1993

The effectiveness of a dual modality treatment sequence for depression

Diana L. Yoshino

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THE EFFECTIVENESS OF A DUAL MODALITY TREATMENT SEQUENCE FOR DEPRESSION

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Social Work

by
Diana L. Yoshino
June 1993
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Abstract

The effectiveness of cognitive therapy for depression within the context of a brief, time-limited therapy model was evaluated utilizing a single-subject design. Three subjects were selected to participate in the cognitive therapy treatment program, which consisted of eight individual sessions followed by eight group sessions. The Beck Depression Inventory was administered to each subject before treatment and weekly during treatment to track changes in mood. A Goal Attainment Scale was constructed for each subject to chart behavioral changes. None of the three subjects completed the entire treatment program. However, subjects showed immediate and marked improvement according to scores on the Beck Depression Inventory and a Goal Attainment Scale, suggesting that cognitive therapy is effective for depression in brief, time-limited psychotherapy.
ACKNOWLEDGMENTS

The author would like to thank the following people and organizations for their assistance in this project:

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My husband Ron and our children for their tolerance, patience, understanding, and support.
<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT .................. iii</td>
</tr>
<tr>
<td>INTRODUCTION .............. 1</td>
</tr>
<tr>
<td>OBJECTIVE/PURPOSE OF STUDY .. 4</td>
</tr>
<tr>
<td>LITERATURE REVIEW .......... 5</td>
</tr>
<tr>
<td>Depression .................. 5</td>
</tr>
<tr>
<td>Cognitive Therapy and Depression .. 6</td>
</tr>
<tr>
<td>Pharmacotherapy and Depression .... 9</td>
</tr>
<tr>
<td>Termination .................. 11</td>
</tr>
<tr>
<td>METHODS ..................... 13</td>
</tr>
<tr>
<td>Design ..................... 13</td>
</tr>
<tr>
<td>Sampling .................... 14</td>
</tr>
<tr>
<td>Data Collection and Instruments .... 14</td>
</tr>
<tr>
<td>Procedure .................... 16</td>
</tr>
<tr>
<td>RESULTS .................... 22</td>
</tr>
<tr>
<td>DISCUSSION .................. 32</td>
</tr>
<tr>
<td>Implications ................ 35</td>
</tr>
<tr>
<td>REFERENCES .................. 40</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Figure 1: BDI Scores for Subject A..........................24
Figure 2: BDI Scores for Subject B.........................27
Figure 3: BDI Scores for Subject C.........................30

LIST OF TABLES

Table 1: GAS for Subject A.................................25
Table 2: GAS for Subject B.................................28
Table 3: GAS for Subject C.................................31
Introduction

Public and private mental health clinics in the U.S. are currently experiencing an increase in demand for services. Pervasive personal and social problems, such as marital difficulties, job stress, feelings of alienation and helplessness, and stressors associated with difficult financial times, prompt thousands of people to seek professional help. At the same time, resources to provide this help are limited, and often reduced, creating the need for mental health providers to reassess methods for delivery of services and find alternative and more cost effective ways of servicing more people with decreased resources.

One way to cost-effectively serve more people is to adopt a brief, time-limited therapy model. According to the traditional treatment policy, the therapist and/or the client determine termination without regard to time, modality, or number of sessions. In contrast, the time-limited model prescribes a specific number of sessions or length of time. If the clinician determines that the nature or severity of the client's problems warrant more sessions,
he/she may present the case to a Utilization Review Committee and request additional sessions.

Brief, time-limited psychotherapy is becoming the preferred method of treatment for many providers because of diminishing resources and empirical evidence that it is an viable and effective method. One provider who has adopted the time-limited model is Southern California Kaiser Permanente Psychiatry, Riverside, part of the largest health maintenance organization (HMO) in that state. According to William Geckeler, M.D., Chief of Psychiatry in Riverside, California (personal communication, 1992), the time-limited model was adopted by Riverside in January 1992 to increase the efficiency of service utilization, following the example of other Kaiser Psychiatry departments in the region. Clinicians are asked to evaluate cases after seven individual sessions and assess whether the client could significantly improve with more individual sessions or whether the client is at risk of becoming a high utilizer of individual services without hope of improvement. Clients who are at risk may improve or maintain improvement just as well in group therapy as in individual therapy, freeing individual contacts for others. Groups may last from eight to sixteen weeks. This policy is generally consistent with Piper et al.'s (1984) finding that short-term individual and long-term group psychotherapy are 25% more effective than
long-term individual and short-term group modalities. However, Piper et al.'s short-term individual therapy consisted of twenty-four 50 minute sessions and long-term groups consisted of ninety-six 90 minute sessions, both of significantly longer duration than time-limited therapy.

MacKenzie (1991) suggests that many patients improve significantly within the first few psychotherapy sessions, and that for some, additional sessions produce diminishing returns. According to MacKenzie, twenty-five percent voluntarily terminate after the initial session. Seventy percent terminate after seven sessions. Ten percent require from seven to seventeen sessions. Five percent use 30% of all available appointments, but will not significantly improve regardless of the number of sessions. MacKenzie asserts that this 5% are clients with characterological disorders who possibly receive secondary gains from individual therapy, but are not those most in need if hospitalization is used as a measure.

Various forms of time-limited therapy have been proposed. MacKenzie describes three forms. One form, developed by Mann (1973) suggests a specific limit on the number of sessions without regard to frequency. Another form consists of setting a specific termination date, but tailoring the frequency of sessions to the individual. A third form involves limiting the number of sessions without
setting a specific termination date, and altering the frequency of sessions according to the client's needs over the course of therapy (MacKenzie, 1991).

Mumford et al. (1984) found that psychotherapeutic treatment reduces utilization of medical services by up to 20%. However, rationing treatment may not produce any real savings. In a study of service utilization, McGrath & Lowson (1986) found that savings gained by a reduction in psychological services were offset by an increase in medical services as depressed clients sought somatic treatment from physicians in general practice, suggesting that a gain in one area may result in a loss in another.

Objective/Purpose of Study

The purpose of this study is to explore the therapeutic effectiveness of cognitive therapy for depression within the context of the time-limited model. The time-limited model evaluated was developed by Mann (1973). It sets a specific limit on the number of sessions. Since the majority of clients seeking services in outpatient mental health clinics present with affective disorders, with depression being the most common concern, clients with this diagnosis were followed through treatment to determine if progress was affected by the type of modality used (individual psychotherapy or group psychotherapy). Specifically, the research question was, "How do clients who score moderate to
high on the Beck Depression Inventory before treatment progress with treatment consisting of short-term individual cognitive therapy followed by group cognitive therapy within the context of a time-limited treatment model?"

Literature Review

Depression

Depression is a debilitating disorder which interferes with all realms of functioning: intrapersonal, interpersonal, social and occupational. Depression is characterized by feelings of hopelessness and helplessness, despair, worthlessness, emptiness, guilt and often suicidal wishes. Somatic complaints, such as headaches, gastrointestinal disturbances, chest tightness, breathing difficulties, urinary problems, insomnia, fatigue, appetite loss, tearfulness, psychomotor retardation and anxiety, are also common (Deykin, 1971).

These symptoms may result in relationship problems, withdrawal and isolation from friends and family, and poor performance and/or absenteeism on the job. Covi, et al. (1982) estimated that depression cost the U.S. more than one billion dollars in 1973. The American Psychiatric Association (1993) estimates that although most depressed patients return to a premorbid level of functioning after remission, between 20% and 35% experience some residual symptoms, including social and/or occupational impairment.
Fifty percent will experience another depressive episode during their lifetimes.

Weissman & Klerman (1978) estimate that the prevalence rate of depression is between eight and twenty million. The National Institute of Mental Health (1984) calculates the rate of depression at between 4% and 10% of the general population and estimates that 25% of the population will experience a depressive episode during their lifetime. In a summary of the most recent literature, the American Psychiatric Association (1993) cite lifetime prevalence rates of 26% for females, 12% for males, and 5.8% for the general population over 18 years of age. Women are twice as likely to become depressed as men, and those between the ages of 20 and 40 are most at risk. It has been estimated that 60% to 75% of clients seen by private mental health providers suffer from depression (Kline, 1964). The number who are treated by family physicians is unknown.

Cognitive Therapy and Depression

Cognitive therapy has been shown to be an effective treatment approach for depression (Blackburn, et al., 1986; Dobson, 1989; Free, et al., 1991; Kovacs, et al., 1981; Marshall & Mazie, 1987; Shaw, 1977; Teasdale & Fennell, 1982). It is also the approach most researched in the treatment of depression (Thase, et al., 1991). Using the Beck Depression Inventory (BDI) (Beck, et al., 1961) as one
measure, Teasdale & Fennell (1982) found that individual cognitive therapy reduces self-reported depressive symptoms in outpatient subjects more than exploratory approaches after 12 sessions. In a study by Jarrett & Nelson (1987), 54% of depressed subjects experienced statistically significant improvement after 8 group sessions and a 50% reduction in symptoms after 12 sessions. Free, Oei & Sanders (1991) found 68% of their subjects experienced significant recovery compared with nondistressed norms and 73% recovered to mood level comparable to the general population after 12 two-hour group sessions.

The beginnings of cognitive theory may be traced to Kelly who, in the 1950s, posited that people create personal constructs or ways of anticipating and interpreting life events, and that difficulties arise from the meanings associated with an individual's personal constructs (Schultz, 1986). For example, a person who feels guilty and believes that punishment eradicates guilt will tend to punish himself/herself. In the 1960s, Ellis and Beck each refined and modified Kelly's theory, contributing to a theoretical and treatment framework for identifying and altering defects in an individual's beliefs, or personal constructs, and his/her subsequent evaluations of life events which lead to unwanted, disturbing emotions and maladaptive behaviors.
These beliefs are created through socialization, then internalized and perpetuated by the individual. When an event occurs, the individual evaluates and interprets the event through cognitive processes in the form of "automatic thoughts" or internal self-talk. Automatic thoughts are accepted by the individual as true and provide the foundation for his/her interpretation, expectations and self-instructions (Beck, 1976). Erroneous or irrational beliefs may engender negative interpretations of events, creating dissatisfaction and unhappiness, which, in turn, reinforce the underlying negative beliefs. These thoughts become the vehicle that connects or translates beliefs into emotions. Depression is viewed as the result of inaccurate or false beliefs which leads to a negative view of self, the world, and the future, which Beck (1976) calls the cognitive triad. Cognitive theory posits that these beliefs, emotions and behaviors may be changed by learning to think rationally. Rational thinking is defined as thinking that is based on objective fact, that if acted upon will probably result in preservation, will facilitate goals, and will prevent undesirable conflicts (Ellis, 1961). The goal of cognitive therapy is to identify underlying false beliefs through the examination of emotions in relation to automatic thoughts.

McLean & Hakstian (1979) identify five characteristics
of treatment conducive to recovery from depression which typify cognitive therapy:

1) high treatment structure with client participation;

2) use of the social learning model vs. the disease model;

3) use of goal attainment measures;

4) encouragement of externalized interests;

5) acts as a social "prophylaxis" (p. 834).

Schuyler (1991) asserts that cognitive therapy is structured, active, focused on the present, and utilizes homework assignments to maximize treatment, while avoiding the uncovering of unconscious material and eschewing the concept of transference, characteristics which make this approach amenable to time-limited models.

Pharmacotherapy and Depression

Pharmacotherapy has been commonly considered a requisite treatment for depression since the introduction of psychotropic drugs in the 1950s (Weissman & Klerman, 1978). However, research suggests that cognitive therapy alone may be equal to or greater than the effectiveness of tricyclic medication (Morris & Beck, 1974; Simons, et al., 1986), including amitriptyline (Beck et al., 1985), imipramine (Kovacs, et al., 1981; Rush, et al., 1977; Steinbrueck et al., 1983), and nortriptyline (Murphy, et al., 1984).
Depressed subjects treated with individual cognitive therapy in a study by Rush et al. (1977) generated lower BDI scores, indicating a reduction in depressive symptoms, after 12 weeks than did subjects treated with medication alone and Simons et al. (1986) found less relapse among subjects treated with cognitive therapy alone compared to tricyclic medication alone. Dobson (1989) found that the outcomes of subjects treated with cognitive therapy were 98% better than those of controls, 70% better than those treated with medication only and 70% better than subjects treated with other psychotherapies.

However, other researchers have not obtained such positive results. Kovacs et al. (1981) found superior immediate effects with cognitive therapy compared to pharmacotherapy, but after a 12-month follow-up, differences between the two conditions had disappeared. Several studies suggest that cognitive therapy is effective only in combination with other treatments (Elkin et al., 1988; Free & Oei, 1989; Murphy et al., 1984; Simons et al., 1984). Modality may also have an effect, as shown in a study by Rush et al. (1981) in which subjects treated in an equal number of sessions with cognitive group therapy alone demonstrated significantly poorer outcomes than subjects receiving individual cognitive therapy, pharmacotherapy, or a combination of individual therapy and pharmacotherapy.
Termination

Termination of treatment is a salient issue for clinicians, even when utilizing cognitive therapy, which does not emphasize transference issues (Covi et al., 1982). A healthy therapeutic relationship is characterized by trust and some level of emotional intimacy in which the client may disclose material to another for the first time. Appropriate termination is a critical feature in adequately meeting client needs. In a study of termination, DeBerry & Baskin (1989) discovered disturbing differences between private practice and public practice. In private practice, 35% of all terminations were initiated by clients who believed they had reached their treatment goals and 41% by therapists who believed the goals had been reached. None were due to "administrative reasons." In contrast, 40% of all patients seen in public practice were terminated regardless of clinical improvement. Twenty-six percent of these are due to high caseloads and 14% to administrative reasons.

Terminating treatment before issues and/or presenting problems are resolved, especially if the termination is imposed, poses ethical problems. Section II, Article 10 of the National Association of Social Work Code of Ethics states:
The social worker should withdraw services precipitously only under unusual circumstances, giving careful consideration to all factors in the situation and taking care to minimize possible adverse effects.

Hellenbrand (1987) points out that premature terminations dissolve this important relationship and clients commonly react with "a sense of abandonment and loss and feelings of rejection and betrayal or hurt and anger" (p. 767). These feelings must be addressed by the clinician to prevent a return of symptoms or the sudden appearance of "new" problems. The client must feel assured that he/she is capable of coping without the continued assistance of the therapist. Lamb (1985) proposes a model for termination that requires seven weekly one-hour sessions to resolve termination issues, which suggests that a minimum of twenty sessions for treatment is required.

Time-limited models may not allow adequate time to meet termination needs, even when an effective brief therapy is utilized. However, Austad et al. (1988) suggest that termination is not a discrete or final event in HMO settings. Psychotherapy is brief and intermittent, with no termination, but instead an "interruption of therapy" (p. 453), allowing clients to resolve a problem, discontinue treatment, and later return to resolve another problem. This may hold true for insight-oriented approaches which are
geared toward solving specific and individual problems, but may not for cognitive therapy which teaches techniques which may be used more universally applied in problem-solving.

Methods

Design

A single-subject exploratory study utilizing a positivist paradigm was employed. Although research of cognitive therapy for depression is abundant, data regarding its use within the context of a dual modality treatment sequence using a time-limited model is minimal. For example, only one study reviewed for this project combined, individual and group therapy and the two modalities were used intermittently (Covi, et al., 1982). Because there is little in the literature upon which to base assumptions of outcome, the present study began with a research question instead of a hypothesis. However, due to the presence of an independent and a dependent variable, the study is also somewhat descriptive. The positivist paradigm pursues quantitative data obtained through measures of observable evidence, but also allows the use of qualitative data, such as interviews and background information.

An ABC design was utilized. Subjects were administered the BDI at the time of intake to establish a baseline (A). Once individual psychotherapy began, the BDI was administered at the beginning of each weekly individual
sessions (B). During the group psychotherapy phase, the BDI was administered prior to the beginning of each weekly session (C). Scores were immediately graphed and progress was discussed with each subject.

Sampling

Although this study employed a single-subject design, three subjects were chosen to allow for attrition. Subjects were selected from a convenience sample from among the researcher's caseload of clients at Kaiser Psychiatry. Clients who met the following criteria at the time of intake were solicited as subjects: 1) between the ages of 18 and 65; 2) generated scores in the moderate to high range on the BDI; 3) no history of manic episodes; 4) presented no psychotic symptoms; and 5) voluntarily agreed to participate. Subjects were informed that the course of treatment consisted of eight individual psychotherapy sessions followed by eight group psychotherapy sessions, that their progress would be monitored weekly, and information regarding their progress would be discussed at each session.

Data Collection and Instruments

In this study, quantitative data were provided by two measurement instruments. Subjects were administered the Beck Depression Inventory (BDI) (Beck, et al., 1961) weekly throughout the course of treatment, at the point of intake,
during the individual psychotherapy phase and during the
group psychotherapy phase. Although the BDI is a self-
report questionnaire, this instrument was chosen because it
is recognized and utilized universally by researchers and
clinicians alike, in both clinical and nonclinical
populations. Subjects indicate on a scale of 21 items the
presence and severity of depressive symptoms which assess
affective, cognitive, motivational, and psychomotor factors.
Scores range from 0 to 63. The BDI has good to excellent
reliability, ranging from .78 to .93 on split-half, and
ranging from .48 to .74 for test-retest. Good to excellent
validity has also been established by strong correlations
with other depression measures and with clinicians' ratings
(Corcoran & Fischer, 1987).

Behavioral data was quantified through the use of Goal
Attainment Scaling (GAS). GAS was originally developed by
Kiresuk & Sherman (1968) as a measurement for program
evaluation, but has been used in behavior therapy (McLean &
Hakstian, 1979). GAS is easily modified to tailor treatment
goals to the individual. Goals are established (either
prescribed or negotiated) according to graded points which
are weighted by the assignment of numeric values, thereby
allowing quantification of behavioral factors. GAS
facilitates the collection of information, evaluation of the
therapeutic process, and adjustment or addition of goals
during the treatment process (Hart, 1978).

Qualitative data was provided by case studies to establish a context for each subject's baseline and progress or digress.

Procedure

Both referred and self-referring clients to the clinic are routinely prescreened by telephone. Nonprofessional staff inquire as to the nature of the client's distress and the types of symptoms experienced. Those reporting the presence of depressive symptoms were assigned to the researcher/therapist for intake. A 1 to 1½ hour intake appointment was scheduled by the clinic and conducted by the researcher/therapist. Clients who met the criteria were asked to participate in a study of how clients with similar problems progressed within a time-limited course of treatment. Each subject agreed to a program of 8 weekly individual sessions followed by 8 weekly group sessions, and weekly testing to track symptoms. Confidentiality was explained and each subject gave informed consent. The BDI was then administered at the close of the intake interview.

The administration of the BDI preceeded each session. After the third administration, scores were immediately calculated and plotted graphically, and the graphs were then shown to and discussed with the subject. It was explained that higher scores indicated higher levels of depression,
while lower scores indicated lower levels. No judgment of severity was made by the researcher/therapist. Subjects were able to visually note any changes.

During the course of the intake interview, queries were made regarding behavioral factors of the GAS without explicitly indicating these were being documented. Goals contained in the GAS included problem areas common to depression: physical appearance, social interaction, quantity of sleep, weight gain or loss, and amount of exercise.

Physical Appearance: Personal hygiene and grooming often deteriorate as depression reaches moderate to severe levels and, conversely, tend to improve as depression lessens. To track these changes, the researcher/therapist subjectively appraised each subject's physical appearance each session. Subjects were also asked about daily grooming habits, e.g., frequency of bathing, appropriate dressing, etc. These behaviors were rated on a scale of one to ten, with one indicating a total disregard for appearance, and ten (the goal) indicating the highest level of cleanliness and neatness in grooming and dress.

Social Contacts: Depressed individuals tend to withdraw from others and become self-isolating. The person may avoid attending previously enjoyed social activities and may even avoid receiving visitors or answering the
telephone. Changes in social behavior were tracked through inquiries made of each subject in each session, with four contacts per week as the goal.

**Sleep:** Depression often results in sleep disturbances, including insomnia or hypersomnia. Subjects were queried each session regarding sleeping habits at night and during the daytime. Eight hours per night and an absence of daytime sleep was the goal.

**Weight:** Eating disturbances frequently occur with depression. Some individuals experience a significant decrease in appetite and a resulting loss of weight, while others eat compulsively and gain weight. In the intake interview, each subject was asked about changes in eating habits and recent changes in weight. Subject A had gained sixteen pounds during the duration of her depressive episode and the loss of this weight was selected as a goal. This subject was referred to a dietician, who provided a nutritious diet designed for weight reduction. Subjects B and C had both lost approximately ten pounds relating to their depressions and the regaining of the lost weight was selected as goals in these cases.

**Exercise:** Depressed individuals tend to become more sedentary and lack of exercise contributes to feelings of depression, creating a cycle in which physical activity is avoided due to feelings of fatigue and/or apathy related to
depression and depression deepens due to the lack of endorphins created by physical activity. In the intake interview and in each subsequent session, each subject was queried about the frequency and nature of exercise. Subjects were encouraged to exercise for twenty minutes, four times per week.

These goals were not negotiated with subjects nor were GAS profiles shown to subjects due to the possibility of negative effects (impression management, perceptions of therapist criticism, feelings of deficiency, etc.). Immediately following each session, the researcher/therapist recorded subjective and behavioral data obtained in the interview on the subject's GAS profile.

Each subject was queried at the beginning of each session on self-reported behavioral factors related to the GAS and the researcher noted observable components. Behavioral suggestions were made routinely by the researcher/therapist as ways to contribute to improvement in mood and feedback was given for attempts or improvements in behavioral functioning. These data were documented immediately following each session.

Cognitive therapy was employed in both phases of treatment. Beck's (1976) protocol for cognitive therapy was employed in the individual phase. Beginning in the first individual session after intake, the principles of cognitive
therapy were taught: the correlation of feelings to thoughts and beliefs; identifying maladaptive thoughts and beliefs; and challenging and correcting irrational thoughts and beliefs. Clients directly participated in the process of analyzing their own behavior in terms of this process. Handouts were provided during the course of the individual phase that listed examples of automatic thoughts and associated irrational beliefs. Homework assignments were also given, such as documentation of emotional discomfort and the underlying automatic thoughts and beliefs.

Cognitive and behavior therapy are often considered similar but distinct approaches, however the present study does not make this distinction. These two approaches have tended to overlap over time, as evidenced by Bandura (1977) and it is difficult to assign techniques to discrete categories as evidenced by the inclusion of behavioral techniques suggested by Beck (1976) in his protocol for treatment of depression.

The group included two subjects plus five other clients who manifested depressive symptoms, but were not participants in the study due to either failure to meet the research criteria or because they were referred to the group by other therapists at the clinic.

In a review of the literature, Covi et al. (1982) notes that cognitive groups are usually close-ended, and limited
to between 15 and 20 sessions. In this study, group was scheduled for 8 sessions. The cognitive therapy group was modeled after programs developed by Marshall and Mazie (1987) and Free et al. (1991). The first group session provided an orientation to the basic principles of cognitive therapy and subsequent sessions focused on identifying maladaptive thoughts and beliefs, practicing disputing and challenging irrational beliefs, practicing techniques for changing dysfunctional behaviors, and learning about individual depressive cycles.

Procedures followed in the present study are comparable to those of other studies. Of the cognitive studies cited, length of treatment and/or number of sessions varied little. Individual treatments ranged from 12 to 20 sessions (mean=18.7 sessions) over a period of 12 to 20 weeks (mean=13.3 weeks), resulting in a range of 12 to 24 treatment hours (mean=19.5 hours). Group treatment ranged from 6 to 20 sessions (mean=12.7 sessions) over a period of 6 to 12 weeks (mean=10.7 weeks), resulting in a range of 9 to 24 treatment hours (mean=17.1 hours). These studies all required at minimum initial score of 17 on the BDI. In the present study, individual treatment consisted of 8 weekly one-hour sessions (8 hours total) and group treatment consisted of 8 weekly 90 minute sessions (12 hours total). The minimum initial score on the BDI was 10, indicating a
level of depression in the mild to moderate range.

Results

Subject A

The subject was a 65 year old Caucasian female, married for forty-seven years, with two children. Three years prior to intake, the subject had retired from her job as a school district secretary and had moved to a new community 75 miles from friends and family members. The subject had experienced a depressive episode in 1978 which had been treated "successfully" with tricyclic medication. Over the past two years, she had begun exhibiting obsessive-compulsive behaviors, specifically counting, for which her previous psychiatrist had prescribed trazodone.

Subject A presented with complaints of fatigue, hypersomnia, compulsive eating accompanied by a 16 pound weight gain in a 2 month period, social withdrawal, poor concentration and impaired recent memory. She also admitted the presence of passive suicidal thoughts. The subject reported no somatic complaints and was currently taking 300 mg. trazodone HS.

Due to the severity of her symptoms, Subject A was referred for a medication evaluation upon intake. The clinic psychiatrist prescribed sertraline, beginning at 150 mg. HS and increasing to 200 mg., and began decreasing her trazodone from 300 mg. to 100 mg. HS.
The subject's BDI score at intake was at the high end of the moderate to severe range (see Figure 1). Subsequent BDI scores indicate a fluctuation in symptoms during the period of sessions 1 through 5, after which symptoms were markedly reduced. The subject appeared to have difficulty learning and utilizing the principles of cognitive therapy initially, but gained proficiency by the fifth individual session. The subject's GAS (Table 1) also suggests significant behavioral improvement corresponding to mood. Subject A missed session 7, but her BDI score at session 8 reflected a continued reduction of symptoms to within the normal range.

Subject A's BDI score at the first group session was also in the asymptomatic range. However, the subject failed to return and did not complete the group therapy phase. The subject's stated reason for dropping out was that she perceived her improvement was such that she did not require further treatment.

Subject B

This subject was a 38 year old Pacific Islander female who immigrated to the U.S. in 1981. She had been married for 14 years, with two children ages 16 and 7. She did not complete high school in her native country, but completed a cosmotology program after immigrating to the U.S. She had been unemployed for three years.
Figure 1: BDI Scores for Subject A

[Diagram showing BDI scores over time with categories: Normal/Asymptomatic, Mild-Moderate Range, Moderate-Severe Range, and Extremely Severe Range.]
Table 1
Goal Attainment Scores for Subject A

<table>
<thead>
<tr>
<th>Physical Appearance</th>
<th>Social Interacting</th>
<th>Amount of Sleep</th>
<th>Weight A</th>
<th>Weight B</th>
<th>Exercise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal=10</td>
<td>Goal=4</td>
<td>Goal=8 hrs.</td>
<td>Goal= -10 lbs.</td>
<td>Goal=+16 lbs.</td>
<td>Goal=20</td>
</tr>
<tr>
<td>Wt. = .2</td>
<td>Wt. = .2</td>
<td>Wt. = .2</td>
<td>Wt. = .2</td>
<td>Wt. = .2</td>
<td>Wt. = .2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Baseline %</th>
<th>0.0</th>
<th>0.0 Contacts</th>
<th>10 hrs.</th>
<th>-10 lbs.</th>
<th>+16 lbs.</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>25% Improvement</td>
<td>2.5</td>
<td>1</td>
<td>9.5</td>
<td>+2.5</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>50% Improvement</td>
<td>5.0</td>
<td>2</td>
<td>9.0</td>
<td>+5.0</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>75% Improvement</td>
<td>7.5</td>
<td>3</td>
<td>8.5</td>
<td>+7.5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>100% Improvement</td>
<td>10.0</td>
<td>4</td>
<td>8.0</td>
<td>+10.0</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>

Total % Improvement

Subject A Improvement: 20.0 20.0 20.0 - 17.5 20.0 97.5
Subject B presented with feelings of sadness and guilt, fatigue, anhedonia, indecisiveness, withdrawal and isolation, and a 10 pound weight loss within a period of two months. Onset was gradual over a period of one year, but symptoms became acute two months prior to intake. The subject reported no somatic complaints and denied the use of both prescription and nonprescription medication. However, she reported that she used cannabis on a regular basis to alleviate her emotional discomfort.

The subject's initial BDI score was in the mild to moderate range. Subject B quickly mastered the principles of cognitive therapy and demonstrated a marked reduction in symptoms (Figure 2) within 5 individual sessions. At that point, the subject was released from further individual sessions as her scores had been within the normal range since session 2 and it was decided that it would be unethical to deplete the limited number of individual sessions available to her for the sake of the project.

Improvements in behavioral components during Subject B's participation in individual therapy are illustrated in Table 2. It is also worth noting that although substance abuse was not a primary target for immediate remediation, the subject decreased her use of cannabis through the course of treatment.

Subject B returned for the group phase, but attended
Figure 2: BDI Scores for Subject B
### Table 2
Goal Attainment Scores for Subject B

<table>
<thead>
<tr>
<th>Physical Appearance</th>
<th>Social Interacting</th>
<th>Amount of Sleep</th>
<th>Weight A</th>
<th>Weight B</th>
<th>Exercise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal=10</td>
<td>Goal=4</td>
<td>Goal=8 hrs.</td>
<td>Goal=</td>
<td>Goal=</td>
<td>Goal=20</td>
</tr>
<tr>
<td>Wt. = .2</td>
<td>Wt. = .2</td>
<td>Wt. = .2</td>
<td>Wt. = .2</td>
<td>Wt. = .2</td>
<td>Wt. = .2</td>
</tr>
<tr>
<td>Baseline %</td>
<td>0.0</td>
<td>0.0 Contacts/Wk.</td>
<td>10 hrs.</td>
<td>-10 lbs.</td>
<td>+16 lbs.</td>
</tr>
<tr>
<td>25% Improvement</td>
<td>2.5</td>
<td>1</td>
<td>9.5</td>
<td>+2.5</td>
<td>12</td>
</tr>
<tr>
<td>50% Improvement</td>
<td>5.0</td>
<td>2</td>
<td>9.0</td>
<td>+5.0</td>
<td>8</td>
</tr>
<tr>
<td>75% Improvement</td>
<td>7.5</td>
<td>3</td>
<td>8.5</td>
<td>+7.5</td>
<td>4</td>
</tr>
<tr>
<td>100% Improvement</td>
<td>10.0</td>
<td>4</td>
<td>8.0</td>
<td>+10.0</td>
<td>0</td>
</tr>
<tr>
<td>Subject B Improvement</td>
<td>20.0</td>
<td>20.0</td>
<td>20.0</td>
<td>12.0</td>
<td>-</td>
</tr>
</tbody>
</table>

Total % Improvement
only one session. Her reason for dropping our was her perception of recovery and the lack of need for additional treatment.

Subject C

Subject C was a 31 year old Hispanic female, married for 4 years, with one child aged 3. She had completed high school and had taken some college courses. She had been voluntarily unemployed since the birth of her child.

Subject C presented with anhedonia, lethargy, low motivation, withdrawal and isolation, feelings of sadness, passive suicidal ideation, and a nine pound weight loss within a three month period. She also reported the presence of marital problems. The subject complained of daily headaches, for which she took nonprescription medication. She admitted to a past history of substance abuse, but currently reported using alcohol only occasionally.

After the third individual session, the client withdrew from the study and requested marital therapy. Although Subject C dropped out of the study after the third individual session, her data is included as a matter of possible interest. The subject's initial BDI score was in the moderate to severe range. Her immediate response to treatment was fair, as shown in Figure 3. Subject C's GAS (Table 3) also illustrates behavioral improvement in the short period she participated.
Figure 3: BDI Scores for Subject C
Table 3

Goal Attainment Scores for Subject C

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Wt. = .2</td>
<td>Wt. = .2</td>
<td>Wt. = .2</td>
<td>Wt. = .2</td>
<td>Wt. = .2</td>
<td>Wt. = .2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Baseline %</th>
<th>Improvement 25%</th>
<th>Improvement 50%</th>
<th>Improvement 75%</th>
<th>Improvement 100%</th>
<th>Subject C Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.0</td>
<td>2.5</td>
<td>5.0</td>
<td>7.5</td>
<td>10.0</td>
<td>18.0</td>
</tr>
<tr>
<td>Contacts</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>20.0</td>
</tr>
<tr>
<td>10 hrs.</td>
<td>9.5</td>
<td>9.0</td>
<td>8.5</td>
<td>8.0</td>
<td>20.0</td>
</tr>
<tr>
<td>-10 lbs.</td>
<td>+2.5</td>
<td>+5.0</td>
<td>+7.5</td>
<td>+10.0</td>
<td>4.0</td>
</tr>
<tr>
<td>+16 lbs.</td>
<td>12</td>
<td>8</td>
<td>4</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

Total Improvement

<table>
<thead>
<tr>
<th>Subject C Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.0</td>
</tr>
</tbody>
</table>

31
Discussion

Results concur with the preponderance of literature which suggests that cognitive therapy is an effective treatment for depression within a brief, time-limited context. All three subjects showed immediate responses to individual treatment, with a marked reduction in symptoms within a short period of time. However, there were several problems that occurred in the course of this study.

The first problem was the size of the sample. Although this was to be a single-subject study, eight subjects would potentially have ensured that at least one subject completed the entire course of treatment. However, because a convenience sample was used, subjects had to be selected from those who presented with the appropriate symptoms and diagnosis. In this case, clients presenting with depression upon intake were uncharacteristically absent.

The second problem was attrition. Other researchers have also experienced attrition problems. Sixteen of the studies reviewed in this report included attrition data. Overall, attrition rates in cognitive therapy conditions were lower than for other treatments. Rates for attrition in individual cognitive therapy conditions ranged between 0 and 32% with a mean of 13.43% (mode=5, median=11), and cognitive group rates ranged between 0 and 23% with a mean of 11.5% (median=17). Attrition in medication-only
conditions ranged from 19% to 36% (mode=36, median=33) and dynamic therapies showed a range of between 30% and 32%, with means of 31.2% and 26.5% respectively.

In a review of the literature, Free et al. (1991) found high attrition rates in similar studies of cognitive therapy, and state:

Other authors have noted that many patients respond rapidly to cognitive therapy. . . . These people may be difficult to retain in therapy once they perceive themselves to be recovered (p.543).

Deykin et al. (1971) hypothesize that when symptoms decrease, clients may believe their depression is cured and, therefore, their need for therapy is also reduced. If clients have no significant symptoms to report, they may believe they are wasting the therapist's time. In fact, subjects' perceptions of improvement contributed to attrition in two of the cases in the present study. Simons et al. (1984) examined attrition rates in the treatment of depression and found no correlation between attrition and time or type of therapy.

One possible explanation for high rates of attrition lies in the concept of high- and low-responders. High-responders are those whose depression is primarily a reaction to life stressors, who respond more quickly to therapy, and who are less likely to experience relapse.
Low-responders are those "more likely to be characterized by a depressed life-style" (McLean & Hakstian, 1979, p. 833) and tend to maintain depressive symptoms longer or regain them sooner (Baker & Wilson, 1985; Simons et al., 1986; Thase et al. 1991). Those individuals who leave treatment prematurely may be high-responders who gain immediate relief from symptoms and interpret that relief as recovery. This may be the case for Subjects A and C. Some authors suggest that cognitive therapy is less effective for more severe depression than for less severe depression (Baker & Wilson, 1985; Elkin et al., 1989; Thase, et al., 1991), a trend which may be related to the concept of high- and low-responders.

The distinction between high- and low-responders is indirectly related to the distinction commonly made between exogenous and endogenous depression, that is, high-responders tend to have the former and low-responders the latter. This concept is founded on the theory that some depression is endogenous and therefore requires biological intervention. However, the distinction between endogenous and exogenous depression has not yet been demonstrated empirically, nor do endogenous features correlate with response to antidepressant medication, and only a small proportion of people respond only to one type of treatment (Free & Oei, 1989; Kovacs et al., 1981).
The third problem concerns the notion that all depressed individuals experience a decrease in appetite. The BDI is congruent with this view, acknowledging only poor appetite and/or related weight loss as symptoms, disregarding the fact that some depressed individuals increase their food intake and experience a related weight gain. Such was the case with Subject A. If the BDI allowed for a positive equivalent for disturbances in eating, her scores would have been one to three points higher during the first six individual sessions. Therefore, the BDI may not be a valid measure in this area.

Implications

The evidence that cognitive therapy is an effective treatment for depression is abundant. One of the benefits of cognitive therapy is that clients acquire tools for maintaining high functioning that can be utilized by the client on an on-going basis, which is especially salient given recurrence rates of depression. Rather than being "problem-specific," as are insight-oriented approaches, cognitive therapy is a practical paradigm which can be applied by clients to a variety of problems or distresses (Gallagher & Thompson, 1982). However, despite the relative low relapse rate reported by several researchers (Marshall & Mazie, 1987; Rush & Watkins, 1981; Rush et al. 1977; Simons et al., 1986), the notion that cognitive therapy may "cure"
depression and, therefore, serve as the perfect vehicle for delivering brief, time-limited treatment as a means of increasing the efficiency of utilization of services, is questionable.

An arbitrary limit on length of treatment may be adequate for clients without psychiatric disorders who are experiencing life crises and require short-term assistance in problem-solving. For those clients suffering from long-term or severe depression and other disorders, limiting treatment may be inappropriate. Even when using a brief treatment approach which has demonstrated effectiveness, as cognitive therapy has, it is important to remember that not all depressions are alike nor do all depressed clients respond to treatment at the same rate.

Evidence suggesting that time-limited therapy models are effective means of mental health service delivery is preliminary. Follow-up and longitudinal studies of clients receiving time-limited therapy are lacking, so the long-term benefits and liabilities of this model are virtually unknown. Estimations of successful outcomes cannot be generated merely by the failure of individuals to present with future episodes as there may be other reasons for them not returning in the future, such as dissatisfaction with services, lack of resources to make co-payments, or loss of insurance coverage. It is possible that, in practice, the
time-limited model is actually crisis intervention, effecting no significant, lasting changes in a client's functioning.

In addition to these concerns, termination remains a salient issue for consideration. Garfield (1989) asserts that client variables, therapist variables and length of therapy influence termination. While the author discusses these variables in terms of transference, they also provide a helpful framework for assessing appropriate termination, such as the client's rate of progress, his/her need and capacity for continued change, subjective evaluations by both client and therapist regarding problem resolution and goal attainment, utilization of appropriate treatment approaches, and the efficacy of continued treatment.

Even within the context of a time-limited model and even when utilizing cognitive therapy, the therapeutic relationship is a special one, distinctive from all other types of relationships. The interaction between the client's disclosure of intimate information and the therapist's empathic responses and skills create a bond of trust which, if broken prematurely and/or artificially, adds some level of discomfort to the client's existing distress which may impair the client's recovery.

Aside from ethical problems, terminating treatment prematurely may be cost-inefficient. There is a high
probability that clients who are inadequately served will return for additional treatment for the same problem, whether the treatment they seek is psychiatric or medical. In this eventuality, the total cost of attenuated treatment may actually exceed the cost of adequate first-time care.

The search by HMOs for more cost-effective means of mental health service delivery is understandable given the lack of resources resulting from current economic conditions. However, employing arbitrary limits on treatment as a solution to this problem is debatable. Rather than prescribing time frames for recovery, increasing the effectiveness of services while allowing for more individualized termination may be a more appropriate direction to take. Standardizing treatment approaches instead of treatment length could result in greater efficiency overall.

An example of this strategy is illustrated by a symposium offered recently by the Department of Psychosocial Services at Kaiser Permanente, San Diego. The purpose of the symposium was to educate clinicians about cognitive therapy as an effective brief treatment approach. Specific protocols were offered for the treatment of anxiety disorders and depression, focusing on maximizing treatment and treatment results within a brief psychotherapy framework. This type of training may be especially helpful.
to clinicians trained in more time-consuming psychotherapies, such as insight-oriented therapies, which may be generally effective but unsuitable within a brief therapy context. If seasoned clinicians were systematically trained in the utilization of effective briefer therapies, it is possible that this would result in a greater number of successful treatment outcomes and a more comprehensive resolution of treatment issues.


