The Effects of Coverant Control Therapy Under Two Different Conditions on Depression

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THE EFFECTS OF COVERANT CONTROL THERAPY
UNDER TWO DIFFERENT CONDITIONS ON
DEPRESSION

BY

STEVEN BRIAN LUCKS
B.A., Stetson University, 1975

THESIS

Submitted in partial fulfillment of the requirements
for the degree of Master of Science: Clinical
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College of Social Sciences of
Florida Technological University

Orlando, Florida
1978
Abstract

Twenty seven undergraduate psychology students were randomly assigned to two treatment groups and one no treatment control group to assess the effects of Coverant Control Therapy (CCT) under 2 different conditions on depression. The research was an analogue study. The first treatment group received CCT in a didactic format, while the second treatment group received CCT in an encounter group format. The control group assembled jigsaw puzzles. All subjects were administered the Multiple Affective Adjective Check List (MAACL) and the Minnesota Multiphasic Personality Inventory "D" scale for pre-, post-, and followup testing. Groups met for 4 sessions. Separate one-way analyses of variance were performed on pre-, post-, and followup scores on both measures. One significance was obtained on post-test MAACL scores. A Least Squares Difference post hoc analysis indicated that CCT in conjunction with a warm therapeutic relationship was more effective than either CCT delivered without the therapeutic relationship or a no treatment control group. It was concluded that CCT with the "relationship" condition is effective in elevating mood for a college population. Additional research was recommended to assess optimal length of treatment, and to improve generalization of results.
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CHAPTER I

Statement of the Problem Situation

Depression is a prevalent affect condition that is experienced by millions of individuals throughout their lives. There are numerous theoretical explanations for depression; and there are even more approaches to the treatment of depression. Surprisingly, the research indicates that few attempts have been made to evaluate which approach is most effective. Some of the treatment approaches currently used are: psychoanalytic, gestalt, coverant control, systematic desensitization, reality therapy, client-centered therapy, and rational-emotive therapy.

Contradictory evidence, by several authors in different fields suggests that a variety of approaches have been successful (Glasser, 1965; Goldfried, 1976; Johnson, 1971; Lazarus, 1968; Martin, 1972; Mennenger, 1975). In some cases, authors have claimed implicitly that one approach is more successful than another; for example: Jackson (1972), Shapiro (1976), and Stuart (1970) indicated that behavioral approaches are best;
whereas Goldfried (1976) suggested that psychoanalytic approaches are most effective. However, there is no empirical evidence available that any one technique has been more effective in the treatment of depression.

Although there is no direct evidence, a relatively new behavioral approach, CCT has been cited as extremely effective in the treatment of depression (Cooke, 1974; Johnson, 1971; Mahoney, 1971; Rush, Khatami, & Beck, 1975; Tharp, Watson, & Kaya, 1974; Todd, 1972). It is difficult to determine, however, whether the CCT procedure is solely responsible for the behavior change or whether some other uncontrolled variables are instead responsible for its reported effectiveness. The studies cited above were poorly controlled case studies. Variables left uncontrolled included: degree of therapist involvement, nature and quality of responding, time, and numerous other variables.

Eysenck and Beech (1971) state that evidence for the efficacy of behavior therapies is reduced considerably because of poorly controlled studies. They state, "more goes on in behavior therapy (reassurance, suggestion, and directives) than is contained in the programmatic presentations of the theory, and these features may be the important elements in the 'cures.'" (Eysenck & Beech, 1971,
Additionally they state that, "The patient-therapist relationship is the crucial active agent—perhaps along psychodynamic lines (transference), or in the operant conditioning sense as a positive reinforcer." (Eysenck & Beech, 1971, p. 600). It is evident that despite CCT's seeming effectiveness in the treatment of depression it is difficult to attribute success to the procedure alone. The CCT case studies are simply too confounded with uncontrolled variables to provide conclusive evidence.

It appears that the most poorly controlled variable in these studies is that of the patient-therapist relationship. Eysenck and Beech (1971) believe that the relationship alone could conceivably account for client improvement. As reported by Goldstein and Simonson (1971) many major studies support the positive influence of the therapeutic relationship (Holt & Luborsky, 1952; Hunt, Ewing, LaForge, & Gilbert, 1959; Parloff, 1961; Sapolsky, 1965; Truax, 1961; Van der Veen, 1965).

Truax and Carkhuff (1965) designed a procedure for experimentally measuring the effects of high vs. low quality therapist responding. High quality responding was assumed to be directly related to positive therapeutic relationships and was defined in terms of
the following variables, accurate empathy, non-possessive warmth, and genuineness. In their study the therapist began his sessions demonstrating high levels of functioning on the above variable dimensions and would continue for a specified period of time. When the specified period of time elapsed the therapist would begin to function at low levels and again would do so for a set period of time. Finally, the therapist would end his session responding at high levels again. The results indicated that high level responding was directly related to deeper interpersonal exploration and low level responding was related to shallow interpersonal exploration.

Additional studies using the same procedure demonstrated similar findings (Holder, Carkhuff, & Berenson, 1967; and Piaget, Berenson, & Carkhuff, 1967). Isaacs and Haggard (1966) found that when therapists focus on client affect, their clients in turn responded by further identifying and clarifying their own feelings, and continued to do so longer than those clients who did not have therapists who focused on affect.

It appears evident that therapists functioning at high levels on Carkhuff's core dimensions elicit more thorough personal exploration from their clients. This suggests that empathic, warm, congruent therapists
will have a positive influence on their clients regardless of the theoretical model that they choose. With this in mind, any research that seeks to evaluate a specific therapeutic procedure must control for this important variable.

**Purpose of This Study**

The literature demonstrates that there is a lack of well controlled studies in the use of CCT for the treatment of depression. Consequently, there is a need to differentiate between the CCT procedures themselves and other contaminating variables in order to assess their actual efficacy (Eysenck & Beech, 1971). Therefore, the purpose of this study was to assess the relative effectiveness of CCT in a didactic interpersonal relationship and CCT in conjunction with a warm therapeutic relationship for the treatment of depression. In the first condition, the therapist did not respond with low or hurtful levels of relationship skills, but instead did not invite or allow the establishment of a warm, personal therapeutic relationship.
Research Questions

The purpose of this study was to answer the following questions:

1. Is CCT treatment significantly effective in elevating mood in "normals" as compared to a no treatment control group?

2. Is CCT treatment with the addition of a warm therapeutic relationship significantly effective in elevating mood as compared to a no treatment control group?

3. Is CCT with the "relationship" condition significantly more effective than CCT without the "relationship" in elevating mood?

The research was an analogue study since the subjects were college undergraduates as opposed to clinically depressed individuals. It was expected that mood elevation in college undergraduates would be analogous to mood elevation in neurotic depressive persons (Homme, 1965; Velton, 1968); and it was further assumed that mood increases in normals would be reflective of decreases in clinical depression (Homme, 1965; Velton, 1968).

Kennith Heller (1971) has written an extensive critique of analogue research. It is his contention that avoidance of analogue research is a disservice to both
the therapist and the client. In addition, Heller also notes the importance of rigorous controls in these kinds of studies. Although recognizing the potential hazards of such research, he feels the value of analogue research far outweighs the pitfalls. This study was designed as analogue research in order to provide maximum controls without the risk of endangering a clinical population.

Definitions

During this discussion several specific terms will be used. In order to clarify these terms for the reader the following definitions are offered.

1. Neurotic depression: For the purposes of this study depression will be characterized by painful emotions, low self-esteem, impaired problem solving ability, and self-defeating behaviors. Depression is one of several possible symptoms that develop as an individual experiences conflict. Typically this conflict is caused when an individual desires the achievement of some goal while simultaneously experiencing a fear of obtaining that goal.
Traditionally this conflict has been labeled approach-avoidance conflict (Martin, 1972).

2. **Psychotic depression**: Characterized by a more severe reaction than neurotic depression. The individual experiences painful emotions, low self-esteem, appetite and sleep disturbances, difficulty in concentration and thinking, and in addition, loses contact with reality. The person can also develop delusions and hallucinations (Butcher, 1971).

3. **Coverant Control Therapy (CCT)**: A method to change behavior by modifying a person's self-statements. High probability behaviors are made contingent upon the reading of selected self-statements through the use of the Premack Principle. When positive self-statements are selected for use by depressed persons the method results in a reduced frequency of negative statements, thus altering mood or attitudes (Homme, 1965; Velton, 1968).

4. **Premack Principle**: For any two responses, the most probable response will reinforce the less probable response. Therefore, if a more probable response is made contingent
upon the completion of a less probable response, the less probable response will eventually increase in frequency (Homme, 1965).

5. **Therapeutic relationship**: A relationship whereby the therapist models high levels of human relations skills as proposed by Gazda (1973) and Carkhuff and Berenson (1977). These skills specifically are: empathy, warmth, genuineness, respect, confrontation, congruence, immediacy, and self-disclosure. The therapist focuses on both feelings and content issues, and allows the subjects to discuss personal concerns.

**Rationale and Assumptions**

The inherent limitations of CCT suggest that although treatment should indeed be more effective than no treatment there should also be qualitative differences between the two conditions studied here. The following paragraphs will describe the CCT procedure and will explain why differences between conditions were expected.

CCT is a "cognitive" Behavioral therapeutic approach that focuses on the actual inhibition of negative thoughts, via the reinforcement of incompatable positive thoughts. It is assumed that depression is
precipitated and maintained by the high frequency of occurrence of negative thoughts. Using the Premack principle, positive thoughts are reinforced and increase in frequency. Negative thoughts decrease in frequency and mood elevation occurs. Specifically, this process is accomplished by first having subjects generate a list of positive self-statements. They are then asked to write these statements onto cards. The individuals then make a high probability behavior contingent upon reading their positive self-statement cards. As the positive self-statements are reinforced, they begin to occur spontaneously with increased frequency and the incompatible negative thoughts decrease in frequency. As this process continues mood elevation occurs.

It was expected that the presence or absence of the therapeutic relationship would have a direct effect upon subject motivation, trust, and actual conflict resolution. It was further expected that the relationship condition would stimulate greater motivation, trust and conflict resolution and therefore result in greater mood elevation.

Depressed individuals tend to be poorly motivated and lacking in self-esteem (Martin, 1972). Therefore they have little confidence that anything they do
will change their mood. Those individuals in the relationship condition, however, were expected to become much more involved with both the therapist and the other group members than those individuals in the didactic condition. It was expected that the persons in the relationship condition would feel obligated to carry out the procedure because of the increased involvement. It was absolutely essential that the statement cards be read by the subjects if the procedure was to be effective. It was concluded that if the relationship did have an effect on motivation than the relationship condition would be more effective.

There is no reason to believe that a client would sufficiently trust a therapist, after a single session, to faithfully follow a procedure that is prescribed. Without the establishment of a therapeutic relationship, it is unlikely that a client would trust a therapist after only one session. A client who trusts neither the therapist nor the procedure will probably not feel compelled to complete the procedure. It was assumed that the relationship condition of this research would provide a greater opportunity for the development of trust between subjects, and between therapist and subjects. Therefore in the relationship condition of
this research, it was expected that the subjects would feel compelled to carry out the procedure faithfully.

Covenant Control Therapy is a procedure where avoidance of negative thoughts is accomplished through the acquisition of an incompatible response, namely spontaneous positive thoughts. A limitation, however, is that the individual only learns to avoid aversive thoughts rather than resolving the conflict that initiated these thoughts. Therapeutic relationships, established through the use of Carkhuff's core dimensions, are hypothesized to facilitate such conflict resolution. It was expected therefore, that subjects in the relationship condition would experience greater mood elevation because they would have an opportunity to achieve conflict resolution, in addition to increasing the frequency and number of positive thoughts they experienced.

As Martin (1972) explains, depression is a symptom of anxiety based neuroses. Conflict is resolved when an individual is led to experience previously aversive thoughts in the presence of a warm, empathic, therapeutic relationship. Thus as the thoughts are re-experienced,
the warm secure relationship serves to counter-condition those aversive thoughts. Consequently, in the relationship condition, a subject's aversive thoughts were not simply avoided, but became desensitized as well.

Martin (1972) also states that as individuals experience conflict resolution they also increase their problem solving repertoire. He explains that once aversive thoughts are counter-conditioned the individual can experience those thoughts without the resultant anxiety. Once this occurs the person can review the behavior choices he made that led to the conflict originally, and can therefore learn from his mistakes. Therefore, in the relationship condition, relearning is more likely to occur as opposed to simple aversive thought avoidance. Because the relationship condition provided an opportunity for relearning, it was expected that subjects under this condition would be less likely to suffer mood decrement as a function of time.

Providing CCT under two different conditions allowed the CCT procedure to be assessed without the confounding effects of other variables including: therapist warmth, therapist empathy level, time, social contact, testing, subject selection, and the therapeutic relationship. With the above variables controlled the
CCT procedure was evaluated upon its own procedural merits.

It was expected that the CCT condition with the relationship would prove more effective than CCT without the relationship. As discussed earlier, therapeutic relationships, in and of themselves, can have an extremely positive effect. It was also expected that the therapeutic relationship would help alleviate some of the limitations of the CCT procedure when used without the addition of a therapeutic relationship. For example, it was hypothesized that with a warm therapeutic relationship the client would feel valued and appreciated by the therapist. These feelings would help the client trust and respect the therapist's instructions regarding the CCT procedure. Second, it was expected that the client would value his special relationship with the therapist and would be more likely to carry out the procedure faithfully in order to further gain his therapist's approval or at least to receive his therapist's continued interest. Therefore, client motivation was likely to be higher under the relationship condition. Finally, the relationship would function as a warm and secure counter-conditioning agent (Martin, 1972). As anxiety provoking thoughts were discussed and the therapist responded with high levels of
the core dimensions, the thoughts themselves would become less anxiety provoking as they became counter-conditioned. Once this occurred the individual would be able to experience these thoughts and therefore could gain a self-awareness of how they led to ineffective coping behaviors. Once the individual ceased to avoid these thoughts, relearning could occur. In the event the subjects encountered situations in the future that were similar to the ones which precipitated their depressions the clients would have more effective coping strategies to choose from (Martin, 1972).

**Scope and Limitations**

This study was restricted by several factors. First, the investigation included psychology undergraduates rather than a clinical population who had actually sought counseling. This was expected to interfere with generalizability somewhat, but was not expected to affect it drastically (Heller, 1968). In the original design, only the most "depressed" volunteers (as measured by the MAACL) were to be selected. Unfortunately, only 30 students (the minimal acceptable number of subjects) volunteered for the study and this part of the design was dropped.
Only one aspect of depression, mood, was chosen to be researched in this study. Mood is only one measureable aspect of depression and may not be the most relevant variable when evaluated without other diagnostic data. Therefore, it can only be hypothetically assumed that mood increases in experimental subjects will correspond to decreases in depression in depressed individuals.

The label "depression" is vague when considering symptomology and this investigation was not directed at deriving a single description of depression. Rather it was concerned only with mood change as the result of two variations of a single therapeutic approach.

The results of this study cannot be generalized to the psychotic population. It was assumed that college students could be viewed as analogous to a neurotic population in their degree of reality contact, whereas this could not be assumed for psychotic individuals as a group.

Only two variations of a single treatment approach were investigated, and therefore therapeutic effectiveness can only be generalized to each of these two variations.

Finally, the use of self-report measures may have yielded results that were contaminated by halo effects and response sets.
Review of Related Literature

In the remainder of this chapter, depression will be defined, the symptomology and identification discussed, and the related literature will be reviewed. In addition to a review of the literature, both CCT and the human relations skills are described in detail and their development as intervention approaches are discussed. In chapter three, the methodology of the study will be discussed in detail.

Depression Defined

The following discussion on the definition and symptomology of depression is a composite of different theoretical models. The models most heavily relied upon for this review were psychoanalytic and behavioral.

Depression is evidenced as a mood disorder whereby an individual is unhappy, dejected, and feels that life is an aversive experience. There are two basic types of depression: depressive neurosis, and psychotic depression; the difference between them being the degree of severity. Depressive psychotic individuals are characterized by a more severe withdrawal, a loss of contact with reality, and an inability to care for themselves. On the other hand, depressive neurotics are capable of taking care of themselves and distortion of reality is much less severe (Coleman, 1972; Millon,
1969; APA, 1968). The depressions of both the neurotic and the psychotic individual (with the exception of the major affective disorders) begin with a loss, or a perceived loss, of something important in their lives. This loss almost always results in a decrease in positive reinforcement for the individual (Goldfried & Davison, 1976; Jackson, 1972; Lazarus, 1974; Wilcoxon, Schrader, & Nelson, 1976). That is, an individual loses something in his environment that was supportive, rewarding, or secure, and tends to react to that loss with poor coping strategies. Ineffective coping leads to increased failure which in turn creates more conflict which then leads to even poorer coping, etc.

**Symptomology**

The depressed individual typically exhibits several diagnostically significant behaviors. First, depressed persons show lowered levels of activity and initiative. They withdraw from social activities, experience a loss of self-confidence, and believe that they are losing their ability to concentrate. Depressed persons usually complain of "sleep disturbances" and decreased sexual drive. In addition, there is usually an increase in somatic complaints (Coleman, 1972).
Cattell and Scheier (1961) and Cattell, Scheier, & Lorr (1962) suggest that the neurotically depressed individual usually reveals low stress tolerance, together with rigid conscience development and a proneness to guilt feelings. Coleman (1972) suggests that much of the depressed person's behavior, is developed through secondary gain, and therefore much of this person's behavior, is manipulative in nature. That is, the person frequently receives increased attention, sympathy, and perhaps more concern from others than he would otherwise receive.

Ferster (1973) claims that depression is characterized by a reduced frequency of justive behavior including 1) the loss of some kinds of activity, 2) increased escape and avoidance activity i.e. crying, somatic complaints, and irritability, 3) extended latency in replying to direct questions, and 4) a reduced frequency of spontaneous speech. Ferster makes a distinction between "active" and "passive" depression, the latter being the most serious. He also suggests that the active depressive person reacts with anxiety and depression until he builds up enough discontent to act on the environment and to effect change. This person's depression is short lived because the aversive situation is dealt with.
On the other hand, the passive-depressive person fails to act on the environment. This person reacts by complaining and withdrawing. It is this person who develops severe and long lasting depression. The situation perpetuates itself even further because the person loses the ability to accurately observe the environment. When this happens, more and more of the person's behavior is unsuccessful and therefore goes without being rewarded (Ferster, 1973) hence further withdrawal and inactivity.

Beck (1967) claims that depression is maintained by environmental consequences. He states that a person who is depressed will act less effectively and therefore will experience increased failure and rejection. The typical behaviors that develop are: 1) emotional difficulty, 2) somatic complaints, 3) decreased interest in sex, 4) inappropriate social behaviors, 5) loss of motivation, and 6) an "unrealistically low self-image".

Martin (1972) claims that depression is only one of several possible symptoms of an anxiety based neurosis. He explains that the neurotic conflict manifests itself by anxiety, self-depreciating thoughts, and a lowering of self-esteem. He claims that an individual's thoughts, acts, and impulses become cues for anxiety because
they are concurrently punished when certain behaviors are punished. Once a person's thoughts become a source of anxiety, avoidance strategies begin to be used, and therefore the individual's problem solving repertoire is reduced drastically.

Identification and Classification

The identification and classification of depressed individuals is a difficult matter, partly because therapists define depression differently. As a result, therapists are unable to agree on the diagnosis of depressed persons (Blinder, 1966; Pasamanick, Dintz & Lefton, 1959). Wilcoxon, Schrader, and Nelson (1976) state that classification labels encourage reification of these labels. The labels come to be used as though they were diseases rather than simply descriptions of behavior syndromes. Nicholas Hobbs (1975) presents an excellent argument for the retention of a classification system, however. He sees them as facilitating both communication and treatment.

In 1968, the American Psychiatric Association, in conjunction with the World Health Organization, published the DSM II (Diagnostic and Statistical Manual of Mental Disorders) in an attempt to standardize the classification system for mental disorder.
One of the reasons that the APA has not been completely successful in their endeavor for standardization is due to the lack of adequate assessment instruments.

Several instruments are available, but the majority of them are not able to discriminate between depression and general anxiety (Wilcoxon, Schrader, and Nelson, 1976). One of the first measures of depression was the depression scale "D" on the Minnesota Multiphasic Personality Inventory (MMPI) (Beck, 1967). Unfortunately the MMPI was not designed specifically for depression, and current research does not indicate whether it is sufficiently valid when this scale is evaluated without considering a person's entire inventory. Hathaway and McKinley (1940) suggest that the MMPI is valid regardless of whether items are added or removed, but their claims are not substantiated with empirical evidence. Perkins and Goldberg (1964) evaluated the contextual effects of the MMPI, and found that contextual alterations of the instrument have little effect on initial administrations. They did, however, find that repeated administrations resulted in artificial score improvements. The MMPI does discriminate between depression and general anxiety, however, when the entire inventory is considered (Marks, Seeman, and Haller, 1975).
Pasamanick, Dintz, and Lefton (1959) stated that low inter-clinician agreement on the diagnosis of depression, illustrates the fact that there is an urgent need for objective, measureable, and verifiable criteria.

Beck, Ward, Mendelson, Mock, and Erbaugh (1961) developed the "Depression Inventory" with the hope of satisfying some of these needs. He criticized the MMPI as being inadequate because: 1) it was not designed to specifically measure depression, 2) it is based on intrapsychic theory, and 3) "factor analytic studies reveal that the 'Depression' scale contains a number of heterogeneous factors, only one of which is consistent with the clinical concept of depression" (Beck et. al., 1961, p. 562).

The Beck, et. al. inventory measures 21 symptom attitude categories which are listed below.

<table>
<thead>
<tr>
<th>Mood</th>
<th>Social Withdrawl</th>
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<tbody>
<tr>
<td>Pessimism</td>
<td>Indecisiveness</td>
</tr>
<tr>
<td>Sense of failure</td>
<td>Body images</td>
</tr>
<tr>
<td>Lack of satisfaction</td>
<td>Work inhibition</td>
</tr>
<tr>
<td>Guilty feelings</td>
<td>Sleep disturbance</td>
</tr>
<tr>
<td>Sense of punishment</td>
<td>Fatigability</td>
</tr>
<tr>
<td>Self-hate</td>
<td>Loss of appetite</td>
</tr>
<tr>
<td>Self-accusation</td>
<td>Weight loss</td>
</tr>
</tbody>
</table>
Self-punitive wishes  Semantic preoccupation
Crying spells  Loss of libido
Irritability

The reliability of Beck's Depression Inventory ranges from $r = 0.86$ to $r = 0.93$. Wilcoxon, Schrader, and Nelson (1976) feel that Beck's scale is the most useful and reliable scale that is currently available for the measurement of depression. Although, Beck's measure is impressive, it was deemed inadequate for this present study because it did not provide a sufficiently sensitive index for increases in positive mood states. This study, being analogue research, could have had a large number of subjects who were so mildly depressed as to receive a "0" depression score on Beck's measure. Beck's measure does not assess positive mood state and therefore, any elevation in mood for these "non-depressed" persons would have gone undetected.

Several checklists have been developed that involve client self-report. As reported in Buros (1972), William Zung developed the Self-Rating Depression Scale (SDS). The SDS "consists of twenty self-report items which the respondent answers true of himself 'none or a little of the time', 'some
of the time', 'good part of the time', or 'most or all of the time'" (Goodstein, 1972, pp. 320-321). There are many limitations to the SDS which deem it ineffective. Some of its more serious limitations include: 1) no evidence of reliability of the SDS scores reported, 2) highly educated clients tend to score less depressed, 3) the SDS is easily "faked" and, 4) normal adolescents tend to score depressed (Goodstein, 1972). The above limitations for the SDS preclude its use in this present study.

Bernard Lubin (1965) developed the Depression Adjective Check List (DACL). The DACL consists of 32-34 self-descriptive adjectives depending on which form is used. As reported by Goodstein (1972) "the split half reliabilities range from .82 to .93 for normals and .86 and .93 for patients". Fogel, Curtis, Kordasz, and Smith (1966) demonstrated that the DACL has been used successfully as a reliable and valid measure of depression. They found a correlation of .79 between the DACL scores and a psychiatrist's ratings, and a correlation of .95 between DACL scores and client self-ratings of depression. Goodstein (1972), reviewed the research on the DACL and found that depressed patients score significantly higher on the DACL than psychiatric patients diagnosed as something other than depressed.
A significant drawback of the DACL is that forms A-D were normed on females and forms F-G were normed on males. The test does not discriminate adequately depression for males on forms A-D, nor women on forms F-G. Although an apparently valid measure of depression, the DACL has not been chosen for this study because, like Beck’s Depression Inventory, it does not provide a sufficient measure of positive mood increase, and would require controls for the inconsistency of measurement due to sex.

Another Measure for depression is the Multiple Affective Adjective Check List (MAACL). As reported by Kelly (1972), the MAACL was developed by Zuckerman and Lubin in 1965. It is an extension of the Affective Adjective Check List and measures three affect dimensions: hostility, anxiety, and depression. The MAACL includes 132 adjectives in an “In general” form and in a “Today” form. The split-half coefficient for the “Today” form is .92 (p > .01) for college students. Retest reliabilities (7-8 days) tend to be moderate (.54-.70) and relatively low (.00 to .40) for the “Today” form (Kelly, 1972, p. 271). It should be noted that the low retest reliability for the “Today” form is expected since the “Today” form is a state measure as opposed to a trait measure.
As reported by Kelly (1972) the MAACL does have some drawbacks that need to be considered. The most serious issue concerning the MAACL is response set. When reviewing the literature, Kelly (1972) found that subjects vary greatly in the number of words that they respond to. In addition, there is no consistent correlation between affect state and number of words checked. Kelly recommends that subjects be instructed to respond to a certain number of items that best describe their feelings.

An additional concern discussed by Kelly (1972) is high intercorrelations between the scales. He also notes, however, that despite these high intercorrelations, the MAACL has "sufficient differential validity to reflect meaningful changes in affect for groups of S's..." (Kelly, 1972 p. 272). Kelly concludes that the "Anxiety" and "Depression" scales are sufficiently reliable and valid. He discusses the problem with response set on the "Anxiety" scale and explains that there is no data on response set for the "Depression" scale. He suggests that the MAACL is adequate for research purposes as long as it is not being used to assess hostility or anger.
Velton (1968) conducted research on the induction of mood states and used the MAACL along with six other measures: writing speed, distance approximation, decision time, perceptual ambiguity, word association, and spontaneous verbalizations. Velton evaluated the effects of having increasingly more emotional statements read to groups of subjects. In his "Elation" treatment the Experimenter began reading a list of statements that were neutral statements which became progressively more positive. The procedure was the same for the "Depression" treatment except that the statements became more negative. All subjects read the statements silently as the experimenter read them aloud. Velton used three control groups. Each control group used either an "Elation" list, "Depression" list, or an entirely "Neutral" list. In addition to the seven critical measures, two pre-treatment measures were used to assess pre-treatment mood state and suggestibility. Four of the critical measures demonstrated significant mood change \((p > 0.001)\) as the result of treatment, one of which was the MAACL. Mood change as measured by the MAACL was consistent with changes as assessed by writing speed, decision time, and word association. Mood change as assessed by these four measures was also congruent with behavioral
observations that included tears in the "Depression" treatment, and enthusiastic attitude in the "Elation" treatment. Velton's findings in this elaborately controlled study suggest that the MAACL is an effective measure in discriminating changes in mood states.

Of the above mentioned measures of depression, two measures, the MAACL and the MMPI "D" scale were deemed adequate for this current research. None of the other instruments investigated provided adequate validity in conjunction with a measure of positive mood increases. The MAACL and MMPI "D" scale were deemed adequate in both of these areas.

The Development of Self-Control Strategies

Homme (1965) is generally recognized as a leading influence in behavioral change through the use of self-control. He describes coverants as "mental events ie. thinking, imagining, etc." (Homme, 1965, p. 503). His explanation for the term "coverant" is that it is a simple contraction of covert and operant. Coverant Control Therapy is an intervention whereby the actual thoughts that a person has regarding his or herself are modified to effect behavior change. These modifications occur as new, more functional thoughts are reinforced.
Homme was the first behavioralist to discuss the fact that cognitive events had wrongfully been ignored by behavioralists. He suggested three primary reasons for this: 1) "difficulty in detection and occurrence or non-occurrence of the response because of difficulties in the description of the response's topography", 2) "the availability and control of reinforcers contingent upon the response", and 3) the problem of controlling the reinforcers (Homme, 1965, p. 502).

It was Homme's belief that coverants were wrongfully ignored because difficulties, or poor control over coverants, underlie many personality disorders. He stated that the first two reasons for not exploring the value of using coverants in therapy are not important. He further stated that the use of the Premack Principle eliminates the problem of controlling the reinforcers.

As reported by Homme, the Premack Principle stated that, "for any pair of responses, the more probable one will reinforce the less probable one" (Homme, 1965, p. 502). There is some dispute regarding whether the behavior serves as a reinforcer or as a discriminative cue when the principle is applied in clinical settings (Mahoney, 1972, 1974). There
is sufficient evidence for the efficacy of CCT to suggest that CCT is effective in either case (Hannum, Thoreson, & Hubbarb, 1974; Jackson, 1972; Johnson, 1971; Tharp, Watson, & Kay, 1974; Todd, 1972).

Homme (1965) stated that a subject must be reinforced for his self-modification or it will simply extinguish. If this is so, then he must be able to detect some of the consequences of his self-modification. Skinner (1953) and Holland and Skinner (1961) stated that an individual must be able to observe something such as weight loss, or the decline in the frequency of a habit or an uncomfortable feeling in order to persist in their self-modification program. Homme also explained why covariant control should be successful in a clinical setting. He stated that when an individual thinks about a response he is in fact making an approximation of that response. Therefore, by increasing the thoughts about a behavior one increased the probability of the actual occurrence of that behavior. He concluded by saying "it follows that if the subject has a task to perform which is a low probability one, he could approximate that task by making thinking about it a High Probability Behavior (HPB)" (Homme, 1965, p. 509).
Homme also suggested some possible applications of Coverant Control Therapy in clinical practice (Homme, 1965). He suggested that it would be effective in the control of smoking, weight control, sex, stuttering, and mood changes. He did not feel that there was any way of weakening a bad or negative covariant; he only proposed the strengthening of an incompatible response.

The literature indicates that Coverant Control is both a valuable and effective treatment method for a variety of disorders i.e. sexually related problems (Johnson, 1971; and Marshal, 1975); Obesity (Deitchman, 1972; Tyler & Straughn, 1970); test anxiety (Lavigne, 1974; Wagaman, 1975); dating behavior (Glass, Gottman, & Shmurak, 1976; Shmurak, 1974); nail biting (Harris, 1975); stuttering and speech anxiety (Moleski and Tosi, 1976; Wiessberg, 1974); obsessive thinking (Mahoney, 1971); and smoking (Keutzner, 1968).

**Coverant Control and Depression**

The importance of recognizing the cognitive component in the treatment of depression is discussed by Goldfried and Davison (1976).
A conceptualization of depression based solely on external reinforcements remains incomplete; showering a depressed client with gifts and other forms of reinforcement may not relieve the problem. We form a more comprehensive view, whereby depression may result from a perceived absence of any contingency between the person's own efforts and the reinforcing nature of the consequences that follow. We believe it is crucial to add the cognitive component, particularly since depression is not solely characterized by a low rate of behavior. (Goldfried & Davison, 1976, p. 234).

Additional support for this view can be found in Deitchman (1972).

Homme speculated on the applicability of CCT to the treatment of Depression. He stated that it was an approach that could be easily used to help eliminate dysfunctional habits or affect states. As reported earlier, Velton (1968) went even further in demonstrating that a subject's mood can be changed through the use of covarant control. He concluded that covarants do play a large part in the development of depression, and this suggests that depression can be controlled when the covarants themselves are controlled.

Case studies: Covarant control therapy with depression. In order to help the reader establish a clearer conception of the application of Covarant Control Therapy several select case studies will
be discussed. CCT is a flexible approach that can be adjusted according to the demands of the particular situation. The following studies are examples of some of the variations of CCT that have been used in the treatment of depression.

Todd (1972) designed and executed a treatment program for a 49 year old woman who was severely depressed. Mrs. M had attempted suicide on three separate occasions. She had been seeing a psychiatrist for 3½ years without a reduction in her depression. After a 6 month period without therapy, she sought the help of a behavior therapist. Mrs. M's treatment involved the use of many techniques because she had so many different behavior problems. Desensitization was used for phobias, conditioned relaxation for psychosomatic complaints, behavioral rehearsal for assertive training, and CCT for depression. Treatment began with the depression because of the variety and intensity of the problems. During the first phase of treatment Mrs. M was asked to generate a series of self-statements. The resulting list consisted entirely of negative statements, and therefore the therapist assisted in generating a new list of 6 positive self-statements. The 6 statements were printed on paper and Mrs. M was instructed to read one or two of them before
smoking a cigarette. One additional instruction was given: Mrs. M was asked to add new positive items to the list as they occurred to her. At the conclusion of one week of therapy Mrs. M had increased her list of positive items to 14 and Todd claims that her depression had improved considerably. At the end of another week her list of positive statements increased to 21 and she described herself as feeling great. Mrs. M was seen for approximately 41 sessions, and after a 3 year followup she reported no additional serious depressions (Todd, 1972).

Todd's assessment criteria was extremely subjective. Improvement was measured by self-report and the observation that Mrs. M had become more active in the community. Todd also used number of friends and the number of hours spent with friends as criteria. Although subjective evaluation is a part of all clinical work, Todd's criteria is too vague and subjective to be considered experimentally conclusive. One is led to wonder whether Mrs. M really improved or whether she simply reported to Todd what he might want to hear. The only empirical data collected by Todd was the number of positive statements on the list. It is certainly possible that this list increased as a function of her increased self-awareness and
improved self-discipline as opposed to the CCT procedure itself. Mrs. M had such a large variety of problems that many therapeutic techniques were used collectively including, systematic desensitization, behavioral rehearsal, assertiveness training, and marital counseling. Due to the lack of controls it is impossible to conclude that depressive behavior and affect change were the sole result of CCT. Had Todd evaluated the effects of CCT before contaminating therapy with the other approaches discussed; and if at the same time Todd had used criteria that was operationally defineable, his study would indeed have more credibility. In summary, this study lacks sophisticated controls and therefore one can merely state that it appears to lend support for the efficacy of CCT. The evidence, however, is far from conclusive.

In a somewhat better controlled case study, Mahoney (1971) presents a case of the treatment of depression with CCT. In Mahoney's study, baseline data and frequency charts are provided that clearly demonstrate reduction in target behavior. Mahoney did not, however, use additional criteria to assess improvement. Mahoney saw his client 1 hour every other week for obsessive-depressive ruminations. Two week baseline data was collected on an all or none time
sampling method. The client recorded on a 3x5 card each occurrence of the target behavior within a 2 hour time period. Client complaints included frequency, content, and uncontrollability of the obsessive-depressive thoughts. Mahoney's first intervention involved having the client count backwards whenever the target behavior occurred. This intervention increased the frequency of the target behavior. Mahoney then switched interventions and instructed the client to wear a heavy gauge rubber band on his wrist. The client was instructed to snap it upon initiation of the target behavior. A practice trial was implemented and Mahoney assessed that this was moderately painful for the client. Mahoney did not discuss, however, how this assessment was carried about. Within two weeks the target behavior dropped off to zero occurrences. Mahoney then recorded two weeks baseline data on Positive Self-Thoughts (PST's). At the conclusion of the two week period PST's had occurred 0 times. Mahoney then instituted a CCT procedure by attaching 3 positive statement cards to the client's cigarette package. He was instructed to make smoking contingent upon the reading of the 3 cards and the spontaneous generation of his own positive statement. After 4 weeks the client was spontaneously generating positive
thoughts for 64 consecutive 2 hour time periods. In addition, the client reported positive mood changes and specific behavioral improvements. These improvements, however were assessed via self-report and were not substantiated by additional criteria by Mahoney.

Mahoney claims that client improvement was maintained at 2 and 4 month followup, but fails to discuss what, if any, criteria was used. Mahoney's study clearly demonstrates the specific effects of several therapeutic interventions. Mahoney's use of CCT clearly demonstrates its effect on the target behavior. Unfortunately, because additional assessment criteria was not used, it is difficult to assume that mood change occurred. Although, it is clearly evident that the target behavior (spontaneous positive thoughts) did, in fact, increase through the use of CCT.

Another case study presented by Todd (1972) demonstrates the use of CCT for the elimination of test anxiety. The subject of the study was a young man whose anxiety resulted in lowered self-esteem, lack of confidence and a feeling of inadequacy. This young man's anxiety typically reached panic proportions. As discussed earlier in this paper, these behaviors typically precede severe depression. Todd's client, Mr. R complained that he had misgivings about succeeding
in graduate school despite an excellent record as an undergraduate. Todd had Mr. R develop a list of 10 items reflecting Mr. R's past accomplishments and imputing these to his possession of basic abilities. Mr. R was instructed to read one statement immediately before using the phone where he worked. In this case the telephone was selected as the HPB. Todd's CCT program for Mr. R was aimed at increasing self-confidence and feelings of self-worth. At the time of this therapy program Mr. R was a graduate student and was employed as a research assistant. Mr. R began enjoying class discussions after 6 sessions and was voted to represent his class for a project presentation. Todd states that Mr. R demonstrated continued improvement at a 6 month followup, and states that a 1 year followup showed no decrement in this progress.

Todd's case study of Mr. R is an interesting account of the use of CCT, but the study lacks empirical evidence and controls. The only criteria that Todd discusses to support behavior change is Mr. R's self-report that described class discussions as more enjoyable. The second criteria was the fact that Mr. R was elected to present a class project. There is absolutely no empirical evidence presented that allows one to conclude that these self-reports demonstrate a real
reduction in the target behaviors, nor does it allow one to assume that change (if any) was the direct result of the CCT procedure. An additional and perhaps more serious concern with this case study, is Todd's choice of followup criteria. Todd supports "continued improvement" with behaviors that Mr. R was maintaining even while depressed and unconfident; these incidents being outstanding academic success and the obtainment of a graduate assistantship.

Todd's study is valuable in that it demonstrates the adaptability of CCT for a variety of different target behaviors, but the study's poor controls and insufficient assessment criteria prevent the study from conclusively supporting the efficacy of CCT.

Johnson (1971) designed a therapy program for depression that was the converse of Homme's (1965) technique. Johnson demonstrated that CCT was also useful when an individual had already made progress in therapy but was having trouble eliminating old coverants. Johnson recognizes the fact that the thoughts, feelings, and attitudes previously associated with inappropriate behavior often times need special attention.

Johnson had seen Don for 4 sessions and had used
systematic desensitization to help eliminate Don's fear of being away from home. When Don began to show evidence of severe depression, Johnson decided to use CCT. A list of positive therapeutic changes was developed. Don was instructed to read and reflect on these statements prior to urination. After two weeks Don verbalized that he experienced no depressive feelings and even noted that he was aware of spontaneous positive thoughts. Thus he demonstrated how CCT can be used with very basic HPB's such as urination. Even more important, he demonstrated that CCT techniques enable the therapist to extend control to the client's environment.

An example of a CCT program designed by and implemented by the client is presented by Tharp, Watson, and Kaya (1974). They briefly describe the case of a mildly depressed student. The young woman began by completing the MMPI and then initiated a self-mod program that involved increasing honest thoughts and feelings. The woman then began systematically rewarding positive honest statements read whether aloud or to herself. Kaya reports that after two months "remarkable change" was reflected in the MMPI post-test. Kaya's study completely lacked experimental controls, and data is not supplied in the report of the research.
Kaya relates that the study is valuable in that it describes a program developed by and adjusted by the client. Kaya recognizes that the study does not support the efficacy of such a program, but suggests that CCT may become an approach that will offer the person who either cannot (or will not) participate in formal therapy, an opportunity to help themselves.

Rush, Khatami and Beck (1975) present two case studies where cognitive and behavior therapy were used in the treatment of depression. Both patients were pre-tested with the Beck Depression Inventory (BDI), the Hamilton Rating Scale (HRS), and the Visual Analogue Scale (VAS); and had a diagnosis of primary depression. A repeated measures design was used with a pre-test session, 14 treatment sessions and a followup session 1 year after the pre-test session. In the first case a 37 year old male had a 1½ year history of serious depression. During this time ECT, medication, and hospitalization brought no relief of symptoms. Twelve treatment sessions with cognitive-behavioral therapy were then given over a 4 month period.

The subject was assigned the task of keeping a record of his daily activities, and was also instructed
to keep a list also. The process of reviewing his list with his wife provided a time in which she could discuss the positive activities that she had recorded. This procedure exposed the patient to positive statements each day and also served to confront his cognitive distortions when she labeled an activity as positive that he had seen as negative. After the eighth session the depression was at normal limits on all measures and improvement was sustained at the one year followup.

In their second case a 53 year old male with a life history of depression was hospitalized after a two year period of depression. During his last episode he received ten treatments of ECT without alleviation of symptoms. The patient was then introduced to a cognitive behavioral program that continued weekly for three months, biweekly for two months, and then terminated. During treatment the patient was instructed to keep a list of daily activities. He and his wife compared lists daily and distortions were discussed. The patient was instructed to generate a list of new attitudes that he was developing as treatment progressed. He was also to re-read this list daily for the remaining weeks of therapy. An example of one of the statements was "I am starting
at a lower level of functioning at my job, but it will improve if I persist." (Rush, Khatami and Beck, 1975, p. 401). As the depression reduced, the patient returned to work for the first time in two years. At one year followup he was still free of depression on all measures.

Problems in Coverant Control Therapy

There are 3 major problems which could mitigate the effectiveness of CCT. The first problem with CCT is the ease with which therapists can inadvertently impose value judgements on their clients. Typically, depressed persons are not willing to, or are not capable of, generating a list of positive statements. Therapist prompting is therefore necessary. Therapists must be very careful at this stage not to make decisions for their clients in the interest of facilitating therapy. The therapist and client must always develop these lists together, and the therapist has an ethical obligation to avoid imposing his own values onto the client, unless the client becomes a threat to others or to him- or herself.

The second problem with CCT is that of client motivation and participation. Most of the therapeutic intervention takes place outside of the therapist's office, and therefore he retains little client control.
Unless CCT is utilized with persistence the client may discontinue its use because the occurrence of early frustration is probable. In the early phases of treating depression, it is expected that negative self-statements will occur with great frequency.

If a client repeats a positive self-statement early in training, it is very possible that it will be followed by a negative statement on at least a few of the occasions. When this occurs the verbalized positive self-statement will be punished by the negative self-statement. The result could range from mild discouragement to the termination of therapy.

To avoid this dilemma, the therapist would need to maintain strong control, at least during the early stages of therapy. Secondly, behavioral rehearsal could be utilized until the client becomes familiar with the procedure. For example, the therapist might ask the client to imagine that he is just about to eat a meal and read his statement cards. The therapist would then ask the client to play out the entire procedure. This would increase the probability that when he does verbalize self-statements, it would be easy and non-threatening. It would seem that the more positive the initial experience, the stronger it could become; therefore, these initial experiences
would be that much more resistant to the effects of punishment.

The third and final problem of CCT to be discussed in this paper concerns accurate negative self-statements. CCT may not be appropriate when the things that an individual is telling himself are true and accurate. Negative self-statements serve a motivating function sometimes, and they should not be eliminated if they are entirely accurate. The person is not distorting reality, and his depression is therefore still serving an adaptive purpose (Ferster, 1973). This type of depression is probably best treated with training in problem solving skills (Ferster, 1973; Martin, 1972).

Although CCT has some problem areas that could become serious in nature, some of them might be better controlled with careful therapist control via a warm therapeutic relationship. Self-control strategies allow clients to become their own therapists. It requires client participation, involvement, and action; therefore eliciting greater behavior output by the client. Clients that follow the self-control strategies increase their activity level and therefore increase the possibility of performing a behavior that can be reinforced. Reinforcements may come from the environment, other persons, or from internal...
gratification. When the depressed person changes those coverants which had normally led to overt complaints, the frequency of aversive behaviors decrease, and the individual then gains further support from the environment. As more and more cognitions change, the person will come to observe environmental events with greater accuracy which will increase the frequency of reinforceable behaviors. The environmental feedback will in turn reinforce the use of CCT and self-exploration. As concerns are discussed and explored, the client will gain a better understanding of himself and therefore will be better able to choose effective alternatives in the future.

The Development of Therapeutic Relationships

As reported in Truax and Carkhuff (1967) Human Relation skills received their first recognition with Carl Roger's (1957) paper on the "Necessary and Sufficient Conditions of Therapy." Rogers stated that these conditions were empathy, non-possessive warmth and genuiness. Truax and Carkhuff began to examine the efficacy of Human Relation skills for the establishment of a therapeutic relationship. They also began operationalizing these skills while working with Rogers at the University of Wisconsin (Truax and Carkhuff,
This line of research began with a search for the common therapist skills that consistently led to the establishment of a warm therapeutic relationship and in turn, client improvement. The search led to an approach that helps the client grow through examining his problems in terms of his own perceptual (phenomenological) field. Six additional core dimensions were added to Rogers' empathy, non-possessive warmth, and genuineness; they were: respect, concreteness, congruence, self-disclosure, immediacy, and confrontation.

Evidence for the validity of the core dimensions can be found in Truax and Carkhuff (1969) and Hefele and Hurst (1972). Once the core dimensions were enumerated, Truax and Carkhuff developed standardized scales which served for both assessment and training the skills. In addition, they developed a rationale for the use of these intervention skills (Gazda, 1973).

The Core Dimensions of Helping

Truax and Carkhuff developed and standardized the core dimension scales so that one could learn to distinguish between the hurtful use of these dimensions and the most beneficial use of these core elements. For the purpose of this review, the dimensions will be labeled and a brief summary of the higher level
components of each scale will be discussed. For a more extensive explanation of the dimensions, see Truax and Carkhuff (1969) and Gazda (1973).

Empathy: Responding to the client so as to communicate that the therapist understands the client beyond the client’s level of immediate awareness. The therapist focuses on underlying feelings and relates the content issues so as to add deeper meaning to the affect level. Both content and affect match the clients perceptions exactly (Gazda, 1973).

Respect: Responding to the client in such a way that demonstrates that the therapist is willing to: 1) take the risk of being hurt, 2) make sacrifices, and 3) allow the client to be comfortable in being himself. The purpose of providing respect is to allow the client to experience himself as a valued individual (Gazda, 1973).

Warmth: The therapist gives the client his complete and undivided attention while listening; and is willing to alter his physical proximity to the
client or to make physical contact to demonstrate his acceptance of the client (Gazda, 1973).

Concreteness: The therapist responds to the client in such a way as to elicit specificity from him. The therapist actively models specificity by clarifying vague or abstract statements. This dimension also includes therapist activities such as summarizing the client's concerns and statements so as to make them more manageable (Gazda, 1973).

Genuiness: The therapist allows his verbal and non-verbal messages to be congruent with what he actually feels, whether positive or negative. They are not restricted, but are instead channeled honestly in a way that is constructive and that strengthens the therapeutic relationship (Gazda, 1973).

Self-Disclosure: The therapist volunteers relevant information about his own life experiences, ideas, and feelings to the client. The therapist does this even when it involves a risk on his part (Gazda, 1973).
Confrontation: The therapist points out discrepancies that he has noticed during the therapeutic encounters, and explores with the client where these discrepancies lead. These discrepancies are discussed directly and firmly, yet in a constructive manner (Gazda, 1973).

Congruence: The therapist behaves in a manner that is congruent with his feelings. He both models this and elicits it from the client (Gazda, 1973).

Immediacy: The therapist discusses the therapeutic relationship as it exists at that specific moment in time. He is honest yet constructive with his feelings and manages to keep them current (Gazda, 1973).

The Effect of Human Relation Skills

According to Gazda (1973) and Egan (1975) the ultimate effect of using Human Relation skills is that it helps the client generate more effective behavior. The specific goals of therapy are determined by the therapist and client collectively. The therapist provides the environment, via the relationship, that enables the client to explore his inner self, to
come to know and understand himself, and then to choose the appropriate behavior changes or action programs (Gazda, 1973). The reflective listening process allows the client to experiment with new approaches of problem solving and relating to others. The genuine feedback that he receives gives the client the opportunity to evaluate accurately those attempts. If the client wishes to internalize these new approaches, he may do so, or he can choose to continue experimenting. The therapeutic relationship allows the client to experiment continuously within a secure, genuine atmosphere, one that also provides instant feedback (Gazda, 1973).

According to Martin (1972), depression is only one of several possible symptoms for an anxiety based neurosis. He explains that the neurotic conflict manifests itself by anxiety, self-depreciating thoughts, and a lowering of self-esteem. He claims that an individual's thoughts, acts, and impulses become cues for anxiety because they are concurrently punished when certain behaviors are punished. Once a person's thoughts become a source of anxiety, avoidance strategies begin to be used, and therefore the individual's problem solving repertoire is reduced drastically. Conflict becomes symptomatic when the individual attempts to perform two or more incompatible responses at the same time.
Martin (1973) enumerates Dollard and Miller's four types of conflict: approach-approach, avoidance-avoidance, approach-avoidance, and double approach-avoidance. Approach-approach conflict occurs when an individual has chosen two goals that are incompatible with one another. By choosing one goal the individual will lose access to the other goal. Martin explains that this conflict is typically resolved when some factor "tips the scales to favor a particular goal." (Martin, 1972, p. 34). Avoidance-Avoidance conflict refers to the situation where both goals are aversive and the individual must choose between them. Avoiding one goal in this type of conflict automatically results in approach towards the other goal. Individuals usually resolve this type of conflict by fleeing the situation entirely. The third type of conflict is approach-avoidance. This type of conflict is extremely destructive. It occurs when a specific goal is both desired and feared at the same time. The fourth type of conflict, double approach-avoidance is a more complex version of approach-avoidance conflict. This conflict is the one most commonly experienced and results when several alternatives are available for approach and each of those alternatives has feared aspects as well (Martin, 1972).
Martin's model explains intervention as a method of counter-conditioning noxious thoughts. Avoidance of these thoughts prevents the individual from seeing the entire situation and thus reduces his problem solving effectiveness. Frequently, the very thought of attempting to solve a problem leads to avoidance behavior. This results in an avoidance pattern that even inhibits thoughts concerning problem solution.

Through the use of the core skills the therapist forces the client to experience these noxious thoughts. Empathic responding helps the client explore those thoughts that are difficult to deal with. Advanced accurate empathy is used to help the client verbalize those thoughts and feelings that are most difficult for the client to express. This process helps the client move closer to problem resolution, but it does so in a warm, secure, and understanding environment. The therapeutic relationship serves as a counter-conditioning agent by providing this environment. The noxious thoughts soon lose their anxiety provoking quality, and instead become paired with warm, secure feelings. When the client can again experience these thoughts he is able to increase his problem solving repertoire. Therefore, client self-exploration helps
to alleviate depression in two major ways: 1) it counter-conditions the aversive feelings that have become attached to internalized thoughts, and 2) it increases a person's ability to react successfully in the environment.
Subjects

The subjects consisted of 30 volunteer psychology undergraduates, 13 males and 17 females. A request for volunteers was made in all introductory level psychology classes by the instructor. All 30 volunteers were pre-tested and then randomly assigned to groups. No attempt was made to match subjects by common demographic data or on any other variables other than sex, age, and marital status. In addition, the subjects were blind to the experimental hypotheses.

Instrumentation

The measures chosen for this study were the MAACL and the MMPI “D” scale (see appendices A & B). As reported by Kelly (1971) the MAACL was developed by Zucherman and Lubin in 1965. It is an extension of the Affect Adjective Check List and measures three affect dimensions: hostility, anxiety, and depression. Only the depression dimension was utilized for this study. The MAACL consists of 132 adjectives and it
comes in two forms, the "Today" form and the "In General" form. The "Today" form was designed as a state rather than a trait measure and was the form chosen for this study. The split-half coefficient for the "Today" form is .92 (p < .01) for college students. Retest reliability for the "Today" form is relatively low (.21). Zucherman and Lubin (1965) state that low retest reliability for this measure is acceptable since it is a state measure. Retest reliability is .79 for psychiatric patient groups indicating that the measure does reliably measure state depression.

The MMPI consists of 566 statements that cover a variety of subjects. The test-retest reliability coefficients for the "D" scale (when assessed with the entire inventory) are .77 and .66 for normals, and .80 for psychiatric patients (Hathaway & McKinley, 1967). The MMPI "D" scale consists of 60 items. There is little data available that indicates whether the MMPI "D" scale is sufficiently valid when used without the entire inventory. Hathaway and McKinley (1940) suggest that the MMPI is valid regardless of whether items are added or removed, but their claims are not substantiated with empirical evidence. Perkins and Goldberg (1964) evaluated the contextual effects of the MMPI, and found that contextual
alterations of the instrument has little effect on initial administrations. They did, however, find that repeated administrations resulted in artificial score improvements. It was assumed, however, that artificial improvements would remain stable across groups, and therefore would be sufficiently valid for the between group comparison purposes of this research.

Materials

1. Ninety MAACL answer forms (Today).
2. Thirty 3x5 cards.
3. One Hundred and eighty 5x8 cards cut into quarters.
4. Thirty individual permission and release forms.
5. Twenty handouts of 40 sample self-statements.
6. Twenty handouts of instructions for Experimental groups.
7. Two jigsaw puzzles.
9. One cassette recorder.
10. Eight 60 minute cassette tapes.

Procedure

The instructors for introductory psychology courses requested volunteers for research (see Appendix C).
The nature of the research was briefly outlined, to the class, at this time. All volunteers were given a time and place to meet for pre-testing and grouping. During this first meeting the experimenter introduced himself and distributed the MAACL and MMPI "D" scales. The subjects were instructed to fill out the information requested by the test and to follow the test instructions. The experimenter then collected the MAACL and MMPI test forms when they were completed. The experimenter then asked the subjects to provide demographic data, information regarding previous therapy or counseling experiences, and class schedules on 3x5 cards provided. The experimenter's assistant then assigned subjects to groups according to the free time slots noted on their demographic data cards. The experimenter cursorally examined the demographic data to insure that there was a relatively random mixture of individuals across age and marital status in each group. Upon a more thorough examination after the subjects were dismissed no additional imbalance was found. The subjects were then separated according to their groups and did not meet as a single unit again. After the separation was complete, information and release forms were distributed, signed and collected.
(see Appendices D, E, & F). The subjects in each treatment group were randomly divided into 2 subgroups of 5 persons each. Each subgroup was given a time, date and place to meet for their first treatment session and were then dismissed.

Each Experimental group met for 45 minutes once per week (for 4 weeks) with the same therapist. Only one therapist participated in this study. The Control group met for 45 minutes once per week (for 4 weeks) with no therapist present. All subjects were post tested on the WAACL and MMPI "D" scale at the beginning of their fourth session. After the post tests were collected the subjects were given one additional date (30 days later) to meet for followup testing and debriefing (see Appendices G & H).

Experimental Group I (Consisting of 2 subgroups of 5 members each). Experimental group I received CCT in the absence of a warm therapeutic relationship. The therapist delivered the CCT assignment and ran the group in a didactic manner (see Appendix I). He avoided interpersonal discussions of feelings or conflicts (see Appendix J for manual of instructions for Experimental Groups). In addition, each group
member filled out a self-report questionnaire at the beginning of each session (see Appendix K).

**Experimental Group II** (Consisting of 2 subgroups of 5 members each). Experimental group II received CCT instruction (see Appendix I) while involved in a warm therapeutic relationship with a therapist and 5 other group members. In order to develop a warm therapeutic relationship the therapist demonstrated high levels of human relationship skills as defined by Carkhuff and Berenson (1977) and Gazda (1973) (see Appendix J). In addition, each group member filled out a self-report questionnaire at the beginning of each session (see Appendix K).

**Control Group** (Consisting of 2 subgroups of 5 members each). The Control group was given the structured task of working on a jigsaw puzzle. They were instructed to complete as much of the puzzle as possible in the 45 minute period. In addition, they were told that no single members' performance would be measured in any way. The Control group received no treatment. They met 45 minutes once per week, for four weeks, just as the 2 Experimental groups, but had no therapist
present. The same individual who functioned as the "therapist" in the experimental groups provided approximately 5 minutes of brief instructions to this group as to how they were to function during the remainder of their 4 scheduled meetings. At the beginning of group meetings number 2 and 3 the Control groups were given their puzzles and were instructed to assemble them as a group. On the fourth session the group members were post tested prior to working on their task.

Counselor One Ph. D counselor provided treatment to all subjects. Prior to seeing the Experimental subjects, the counselor underwent an intensive briefing session where he was instructed how to interact with the subjects in each of the two treatment conditions. In addition, he received a manual of guidelines to study and adhere to during the experiment.

The Counselor was instructed to tape all treatment sessions. Random segments of these tapes were reviewed by an expert consultant after completion of the study in order to establish whether the experimental conditions were maintained. The consultant determined that there was no evidence of deviation from the prescribed guidelines. In addition, the counselor was blind to the specific objectives and hypotheses of this study.
CHAPTER III

Results

Pre-Treatment ANOVA Across All Groups

To test for differences in mood level among groups prior to treatment, one-way analyses of variance were performed on MAACL and MMPI scores. The results of the analyses indicated that there were no significant differences among groups prior to treatment as measured by the MAACL ($F = .76$, $df = 24$, $p > .05$); and the MMPI “D” scale ($F = .23$, $df = 24$, $p > .05$) (see Table 1).

Post-Treatment ANOVA Across All Groups

Separate one-way analyses of variance were performed on post-test MAACL and MMPI scores across the 2 treatment and 1 control groups. It was found that the groups were significantly different at post-test on the MAACL ($F = 3.44$, $df = 24$, $p < .05$). There was not, however, a significant post-test difference between groups as measured by the MMPI ($F = 3.08$, $df = 24$, $0.05 < p < 1.0$) (see Table 2).
Table 1  
Analyses of Variance:  
Pre-test  

**MAACL**

<table>
<thead>
<tr>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
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<tbody>
<tr>
<td>Between Groups</td>
<td>90.96</td>
<td>2</td>
<td>45.48</td>
<td>0.7628</td>
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<td>Within Groups</td>
<td>1430.89</td>
<td>24</td>
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<td>Total</td>
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**MMPI**

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<th>MS</th>
<th>F</th>
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<td>14.5</td>
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<td>0.235</td>
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<td>Total</td>
<td>734.3</td>
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Table 2
Analyses of Variance:
Post-Test

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<th>MS</th>
<th>F</th>
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<tbody>
<tr>
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<td>268.99</td>
<td>2</td>
<td>134.495</td>
<td>3.44*</td>
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<tr>
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<td>937.00</td>
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</tr>
<tr>
<td>Total</td>
<td>1206.1</td>
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*p < .05

<table>
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<tbody>
<tr>
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<td>200.67</td>
<td>2</td>
<td>100.33</td>
<td>3.08</td>
</tr>
<tr>
<td>Within Groups</td>
<td>780.00</td>
<td>24</td>
<td>32.5</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>980.67</td>
<td>26</td>
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</table>
Followup ANOVA Across All Groups

One-way analyses of variance were performed on followup test MAACL and MMPI scores. The groups were not found to be significantly different at followup on either measure (MAACL: F = 2.96, df = 24, p > .05; MMPI: F = 3.07, df = 24, p > .05) (see Table 3).

Multiple Comparison of Group Differences

Based on the significant ANOVA from post-test MAACL scores, a Least Squares Difference post hoc analysis was performed. The results indicate that there was a significant difference between the experimental group with the "relationship" condition and the "control" group (t (24) = 7.22, p < .05). There was not, however, a significant difference between the "without relationship" condition and the control group (t (24) = 6.00, .05 < p < 1.0).

Correlation of MAACL and MMPI "D" Scale Scores

Mood state (MAACL) was correlated with mood trait (MMPI) in an attempt to determine whether the two measures were measuring different dimensions of depression. It was found that post-test scores correlated highly (rxy = .66, t (25) = 4.39, p < .001) while pre-test and followup scores correlated less highly (rxy = .49, t (25) = 2.81, p < .01; and rxy = .42, t (25) = 2.31, p < .05).
Table 3
Analyses of Variance:
Followup

<table>
<thead>
<tr>
<th>Source</th>
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<th>MMPI</th>
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<td>df</td>
<td>MS</td>
<td>F</td>
<td>SS</td>
<td>df</td>
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<tr>
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<tr>
<td>Within Groups</td>
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<td>24</td>
<td>45.03</td>
<td></td>
<td>729.778</td>
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</tr>
<tr>
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<td>916.67</td>
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Group Means Over Time

Table 4 reflects that the "with relationship" group mean on the MAACL (10.33) was much smaller than the "without relationship" group (14.33) and the control group (14.11) on the same measure. This was not the case, however, for the MMPI pre-test means. While not statistically significant, the trend suggests that the "without relationship" group improved more than the "with relationship" group as measured by the MMPI at both post-test and followup.

The "without relationship" group's pre-test mean (MAACL) was 14.33 and changed to 8.22 at post-test. The "with relationship" group's pre-test mean of 10.33 changed to 7.0. While the "with relationship" post-test mean was numerically smaller than the "without relationship" group's mean, it appears that the greatest total change occurred in the "without relationship" group.
Table 4
Group Means and Standard Deviations

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<tr>
<th></th>
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<th></th>
<th></th>
<th>Post</th>
<th></th>
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<th>Followup</th>
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<tr>
<td></td>
<td>MAACL</td>
<td>MMPI</td>
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<td>MMPI</td>
<td>MAACL</td>
<td>MMPI</td>
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</tr>
<tr>
<td></td>
<td>8.45</td>
<td>6.67</td>
<td>5.93</td>
<td>5.13</td>
<td>4.82</td>
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</tr>
<tr>
<td>E₂</td>
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<td>21.11</td>
<td>7.0</td>
<td>19.55</td>
<td>9.55</td>
<td>19.44</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.69</td>
<td>5.28</td>
<td>5.52</td>
<td>6.29</td>
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<tr>
<td>E₃</td>
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<td>22.66</td>
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<td>7.17</td>
<td>5.63</td>
<td>5.92</td>
<td>6.22</td>
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CHAPTER IV

Discussion

The results of this experiment provided mixed support for the main questions under investigation. Of the two instruments used (MAACL and MMPI "D" scale) only the MAACL detected a significant difference between groups at the post-test measurement period. The CCT "with relationship" condition was found to be significantly different from the control group at post testing. The "with relationship" condition experienced significant mood elevation. There were no significant differences identified at followup testing, however.

The purpose of this study was to answer the following questions:

1. Is CCT treatment significantly effective in elevating mood as compared to a no treatment control group?

2. Is CCT treatment with the addition of a warm therapeutic relationship significantly effective in elevating mood as compared to a no treatment control group?
3. Is CCT with the "relationship" condition significantly more effective than CCT without the "relationship" in elevating mood?

**MAACL**

With respect to question 1, it was predicted that CCT would be effective in elevating "mood" even in the absence of a therapeutic relationship. Surprisingly, this prediction was not supported by the present data.

With respect to question 2, it was found that only CCT in conjunction with a therapeutic relationship was more effective than no treatment ($t(24) = 7.22, p < .05$). The MAACL scores did indicate an elevation of mood for the CCT "without relationship" condition, but the difference was not significant (see Table 4).

**MMPI**

MMPI scores did not indicate that treatment was more effective than no treatment when dealing with mood elevation.

It is important to note, however, that although MMPI scores did not indicate a significant difference between the groups; they did in some cases conflict with the results of the MAACL scores. The discrepancy
between results on the MMPI and the MAACL was unexpected. The MMPI scores indicate a mood elevating trend for the "without relationship" group at both post- and followup testing, while only a minute trend in mood elevation for the "with relationship" condition. While not statistically significant at the $p < .05$ level, the trend is consistent and therefore deserves some speculation.

The data trend suggests that the warm therapeutic relationship did not effect those variables such as, client trust, motivation, conflict resolution, and treatment effectiveness as expected. It was expected that the "with relationship" condition would generate greater motivation, trust, conflict resolution, and treatment effectiveness than would the CCT "without relationship" condition. It was also expected that these differences would be reflected through greater mood elevation as measured by both of the critical measures. The data trend does not support this hypothesis. The "counselor", however, noted on many occasions that the "with relationship" group was more prepared, and maintained a more serious approach toward the CCT procedure than did the "without relationship" condition. The measure specifically designed to assess changes in trust and motivation was deemed useless
for several reasons. First, many of the subjects were observed estimating the requested information rather than actually computing. Second, some subjects failed to complete the forms; and third, some of the forms were not turned in as directed at the completion of the sessions. More careful experimental control could have alleviated this problem but the error was not detected until after some of the groups had already completed their second session. Unquestionably, this missing data could have clarified some of the apparent conflict surrounding the interpretation of the data.

When reviewing both the data trend and the counselor's observations, it appears that the CCT "without relationship" condition resulted in mood elevation as detected not only by the MAACL, but the MMPI "D" scale as well. While not reflecting mood elevation on the MMPI "D" scale, the CCT "with relationship" group demonstrated greater mood changes as measured by behavioral observation. Upon reviewing this information, it appears as though the CCT "without relationship" condition might have simply improved the subjects' ability to "repress" (avoid aversive thoughts), as opposed to actual mood change. The "counselor's" behavioral observations support this
contention in that no instances of behavioral change were noted for the "without relationship" group. The MMPI is based on intrapsychic theory and would therefore be most sensitive to changes in this intrapsychic mechanism.

The "with relationship" condition focused on conflict resolution as opposed to aversive thought avoidance. This particular treatment would most likely effect honest self-disclosure and self-awareness while not improving repression at all. On an intrapsychic measure such as the MMPI, improved self-awareness might in fact appear as though the subject was incapable of effectively repressing painful impulses. Again the behavioral observations made by the "counselor" support this contention since many behavioral changes such as spontaneous positive self-statements, frequent smiles, and enthusiastic participation, were noted for the "with relationship" group. Obvious behavior changes were noted without concurrent changes on the MMPI "D" scale.

The "with relationship" condition was designed to achieve mood elevation in conjunction with conflict resolution. This condition demonstrated significant mood change (as measured by the MAACL) in addition to noted behavioral changes. Although not substantiated
with empirical evidence, the "counselor's" behavioral observations suggest that subject trust and subject motivation, did actually improve as originally expected. This observation becomes of critical importance when considering the implication to the clinical setting. The observation suggests that a client will be more likely to complete and follow through with CCT when it is delivered in conjunction with a warm therapeutic relationship.

It is possible that the above interpretation sufficiently explains the data. There are other factors, however, that suggest that the data itself could be misleading due to the presence of other extraneous variables. The following discussion enumerates and explores those factors.

The dependent variable in this study was mood. Two measures, the MAACL and the MMPI "D" scale were chosen to assess mood change. The MAACL was chosen as a measure of mood "state" while the MMPI was chosen as a secondary measure. When considering the discrepancy between the two measures several possible explanations come to mind. First, there is little empirical research on the validity of the MMPI "D" scale when used independently of the entire profile. Hathaway and McKinley (1940) speculated and proposed that items could be added or
removed from the test without any marked effects. Perkins and Goldberg (1964) empirically studied the contextual effects of the MMPI and found that contextual deviations including the isolation of a single scale, has little effect on scores for initial presentations. They did find, however, that retest effects posed some problem. They found that patients' scores improved with each additional retest. Perkins and Goldberg, explain this trend towards improvement as a change in the approach to the task. Patients initially concentrate on each question and answer accordingly. Perkins and Goldberg suggest that on future occasions, the patients become bored and tend to respond to the social desirability aspects of the questions. Therefore, it is conceivable that the retest process alone results in apparent improvement. With respect to this present research, the CCT "with relationship" group would have been less susceptible to this retest effect since the focus of their treatment was on honest self-disclosure and improved self-awareness. On the other hand, the CCT "without relationship" condition was most susceptible to this retest effect since their treatment did not focus on honest self-disclosure and improved self-awareness. As discussed earlier in this paper, CCT delivered without the addition
of a warm, therapeutic relationship merely results in thought avoidance and inhibition. The very nature of this treatment may have even accelerated the retest effect for this group. In light of this information it is impossible to dismiss the possibility that the use of the isolated MMPI "D" scale may have been invalid under the conditions of this study.

Second, both measures chosen were susceptible to response sets. On the MAACL, specifically, subjects would respond to as many or as few stimulus words as desired. On both measures, subjects could intentionally avoid checking negative stimulus words in an attempt to present themselves in a more positive light. In sum, subjects' scores could be dependent upon how honest or disclosing they chose to be. When choosing the measures to be used for this research it was assumed that response sets would remain stable. The conflicting results, however, suggest that response sets may not have been stable as assumed.

Third, the MMPI is a "trait" measure as opposed to a "state" measure. That is, it purportedly measures enduring, stable personality characteristics as opposed to current mood awareness. It is probable that two different facets of mood were measured. Supporting this conclusion is data presented by Zucherman and Lubin.
(1965). They present correlations of .49 for MAACL and MMPI "D" scale scores for males and .41 for females. When a Pierson product moment correlation was performed it was found that for this study MAACL and MMPI "D" scale scores were moderately ($p < .05$) correlated at pre- (.48) and followup (.42) testing, but were more highly correlated ($p < .001$) at post-testing (.66). It is probable therefore, that the MAACL and MMPI "D" scale were, in fact, measuring different dimensions of mood.

In the event the MMPI was a valid indication of mood change and if the above mentioned variables did not interact as suggested; then the results would suggest that CCT is most effective when the relationship aspect is absent. In an attempt to clarify this confusion, the experimenter examined the verbal and written statements expressed by the subjects throughout the course of the study. Several subjects wrote statements on their weekly self-report form, while others verbally expressed feelings during followup testing. These statements were not catalogued in a consistant and controlled manner, but when reviewed suggested that the CCT "with relationship" condition was more effective than the CCT "without relationship" condition in eliciting spontaneous statements. Several subjects from the
"with relationship" group expressed highly positive feelings, i.e. "I find myself feeling really good on Tuesdays, all day!"; "I've been thinking super positive before I eat, the thoughts just pop out in my mind."; "I've found a new boyfriend because of this study, I've been more fun to be around."

In only one case did a subject from the "without relationship" group spontaneously verbalize an elated or especially positive statement. This person stated, "I think I'm happier now than before this study began."

Verbal statements from the "control" group were either neutral or negative, i.e. "I had to withdraw from my psychology class because I just can't get myself in gear."; "I feel really crappy today."; "Here we are, another day with the jigsaw puzzles!". The written and verbalized statements appear to support the MAACL results as opposed to the MMPI "D" scale results.

Limitations

As the research progressed several problems developed that could easily have affected the results. The first problem that developed was in the grouping procedure. Originally, only the 30 most depressed subjects were to be used in the study. Unfortunately,
only a total of 30 subjects volunteered and therefore they had to be randomly assigned regardless of pre-test depression scores. The second problem that developed was in the sampling procedure. It was decided that the absolute minimal sample size for a study of this design was 27 subjects. Only 30 subjects volunteered but only 27 of these subjects completed the study. Three subjects were not able to complete the study for a variety of reasons. One subject from the control group died during the second week of the study, one from the "without relationship" group had to be hospitalized for a kidney infection, and one subject from the "with relationship" group promised to attend but never did. In each case of discontinued involvement, the reasons for the subjects' absence was withheld from other group members in order to avoid any contaminating effects. For example, had subjects learned that one of their fellow group members had died, they might have increased their relationship involvement due to this extraneous stimulus, while the other groups would not have had this potential cohesiveness building experience. In addition, group mood may have been artificially depressed due to knowledge of a fellow group members misfortune.

A third problem was that a large number of subjects contracted the flu during the research period.
Several of the subjects were heavily medicated during the follow-up test. Surprisingly, none of the control group subjects contracted the flu and this could have had a bearing on their responses to the measurement devices. It was difficult for the "sick" subjects in the two treatment groups to respond positively to the MAACL which requests the subjects to check adjectives which describe how they feel "today". Thus scores at follow-up could have been artificially depressed for this reason.

Two major design flaws were encountered during the study. The first problem was that the CCT "with relationship" condition had an insufficient number of sessions in which to establish a well grounded relationship with the group leader and the group members. The first session was introductory and only two actual treatment sessions remained (the fourth session was used for post-testing). Many group members never had an opportunity to deal with their feelings, although they were able to be supportive of their peers. As a result of this trial inadequacy the CCT "with relationship" group may not have experienced as much conflict resolution as was expected.

The second design problem was that subjects in the "with relationship" condition learned to become
more honest, disclosing, and less afraid to deal with negative feelings as well as learning to increase positive feelings. It is probable that these subjects were more willing to label these aversive feelings on the MMPI and MAACL, and therefore their self-ratings might not indicate their overall mood gains. A measure that would not have been negatively influenced with increases in ability to disclose honestly should have been included in the assessment process. Unfortunately, none of the measures investigated for this study would have been adequate for this purpose. Behavioral measures such as number of positive spontaneous statements, number of conversations initiated, response time, and number of smiles observed might be useful additional criteria.

Finally, it is important to remember that this study is an analogue study and this has an effect on the generalizability of the results. In this study specifically, generalizability is diminished due to the small number of subjects, it is clear, however, that for a college population, CCT in conjunction with a therapeutic relationship is effective in elevating mood, or decreasing depression as long as treatment is maintained. Due to the limitations of this study, it is impossible to determine how much treatment would
be necessary to have lasting results. It is recommended that future research be directed at followup assessment so as to determine the optimal length of treatment for the most lasting results.
APPENDIX A

MULTIPLE AFFECT
ADJECTIVE CHECK LIST
TODAY FORM

By Marvin Zuckerman
and
Bernard Lubin

Name............................................. Age....... Sex.......
Date................................. Highest grade completed in school....

DIRECTIONS: On this sheet you will find words which describe different kinds of moods and feelings. Mark an X in the boxes beside the words which describe how you feel now - today. Some of the words may sound alike, but we want you to check all the words that describe your feelings. Work rapidly.

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|   | Active       | Adventurous | Affectionate | Afraid     | Agitated | Agreeable | Aggressive | Alive     | Alone      | Amiable    | Amused     | Angry      | Annoyed    | Awful      | Bashful    | Bitter     | Blue      | Bored     | Calm      | Cautious   | Cheerful   | Clean      | Complaining | Contented  | Contrary   | Cool       | Cooperative | Critical   | Cross      | Cruel      | Darling    | Desperate  | Destroyed  | Devoted    | Disagreeable | Discontented | Discouraged | Disgusted  | Displeased | Energetic  | Enraged    | Enthusiastic | Fearful    | Fine       |
|---|--------------|-------------|-------------|-----------|----------|-----------|------------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| 1 | active       | adventurous | affectionate| afraid     | agitated | agreeable | aggressive | alive     | alone     | amiable    | amused     | angry      | annoyed    | awful      | bashful    | bitter     | blue      | bored     | calm      | cautious   | cheerful   | clean      | complaining | contented  | contrary   | cool       | cooperative | critical   | cross      | cruel      | daring     | desperate  | destroyed  | devoted     | discontented | discouraged | disgusted  | displeased | energetic  | enraged    | enthusiastic | fearful    | fine       |
| 45| fit          | forlorn     | frank       | free       | friendly  | frightened | furious    | gay       | gentle    | glad       | gloomy     | good       | good-natured| grim       | happy      | healthy    | hopeless  | hostile   | impatient | incensed  | ignignant | inspired   | interested | irritated  | jealously  | joyful     | kindly     | lonely     | lost       | loving     | low        | lucky      | mad        | mean       | meek       | merry      | mild       | miserable  | nervous    | obliging   | offended  | outraged   | patient    | worrying   | young      |
APPENDIX B

NAME:

T  F  1. I have a good appetite.
T  F  2. I am easily awakened by noise.
T  F  3. My daily life is full of things that keep me interested.
T  F  4. I am about as able to work as I ever was.
T  F  5. I am very seldom troubled by constipation.
T  F  6. At times I feel like swearing.
T  F  7. I find it hard to keep my mind on a task or job.
T  F  8. I seldom worry about my health.
T  F  9. At times I feel like smashing things.
T  F 10. I have had periods of days, weeks, or months when I couldn't care for things because I couldn't get going.
T  F 11. My sleep is fitful and disturbed.
T  F 12. My judgment is better than it ever was.
T  F 13. I am in just as good physical health as most of my friends.
T  F 14. I prefer to pass by school friends, or people I know but have not seen for a long time, unless they speak to me first.
T  F 15. I am a good mixer.
T  F 16. Everything is turning out just like the prophets of the Bible said it would.
T  F 17. I sometimes keep on at a thing until others lose their patience with me.
APPENDIX B (Cont.)

T F 18. I wish I could be as happy as others seem to be.
T F 19. I sometimes tease animals.
T F 20. I am certainly lacking in self-confidence.
T F 21. I usually feel that life is worthwhile.
T F 22. It takes a lot of argument to convince most people of the truth.
T F 23. I go to church almost every week.
T F 24. I believe in the second coming of Christ.
T F 25. I don't seem to care what happens to me.
T F 26. I am happy most of the time.
T F 27. I seem to be about as capable and smart as most others around me.
T F 28. I have never vomited blood or coughed up blood.
T F 29. I do not worry about catching diseases.
T F 30. Criticism or scolding hurts me terribly.
T F 31. I certainly feel useless at times.
T F 32. At times I feel like picking a fist fight with someone.
T F 33. Most nights I go to sleep without thoughts or ideas bothering me.
T F 34. During the past few years I have been well most of the time.
T F 35. I have never had a fit or convulsion.
T F 36. I am neither gaining nor losing weight.
T F 37. I cry easily.
T F 38. I cannot understand what I read as well as I used to.
APPENDIX B (Cont.)

T F 39. I have never felt better in my life than I do now.

T F 40. My memory seems to be all right.

T F 41. I am afraid of losing my mind.

T F 42. I feel weak all over much of the time.

T F 43. Sometimes, when embarrassed, I break out in a sweat which annoys me greatly.

T F 44. I do not have spells of hay fever or asthma.

T F 45. I enjoy many different kinds of play and recreation.

T F 46. I like to flirt.

T F 47. I have at times stood in the way of people who were trying to do something, not because it amounted to much but because of the principle of the thing.

T F 48. I brood a great deal.

T F 49. I dream frequently about things that are best kept to myself.

T F 50. I believe I am no more nervous than most others.

T F 51. Sometimes, without any reason, or even when things are going wrong, I feel excitedly happy, "on top of the world."

T F 52. I have difficulty in starting to do things.

T F 53. I sweat very easily even on cool days.

T F 54. When I leave home I do not worry about whether the door is locked and the windows closed.

T F 55. I do not blame a person for taking advantage of someone who lays himself open to it.
APPENDIX B (Cont.)

T  F  56. At times I am full of energy.
T  F  57. Once in a while I laugh at a dirty joke.
T  F  58. I am troubled by attacks of nausea and vomiting.
T  F  59. I work under a great deal of tension.
T  F  60. I have periods in which I feel unusually cheerful without any special reason.
Statement Requesting Volunteers

I have been asked by one of our psychology graduate students to request volunteers for a research project. The project will involve answering some short questionnaires, and meeting with some other group members. You will meet one hour, once per week, for four weeks after the groups are arranged.

(optional: instructors may at this time offer extra credit points for participation in the research).

Instructors may now discuss the value of participating in research in their own words.

Instructors will now:

1. Ask for a show of hands for those interested in volunteering.
2. Record these persons names.
3. Give them the date, time, and meeting place for the first meeting.

Date ________________ Time ________________ Place ________________
Informed Consent

INFORMATION:

You will be involved in an experiment that will involve reading statements from cards at a certain time each day for a 4 week period. In addition you will meet with a counselor and 4 other group members to discuss the procedure.

CONSENT:

I hereby acknowledge that the procedure I will follow is for the purposes of graduate psychology research being conducted by Steve Lucks. I agree to participate in the study with the understanding that no participant will be identified individually in any report of the research.

I hereby acknowledge that the counseling is being audio-tape recorded and parts of it may be reviewed by a professional counselor for experimental control purposes. The tape will be erased following the above validation purposes and my identity will remain completely anonymous. I understand that I may request the interviewer to stop the tape at any time.

I hereby acknowledge that my group's performance will be discussed with my group during the debriefing period. I may obtain information regarding my own individual performance by requesting it of the experimenter at the conclusion of the study.

Participant's Signature ___________________________ Date ___________________________
APPENDIX E

Informed Consent

INFORMATION:

You will be involved in an experiment that will involve reading statements from cards at a certain time each day for a 4 week period. In addition, you will meet with a counselor and 4 other group members once per week to discuss the procedure and any other concerns you may choose to deal with. The counseling will proceed in a group format. The process may include, but not be restricted to, topics such as family, friends, current and past interests, school adjustment, vocational plans and significant factors in your growth and development. This may be a unique opportunity of exploring these areas during a 45 minute counseling session, and you may find it to be a rewarding and meaningful experience. If you find this experience rewarding and positive then the option of continuation can be discussed at a later time.

CONSENT:

I hereby acknowledge that the counseling sessions in which I am a participant is for the benefit of graduate psychology research being conducted by Steve Lucks. I am aware that my discussions may involve matters of a personal nature and that I am under no obligation to discuss any particular topics or to respond to any particular question.

I hereby acknowledge that the counseling is being audio-tape recorded and parts of it may be reviewed by a professional counselor for experimental control purposes. The tape will be erased following the above validation purposes and my identity will remain completely anonymous. I understand that I may request the interviewer to stop the tape at any time.

I agree to participate in the study with the understanding that no participant will be identified in any report of the research. I hereby acknowledge that my group's performance will be discussed with my group during the debriefing period. I may obtain information regarding my own individual performance by requesting it of the experimenter at the conclusion of the study.

Signature ____________________  Date ______________
APPENDIX F

Informed Consent

CONSENT:

I hereby acknowledge that the procedure I will follow is for the purposes of graduate psychology research being conducted by Steve Lucke. I agree to participate in the study with the understanding that no participant will be identified individually in any report of the research.

I hereby acknowledge that my group's performance will be discussed with my group during the debriefing period. I may obtain information regarding my own individual performance by requesting it of the experimenter at the conclusion of the study.

_________________________________________  _________________
Participant's Signature                        Date
February 7, 1978

Dear Volunteers:

The initial phase of this research is now completed. I need to meet with each of you for 20 minutes on Friday, March 10, 1978. Four hours (9-12) will be reserved, and you can check in at your convenience.

The activities during this session will consist of:
1. filling out 2 self-report questionnaires
2. debriefing of the purpose of the study
3. a date will be provided for a party that each of you are invited to
4. your name will be checked so that your instructor can be notified of your participation and therefore give you your well earned credit

Each of you will receive by mail an abstract of the study, including an analysis of the results. You will be sent your copy as soon as the data is tabulated. In addition, the results will be discussed in detail during the party.

Dr. Hiett or myself will call to remind each of you prior to the March 10 meeting. Attendance of this session is critical to the study's conclusion, and I would greatly appreciate your making a mental note of the day right now. The room will be announced when you receive your phone call.

Thanking you in advance,

Steve Lucks
Debriefing Meeting

Debriefing took place immediately after the subjects were followup tested. The experimenter explained that there has been disagreement among theorists as to what form of counseling is most effective in the treatment of depression. The experimenter explained that there has been disagreement among theorists as to what form of counseling is most effective in the treatment of depression. The experimenter then explained that he had chosen one approach, delivered under two different conditions in order to compare the effects of each. Following the above introduction the experimenter briefly described CCT with the relationship condition and CCT without the relationship condition. The measurement instruments (MAACL and MMPI "D" scale) were also described at this time.

After the subjects were introduced to the purpose and nature of the study the results were discussed and explained in relation to group performance. The subjects were reminded that information regarding individual performance could be obtained if requested. This information was only released privately.
The final segment of the debriefing session was a question and answer period to clarify any questions regarding debriefing. The experimenter requested feedback concerning recommendations that would improve the procedure of the study if it were to be replicated. The session closed with a statement by the experimenter expressing his appreciation for the subjects' time and cooperation.
APPENDIX I

INSTRUCTIONS

1. Carry statement cards and a pen with you wherever you are for the following three weeks.

2. One card in the stack should always be blank.

3. Read a statement off of one of the cards immediately prior to eating anything or using the bathroom. Do not allow yourself to eat or use the bathroom until you have read the statement.

4. After reading a card place it on the bottom of the pile.

5. When you begin to read a statement and you find the blank card is on top, think of a new positive self-statement and write it down on the blank card. Do not allow yourself to eat or use the bathroom until you have done this. After you have written down the statement place the new card on the bottom.

6. After writing a new statement on the blank card be sure to add a new blank card to the stack.
APPENDIX J

MANUAL OF INSTRUCTIONS FOR
EXPERIMENTAL GROUPS

Experimental Group II

Session 1

1. Therapist will sit on the floor in a circle with all group members. He will introduce himself as Russ Hiett and will explain that he prefers to be called Russ. He will explain that he is a full time counselor at The Green House and will briefly disclose how he feels about having that position. When he has finished introducing himself he will ask each group member in turn (from left to right) to introduce themselves as well. The therapist will be warm and will freely disclose his feelings whenever appropriate. He will actively deal with both his feelings and the subjects' feelings as opposed to content issues.

2. Therapist will hand out sample self-statements, instruction sheets, and blank CCT cards. He will spend the next fifteen minutes explaining CCT, assisting in the developing of positive self-statements, and answering questions regarding the
APPENDIX J (Cont.)

procedure.

a. He will ask each subject to generate a list of his own positive self-statements using the samples as a guide. He will be asked to generate 10 such statements, and after they are reviewed by the therapist he will be asked to transfer them onto the CCT cards.

3. When the subjects have completed this task the therapist will go from person to person and review their self-statements. He will modify any that are not appropriate and give feedback as to how they were inappropriate.

4. The therapist will then role play two situations where the subject will use CCT. The first demonstration will be a situation where a single card is read immediately prior to eating. The second demonstration will concern the situation where a blank card is on the top of the list and the subject must generate a new positive self-statement and record it on the card.

5. The therapist will ask if there are any questions about the procedure and will answer them. If
these questions are grounded in emotional concerns about the procedure, the therapist will explain that he will provide an opportunity later in the session to deal with those issues. He will also instruct all subjects to bring their CCT cards to all further sessions.

6. At this time the therapist will ask the question "What concerns would you like to share here in the group?". This question is directed at the entire group.

   a. In the event that no one responds after two full minutes of silence the therapist may either self-disclose about one of his earlier college concerns, or he may instead become directive and ask a specific person in the group what some of his concerns are. In the event that these procedures do not manage to open up communication, the therapist may use his discretion and proceed as he feels best.

**Session 2**

1. The Therapist will greet each subject informally and ask them to sit on the floor with him.
2. Therapist will check with each subject to insure that he is carrying out the CCT procedure correctly and reliably.
   a. In addition, the therapist will hand out the self-report questionnaire (see appendix K). This questionnaire will help assess the degree to which the subjects are following and maintaining the CCT procedure.

The therapist will troubleshoot any problems that develop with the procedure, and remind each subject that it is important to continue the procedure.

3. The therapist will open up the session to individual concerns, and will utilize helping skills and active listening to communicate understanding and facilitate self-exploration of these concerns.

**Session 3**
1. Same as session 2.

**Session 4**
1. The therapist will greet each subject informally and ask them to sit on the floor with him.
2. The therapist will administer the post test and then distribute the self-report questionnaire.
3. Therapist will discuss CCT procedures and problems
from the proceeding week. He will collect all subjects' CCT cards.

4. Therapist will open session for communication of personal concerns.

5. At 40 minutes into the session the therapist will close discussions and give date, time, and place for followup testing and debriefing, and will express his feelings about having been with the group for the past 4 sessions.

6. He will dismiss subjects.

Guidelines and Restrictions

1. The therapist will run each session in an informal, encounter group type format, and will rigidly follow the session agenda.

2. The therapist will actively listen, using the helping skills (empathy, genuiness, warmth, respect, concreteness, confrontation, immediacy, and self-disclosure) described and defined by Gazda (1973). These skills will be utilized when the CCT procedure is explained and also when individual concerns are dealt with.
3. The therapist will allow the subjects to deal with both CCT procedural problems and individual concerns during any of the sessions.

4. The therapist will attempt to build a therapeutic relationship between himself and the subjects, and also between each of the subjects themselves.

5. The therapist will focus on the feelings of the group members and help them self-explore their concerns with the goal of helping the group members more fully understand themselves.

6. The therapist will be empathic, but will maintain a directive stance when the communications become tangential and content oriented. He will use any of the helping skills to redirect the group member back to relevant issues.

7. The therapist will refrain from giving any advice what-so-ever when dealing with a client's concerns and feelings. If the group member is generating his own alternatives, however, the therapist may further explore these alternatives with him.

8. If asked for advice the therapist will either redirect the question back to the subject, or he may explore the subject's need for answers with the subject.
APPENDIX J (Cont.)

9. The therapist will deal with one group member's concerns at a time. Other group members may intervene, but the therapist will maintain control of this at all times. In the event the therapist wishes to prevent a group member from intervening in an interaction he may:
   a. ask the group member to hold his comments for just a few moments.
   b. he may reach over and touch the person so as to indicate to hold off for a few moments.
   c. he may ask the group member to refrain from intervening very directly.

10. The therapist may allow other group members to add feedback, but will immediately stop destructive feedback directed at any member. The below types of responses are to be considered destructive.
   a. blaming
   b. giving advice
   c. disqualifying
   d. judging
   e. sarcasm
   f. depreciating
   g. preaching, moralizing
h. defending
i. interpreting, analyzing, diagnosing

Experimental Group I

Session 1

1. Therapist will have all subjects sit down in desks facing the blackboard. He will introduce himself as Dr. Russel Hiett and will neither encourage nor discourage anyone from using his first name. He will explain that he is a full time counselor at the Green House and will briefly describe his duties without reflecting his feelings concerning this position. He will then call off the names of the group members much the way a professor would call names in a classroom. The therapist will not present himself as cold or aloof, but will avoid dealing with feelings. He will maintain a didactic format and may appear very formal.

2. Therapist will hand out sample self-statements, instruction sheets, and blank CCT cards. He will spend the next fifteen minutes explaining CCT, assisting in the developing of positive self-
APPENDIX J (Cont.)

statements, and answering questions regarding the procedure.

a. He will ask each subject to generate a list of his own positive self-statements using the samples as a guide. He will be asked to generate 10 such statements, and after they are reviewed by the therapist he will be asked to transfer them onto the CCT cards.

3. When the subjects have completed this task the therapist will go from person to person and review their self-statements. He will modify any that are not appropriate and give feedback as to how they were inappropriate.

4. The therapist will then role play two situations where the subject will use CCT. The first demonstration will be a situation where a single card is read immediately prior to eating. The second demonstration will concern the situation where a blank card is on the top of the list and the subject must generate a new positive self-statement and record it on the card.

5. The therapist will ask if there are any questions about the procedure and will answer procedural
questions only. He will instruct them to bring the CCT cards to all sessions.

6. The therapist will lecture on the importance of making eating and using the bathroom consistently contingent upon reading the CCT statements. The therapist will continue on this subject for the remainder of the session. He will then dismiss the subjects at the end of the 45 minute session.

Session 2

1. Therapist will greet each subject formally and ask them to sit down at desks. He will again stand by the blackboard.

2. The therapist will check with each subject to insure that he is carrying out the CCT procedure correctly and reliably.

   a. In addition, he will hand out the self-report questionnaire (see Appendix K). This questionnaire will help assess the degree to which the subjects are following and maintaining the CCT procedure. He will remind the subjects that it is important to continue the procedure.

3. The therapist will spend the remainder of the session discussing the CCT procedure as it was
experienced by each group member. He will then ask the subject which of those cards were the cards generated during that week. The therapist will provide feedback about the quality of the statements and will make suggestions for revision if necessary. The therapist will ask the subject to explain any difficulties that were encountered in generating self-statements. The therapist will provide suggestions if there was difficulty and will praise if there was no difficulty. The therapist will then ask the subject to discuss any difficulties he had with the CCT procedure itself. For example, the therapist will ask:

a. Did you find it inconvenient?
b. If yes, how?
c. Did your friends notice or comment?
d. What did you do then?
e. What things did you do to help yourself remember to read the statements?

The therapist will listen carefully, but will only respond with an understanding smile or laugh. No discussion or reflection of feelings will be dealt with.
APPENDIX J (Cont.)

4. When the therapist has finished with this subject he will move on to the other subjects and will follow the same procedure for each.

Session 3
1. Same as session 2.

Session 4
1. The therapist will greet each subject formally and ask them to sit down at desks. He will again stand by the blackboard.
2. Therapist will administer the post test and then distribute the self-report questionnaire.
3. Therapist will discuss CCT procedures and problems from the proceeding week (as in sessions 2 and 3) and will collect all subjects CCT cards.
4. At 40 minutes into the session the therapist will close discussions and give date, time and place for followup testing and debriefing.
5. He will dismiss subjects.

Guidelines and Restrictions
1. The therapist will run each session in a formal, didactic format, and will rigidly follow the session agenda.
APPENDIX J (Cont.)

2. The therapist will listen to group members in a considerate fashion, but will avoid sharing his feelings in the sessions. He will not use the listening skills to probe for feelings.

3. The therapist will only allow the subjects to deal with CCT procedural problems. All attempts by subjects to deal with their own concerns or problems will be dealt with in one of the following ways:
   a. direct explanation that for the purposes of this study these issues cannot be dealt with at this time.
   b. therapist can give an immediate behavioral solution. A solution that is content oriented and which avoids the exploration of feelings, i.e.

subject: I'm frustrated because I forget to bring my CCT cards with me when I eat.

therapist: What you need to do is carry them with you at all times. Try wearing a shirt with a pocket so that you can be sure to do that. If that doesn't work, keep a blank card at your table so that it will remind you.

4. The therapist will remain formal and will not attempt to create a relationship between himself and the subjects.
APPENDIX J (Cont.)

5. The therapist will focus on content issues and will remain task oriented.

6. The therapist will be attentive, and directive at all times. He will not allow the discussions to become tangential and off task.

7. The therapist will give behavioral advice freely in an attempt to assist the subjects in following the CCT program. He will allow group members to develop their own alternatives and solutions if they choose to do so.

8. If asked for advice on procedural problems he will give it freely. He will avoid requests for advice concerning personal problems. He may state quite clearly that "for the purposes of this research, these issues cannot be discussed."

9. The therapist will not allow other group members to intervene if he finds them encouraging a group member to deal with feelings and personal problems.

10. The therapist may allow other group members to add feedback, but will not allow any member to respond destructively. The below types of responses are to be considered destructive.

   a. blaming
APPENDIX J (Cont.)

b. disqualifying
c. sarcasm
d. depreciating
e. defending
f. interpreting, analyzing, diagnosing
APPENDIX K

Self-Report Questionnaire

NAME: ________________________________
(please print)

DATE: ______________________

1. What is the total number of statement cards in your stack? ____

2. Approximately how many times are you eating per day? ____

3. Approximately how many times are you using the bathroom per day? ____

4. How reliably are you reading the statement cards?
   ____ a. always read cards
   ____ b. usually read cards
   ____ c. sometimes read cards
   ____ d. never read cards

5. Do you know the other members in your group?
   ____ yes  ____ no
Forty Sample Positive Self-Statements

1. I am a kind person.
2. I am assertive.
3. I try my best in school.
4. I am a good friend to others.
5. I am a good athlete.
6. I have many good friends.
7. I'm a considerate person.
8. I am a hard worker.
9. I'm good at motivating others.
10. I'm a good leader.
11. I can sew very well.
12. I'm a good cook.
13. I'm a good driver.
14. I'm a happy person.
15. Although not perfect I'm working on improving ________.
16. I'm good at working with my hands.
17. I have a good complexion.
18. I have pretty eyes.
19. I'm thrifty and handle money well.
20. I have pretty hair.
21. I am a good conversationalist.
22. I have good taste and buy things that are nice.
APPENDIX L (Cont.)

23. I am quiet and thoughtful and can therefore appreciate experiences.
24. I'm resourceful.
25. I'm a soft and tender person.
26. I'm courageous.
27. I am best at _________.
28. I want to be noticed for my ________ and am working towards achieving this.
29. I am an intelligent person.
30. I am a responsible person.
31. I'm good at my job.
32. I'm lonely but that can be a strength for me right now, and I am learning to appreciate that.
33. I'm learning to soften my temper because I choose to do that.
34. I'm accepted by lots of people and that's really neat.
35. I'm good at making people laugh.
36. When I really think about it, I really have a lot going for me.
37. I'm the kind of person who does not care about money, but instead places value on other things such as ___.
APPENDIX L (Cont.)

38. I am a darn good artist.
39. I am a good listener.
40. One of my greatest strengths is my willingness to persevere.
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