for Rating Tape Transcripts

Re: DOES THE AFFECT WORD REFER TO THE SPEAKER'S FEELINGS OR DOES IT DESCRIBE, COGNITIVELY, ANOTHER PERSON, SITUATION, OR THING.

Criteria--Look at the affect word, ask yourself:

1. WHO feels this way?
2. Is this just a statement of affect or does it express the person's feeling state at the time.

Examples:

This is a nice table--NO, affect word refers to table; this is a statement of fact.
That's really great--NO, what is great? the person? no. Whatever THAT is is what's great. Another statement of fact.
That made me really scared.--YES, who is scared? the person--therefore, rate this as an affect unit.
This was really shitty--NO, shitty refers to whatever this was.

Note: This criteria supercedes contradictory criteria stated under implicit self reference on the Quality criteria. In order to have implicit self reference, the affect must still apply definitely to the PERSON.

Re: REFERENCE-QUALITY

1. Note criteria for a 4 rating--if ME or MY appears explicitly in the statement.

   Examples: Drinking makes me happy.
   This hurts me.
   My feelings are hurt.

2. Special case of Situation 16. Often people respond with an adjective (and often a swear word)
   Shitty--rates as affect. Understood subject rates 0.
   Sit--
   Shit is a noun; doesn't rate as affect. Do not rate.

Re: Specificity of Reason-Quality

Look carefully at the situation to which it refers; to rate a 5 it would refer to the situation in general. To rate an 8, it must pick out a particular part of the situation. To rate 2, it will use a pronoun to refer to reason.

In all cases on specificity as well as reason-yes/no, remember to check the unit immediately preceding the affect unit and the unit immediately following it. Remember that one affect unit can serve as a reason for another affect unit IF it makes sense to put BECAUSE in front of the affect unit scored as reason.

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APPENDIX I

SKILL TEST

SKILL TEST

INSTRUCTIONS: Please read each item carefully, then choose the response you would make if you were in the situation.

1. A special girl friend comes back into town and calls you to go out. When you meet at the theatre, you want to tell her how you feel. You say ...

   A. I'm really excited that you called.
   B. Your call made my day.
   C. I was really excited that you called.
   D. I'm looking forward to seeing this movie with you.

2. After you watch your best friend slave over a term paper all day, he asks you to read it. It's really well written and creative. He shyly asks, "What do you think?" and you respond by saying ...

   A. Good paper! You're really creative!
   B. You certainly deserve a 4.0 on this one!
   C. What a fantastic job! I'm really impressed!
   D. That's a really good paper!

3. You have been working on your bicycle for three hours and finally have it repaired and ready for summer. A close female friend stops by and says, "You really did a great job!" You say ...

   A. Thanks. I feel really good about it myself.
   B. Thanks. It was a real chore, but I think it's finally ready to go.
   C. Thanks. Let's go for a ride together soon.
   D. Thanks. I'm really pleased that you noticed my hard work.

4. You are recovering from bronchial pneumonia and have been in bed for three weeks. Your best friend brings you a plant and visits a while. You say to him ...

   A. It's really good of you to come.
   B. Thank you. The plant is really nice.
   C. I'm happy you came.
   D. You're a good friend for coming to see me.

5. After studying three days and nights for the one exam that could make or break your whole college career, your professor comes up to you before the exam and says: "There has been a terrible mistake. You have a 4.0 after all, and you don't have to take the exam." You say ...

   A. I'm relieved that I don't have to take the exam.
   B. I really studied hard for this exam, but I'll take a 4.0 any day!
   C. I wish you'd told me sooner.
   D. Thanks. I really needed the 4.0!

6. You have just been rejected for an important job you really wanted. After telling a good friend, she replies: "Friend, it's their loss. You're so talented I know something better will come." You say ...

   A. I feel better now that I've talked to you.
   B. You always make me feel better.
   C. Thanks. You're really a thoughtful person.
   D. Thanks. I can always count on you for cheering words.

7. You're out with your favorite date. Your home team won a close game that you attended. You say to your date ...

   A. Our team really played a great game!
   B. We both got pretty excited, didn't we!
   C. I'm really excited that we won!
   D. Hey! Wasn't that great!

8. You just got the results back from a blood test for mono, and found out that you don't have it. You run into a close male friend on your way home from the health center and say ...

   A. Hey! I'm feeling really good!
   B. I just got my blood test results back, and I don't have mono!
   C. I was real worried, but am feeling better now cuz I don't have mono.
   D. I'm ready to get back into action cuz I don't have mono.

9. As a token of friendship, you give your best female friend a bottle of her favorite cologne. As you give her the present, you say ...

   A. I think good friends are hard to find, and I got you this to let you know that you're the greatest.
   B. I just want you to know how much I like you.
   C. You're very special to me.
   D. I thought you might like this.

10. You're talking with a close male friend. He tells you that he just got a good paying part-time job. You respond to him by saying ...

    A. That's great! That extra money will sure come in handy, won't it?
    B. I'm really happy that the job came through for you!
    C. Hey! You must be really excited!
    D. Tell me all about it.

11. You're walking through the woods with your best female friend. She turns to you and says: "You're the neatest person I've ever known. I hope we'll be friends forever." You respond by saying ...

    A. Thanks for sharing your feelings with me. I hope we'll always be friends, too.
    B. I like you a lot, too.
    C. You're super!
    D. Having a close friend like you is the greatest gift anyone could have.

12. You have just come from a class where the prof praised your term project in front of the entire class. When you run into your best male friend, you say ...

    A. I just got a 4.0 on my term project!
    B. Nothing, since it's better to keep accomplishments to yourself.
    C. I'm really proud of my term project!
    D. This is one of the best days of my life!

13. You spent several hours picking out a birthday gift for a friend. He opens it and says, "Is this the only color it comes in?" You say ...

    A. You're disappointed that it's not the color you'd like.
    B. Don't you like the color?
    C. I'll take it back, then.
    D. I'm disappointed that you don't like the color.

14. Your best female friend enjoys cooking, but really lacks the knack. After a very stressful day, you once again find dinner burned. You say ...

    A. You know, cooking just doesn't seem to be your thing.
    B. You're no Julia Childs, are ya?
    C. I'm irritated that dinner's burned again.
    D. This has been a hard day, and I'm not really hungry.

15. A good friend says to you, "You just don't have the brains to go to med school." You say to him ...

    A. I appreciate your honesty.
    B. It's not your opinion that counts.
    C. Bug off.
    D. I'm hurt that you don't think I can make it.

16. During the course of a tense evening at your girlfriend's apartment, you spill an entire cup of coffee on her new couch. She leaps up and screams hysterically, "You stupid ass! You're hopelessly clumsy!" You say ...

    A. I'm upset that you're angry with me.
    B. It was really stupid of me to do that.
    C. I've been tense all evening and didn't mean to spill it.
    D. Here, I'll clean it up and pay for the cleaning bill.

17. While waiting for an elevator during rush hour, a good female friend comes up to you, smiling, and says, "Your fly is open!" You reply ...

    A. Thanks for telling me. We all have our embarrassing moments, don't we?
    B. How stupid of me! I don't believe I did that!
    C. How embarrassing! Thanks for telling me.
    D. I'm really embarrassed. Thanks for telling me.

18. As a big surprise, your roommate has painted the living room. You return from a day of classes and encounter four walls of a color you particularly dislike. You turn to your roommate and say ...

    A. Nothing; maybe you'll get used to the color.
    B. I'm upset that you painted the apartment without talking to me first.
    C. You really shouldn't have painted the walls without first talking to me.
    D. I know you've worked hard, but you really shouldn't have painted the walls without asking me first.

19. You have borrowed a good pair of slacks from a friend to wear to a special occasion. You take good care of them and return them promptly. Your friend notices a ragged hole in the cuff and says sarcastically, "Some friend you are! I can't even trust you with a pair of slacks!" You say ...

    A. I think you're being unfair with me because the hole was there before I borrowed them.

B. I'm upset because the hole was there before I borrowed them.
C. I really don't think I made the hole, but I'll see that the slacks are fixed.
D. I think that hole was there before I borrowed them. What can I do to make things right?

20. A state cop has pulled you over for a faulty brake light. You expect to be warned, but instead, he gives you a twenty dollar ticket. After he leaves, you say to a female friend who's with you ...

A. I'm mad that I got that ticket.
B. This just isn't my day!
C. I just never seem to get a break!
D. I'm so angry I could scream.

21. Your best friend has borrowed your tape recorder and returned it with a note saying he broke it. He didn't offer to replace or fix it. You go to him and say ...

A. You know, if you weren't my best friend, I'd be really hot that you busted my tape recorder!
B. I thought I was a klutz, but you take first prize this time!
C. Hey! I'm really angry that you broke my tape recorder and didn't offer to pay for repairs!
D. I don't believe you broke my tape recorder, and you didn't even offer to fix it!

22. Your best female friend says, "You're a lousy driver! I never want to ride with you again!" You say ...

A. So who's asking you? You didn't have to come, you know.
B. I'm mad because you're knocking my driving!
C. You're making me mad with this talk about my driving!
D. I'm getting mad at you because of this!

23. You've just finished typing a term paper for a close male friend. As he's proofreading it, he says, "God! You really made a lot of typos, didn't you?" You respond by saying ...

A. I did the best I could. I'm upset that you're being so critical.
B. Nothing; it's not worth the hassle.
C. I'm not perfect, you know. I did the best I could.
D. You really make me angry.

24. You and a close female friend are walking by a river. Suddenly, a snake glides across your path. Startled, you turn to her and say ...

A. That snake scared you, didn't it?
B. I get cold chills whenever a snake startles me.
C. I think snakes are ugly.
D. Snakes give me the creeps.

APPENDIX J

ATTITUDE SCALE

ATTITUDE SCALE

Tell how you feel about these statements by marking an opinion from STRONGLY AGREE to STRONGLY DISAGREE for each statement. It is important to be truthful when answering the statements. Please answer every question. Circle the correct letter.

KEY
a--strongly agree
b--agree
c--agree somewhat
d--neutral
e--disagree somewhat
f--disagree
g--disagree strongly

a b c d e f g 1. When I tell someone how competent I feel, it's really like bragging.

a b c d e f g 2. My good friends know how I feel without my telling them.

a b c d e f g 3. People will think less of me if I tell them I've failed at a new task.

a b c d e f g 4. Nervous people make things worse by not telling others how they feel.

a b c d e f g 5. If I'm afraid, I'll feel better by sharing my feelings with others.

a b c d e f g 6. When I'm angry with others, it's best to tell them so.

a b c d e f g 7. No one cares how I feel, when you get right down to it.

a b c d e f g 8. If I feel jealous, it will get me down unless I tell the person.

a b c d e f g 9. When I'm discontented, just keeping busy will make the feeling go away.

a b c d e f g 10. When I'm upset, it's better to work out my feelings alone.

a b c d e f g 11. Although they pretend not to be, friends are leery of me after I talk about feeling worthless.

a b c d e f g 12. It's often best not to tell people I really like them.

a b c d e f g 13. Proud feelings really shouldn't be shared.

a b c d e f g 14. It's good to deal with feelings of failure myself.

a b c d e f g 15. Expressing anger will get me in trouble.

a b c d e f g 16. When I'm depressed, it's a good idea to handle it myself.

a b c d e f g 17. When I love someone, I tell them.

a b c d e f g 18. When I am attracted to a person, I should let them know how I feel.

a b c d e f g 19. Others will think better of me if I will tell them when I feel helpless.

a b c d e f g 20. It's best to express intense emotions rather than keep them inside.

a b c d e f g 21. Expressing feelings of inadequacy makes others think less of me.

a b c d e f g 22. Even if I think I'm really handsome, I shouldn't bore my friends by telling them so.

a b c d e f g 23. If I'm attracted to someone I just met, I'll keep these feelings to myself.

a b c d e f g 24. Sharing feelings is one of the best ways to get close to people.

a b c d e f g 25. I should be able to deal with most of my feelings myself.

a b c d e f g 26. Feelings should be shared with counselors instead of friends.

a b c d e f g 27. I'm more comfortable keeping my feelings to myself.

a b c d e f g 28. People are more comfortable when I don't tell them how I feel.

a b c d e f g 29. When I like a person, it's good to tell him even if I don't know how he feels about me.

a b c d e f g 30. It's a good idea for me to express feelings verbally.

APPENDIX K

DEBRIEFING QUESTIONNAIRE

DEBRIEFING QUESTIONNAIRE

Please answer the following questions to help us in planning future training sessions.

1. Overall, what do you feel was of most value in the training?

2. Did you learn anything new about yourself? If so, what?

3. How do you feel you've benefited from the experience?

4. In what ways could it have been more helpful?

REGARDING THE VIDEO TAPE--Please leave blank if you haven't had the video tape yet.

5. Was the instructional portion clear? How could it have been better?

6. Did the modeling examples help? Why or why not?

REGARDING THE SELF-MANAGEMENT PROGRAM--Please leave blank if you haven't had self-management yet.

7. Did you actually do the project?

8. Did you regularly meet your goals?

9. Did you find it easier to express your feelings to males or to females? Why was this do you think?

10. Is it easier to respond to another person with feeling statements or to initiate feeling statements? Why?

11. Are positive feelings easier to express than negative feelings?

12. Please give any additional comments here.

13. I am _____ years old.

14. I am a freshman _____
sophomore _____
junior _____
senior _____