6-4-2003

Cognitive behavioral therapy with non-ambulatory clients in the treatment of depressive symptoms

Kevin C. O'Leary
Rowan University

COGNITIVE BEHAVIORAL THERAPY WITH NON-AMBULATORY CLIENTS IN THE TREATMENT OF DEPRESSIVE SYMPTOMS

By
Kevin C. O'Leary

A Thesis

Submitted in partial fulfillment of the requirements of the
Master of Arts Degree
of
The Graduate School
at
Rowan University
(June 4, 2003)

Approved by_____
Professor

Date Approved 6/4/03

ABSTRACT

KEVIN C. O'LEARY

COGNITIVE BEHAVIORAL THERAPY WITH NON-AMBULATORY CLIENTS IN THE TREATMENT OF DEPRESSIVE SYMPTOMS

2002 – 2003

DR. MARY LOUISE KERWIN

MASTER OF ARTS IN APPLIED PSYCHOLOGY AND MENTAL HEALTH COUNSELING

The purpose of this study was to expand the current research on the effectiveness of Cognitive Behavioral Therapy in the treatment of depressive symptoms with a non-ambulatory client experiencing dysthymic depression. Using a single subject AB design, Cognitive Behavioral Therapy was implemented during weekly sessions with Beck Depression Inventory and the Leahy Anxiety Checklist for Patients as outcome measures. Results suggest that Cognitive Behavioral Therapy can be used in the treatment of depressive symptoms in non-ambulatory clients. Clients with physical disabilities who experience mental illness have unique requirements suggesting the need for additional research.

MINI-ABSTRACT

KEVIN C. O'LEARY

COGNITIVE BEHAVIORAL THERAPY WITH NON-AMBULATORY CLIENTS IN THE TREATMENT OF DEPRESSIVE SYMPTOMS

2002 – 2003

DR. MARY LOUISE KERWIN

MASTER OF ARTS IN APPLIED PSYCHOLOGY AND MENTAL HEALTH COUNSELING

In this study a non-ambulatory client was treated for symptoms of depression using Cognitive Behavioral Therapy. Her progress was tracked through use of the Beck Depression Inventory and the Leahy Anxiety Checklist for Patients. The study showed a significant decrease in depressive symptoms as well as any symptoms of anxiety.

Acknowledgements

The author thanks Dr. Mary Louise Kerwin for serving as advisor, editor, and motivator for this research project. Also, Amy Poole for supervising me during the treatment phase of the study.

Table of Contents

List of Figures

Chapter 1

Introduction

Depression is a problem facing many Americans today. Depression is said to affect between 6% and 25% percent of the population (American Psychiatric Association, 2000). Although many treatments are available for this difficult disorder, people are still suffering everyday with its affects. The symptoms of depression are poor appetite or overeating, insomnia or hypersomnia, low energy or fatigue, low self-esteem, poor concentration or difficulty making decisions, and an overall feeling of hopelessness (American Psychiatric Association, 2000). Depression can affect all facets of life including job performance, marital relationships, social functioning and support. Severe depression can result in feelings of hopelessness and suicide.

Many interventions have been developed to treat people with depression. These treatments include psychoanalysis (Craighead, Evans, & Robins, 1992; Klerman, 1988; Leichsenring, 2001;), Cognitive Behavioral Therapy (Rush, Beck, Kovacs, & Hollon, 1977; Kovacs et al., 1981; Hollon et al., 1989; Simons, Murphy, Levine, & Wetzel, 1985; Hollon, DeRubeis, & Seligman, 1992), Mindfulness-Based Cognitive Therapy (Segal, Williams, & Teasdale, 2001; Teasdale et al., 1995), Social Skills Training (Segrin, 2000; Hersen, Bellack, Himmelhoch, & Thase, 1984; Lewinsohn & Gotlib, 1995), Behavioral Activation Therapy (Jacobson, Martell, & Dimidjian, 2001), Electroconvulsive Therapy (Klerman, 1988; Sackeim et al., 2000; Tremont & Stern, 2000) Psychopharmacological Treatments (Depression Guideline Panel, 1993; Nemeroff & Schatzberg, 1998; Simon, Von Korff, Rutter, & Peterson, 2001) and Problem Solving Therapy (Alexopoulos, Raue,

& Arean, 2003; Katon et al., 2002; Frank et al., 2002; Townsend et al., 2001; Lerner & Clum, 1990; Nezu & Perri, 1989).

Over the years, these techniques have been debated and tested with different populations and different levels of depression. Although there are a variety of approaches, the field has moved towards the use of empirically supported treatments. Empirically supported treatments are defined as treatments that have been demonstrated to have superior outcomes when compared to either control groups or "typically used treatment approaches" they are evaluated within a randomized controlled experimental study (Task Force on Promotion and Dissemination of Psychological Procedures, 1995).

The three techniques that appear in the literature as empirically supported treatments of depression in adults are Cognitive Behavioral Therapy, Problem Solving Therapy, and Medication Treatments (Hersen & Bellack, 1982; Oxman et al., 2001).

Cognitive Behavioral Therapy

The theory behind Cognitive Behavioral Therapy (CBT) is that a person's symptoms or behaviors result from irrational beliefs or thoughts. If a person were to reorganize their self-statements, they in turn would reorganize their behavior. There are two main theorists of CBT who developed similar approaches at the same point in time but relatively independent of each other.

Albert Ellis proposed Rational Emotive Behavior Therapy when he decided to branch from the traditional psychoanalytic therapy and attempt to combine philosophical, humanistic, and behavior therapy into one treatment (Ellis, 1962). Ellis believes that mental health problems stem from irrational beliefs. Using a confrontational approach, Ellis challenges these irrational distortions to demonstrate the control they have over the

client's behavior. Once the client understands and accepts the impact of the distortions on behavior, the client is encouraged to modify the beliefs.

At the same time, Aaron Beck was developing his own approach called Cognitive Therapy (Beck, 1976). Beck's Cognitive Therapy allows the client to focus on his or her cognition during a certain experience. Presenting the client with experiences that challenge the underlying cognitive distortions enable the client to understand why he or she feels a certain way and lead the client to change their core beliefs and therefore affect the way they feel about a certain situation. One way these experiences are presented to the client is through homework assignments to be accomplished outside of sessions (Corey, 2001). Homework assignments have been shown to be a very important part of CBT. In an experiment by David Coon, it was shown that homework compliance contributed significantly to post treatment outcome as measured by both interview-administered and patient self-report measures of depression (Coon & Thompson, 2003)

Both Ellis and Beck's therapies were very similar and at times they even exchanged ideas. Rational Emotive Therapy and Cognitive Therapy have at their core the assumption that faulty cognitions are the underlying problem and that changing these faulty cognitions will result in changing affect and emotions.

Klosko and Sanderson (1999) describe CBT as a way for clinicians to intervene at all the levels of depression. By teaching clients to manage their cognition, mood, physiology, and behavior better, they can overcome their depression and meet their goals in life. At the cognitive level, clients can correct their negatively distorted depressive thoughts and think more realistically. At the level of mood, the client is taught self-control techniques so they can better contain and manage the negative emotions. At the

physiological level, the client is taught to use imagery, meditation, and relaxation techniques such as activity scheduling and assertiveness training to help them behave in more constructive ways. Overall, this technique builds on what is already healthy in the client's life (Klosko & Sanderson, 1999).

Cognitive Behavioral Therapy is used as short-term therapy so the client can manage their depression as quickly as possible and maintain these gains on their own. Using CBT, the clinician must assume that the client is functioning at a reasonable level so that they are able to attend all sessions, and have sufficient motivation to work with the therapist to manage their depression.

In many studies researchers have seen improvements in depressive symptoms using CBT. In adolescents diagnosed with Major Depression, Cognitive Behavioral Therapy has been shown to be successful in decreasing the depressive symptoms (Gaynor et al., 2003) even when set up as a standardized treatment (Ablon & Jones, 2002). Cognitive Behavioral Therapy has been shown to be more effective than placebo in experiments, but is shown to be even more effective when used in conjunction with medication (Oei & Yeoh, 1999; Klerman et al., 1988).

In the experiment performed by Oei and Yeoh (1999), the population used was an adult depressed population with no history of drug and alcohol abuse as well as no signs of psychosis. In this study, CBT was compared to CBT with antidepressant medication. The results showed that the medication did not take away from the treatment and both groups showed dramatic improvement. The coauthor's concluded was that medication should be used with extreme cases of depression where the client may not be able to attend a CBT session.

In research done by Taylor (2000), the treatment outcomes of clients diagnosed with depression were equal when treated with Medication and with CBT. This researcher used a severely depressed population and used the Beck Depression Inventory and Hamilton Rating scale for Depression as outcome measures. This contradicts other research showing that Cognitive Behavioral Therapy was the favored treatment in treating depression (DeRubeis, Gelfand, Tang, & Simmons, 1999).

Although CBT has been demonstrated to be a superior treatment to placebo, the methodology employed does expose limitations to these studies. When Cognitive Therapy was compared to "other psychotherapies" in the treatment of depression, CT was shown to be superior to the other therapies; however, the results may be due to the experiment lumping "other therapies" into one category including both bona fide treatments as well as treatment without therapeutic rational for depression (Wampold, Minami, Baskin, & Tierney, 2002).

When CBT is compared to other treatments such as Psychodynamic-interpersonal psychotherapy, CBT is shown to be more effective as a treatment in both the 8 and 16-week trials using the Beck Depression Inventory as a measure. However, this improvement was only seen in the more severe cases of depression (Shapiro, Barkham, Rees, & Hardy, 1994).

Problem-Solving Therapy

Another common therapy that is used for depression is Problem-Solving Therapy (D'Zurilla, 1986). Problem Solving therapy was developed in the early 1970's due to a trend in psychology to develop an arsenal of more interventions for treatment of common mental health problems (D'Zurilla, 1986). This treatment focuses on the client's

presenting issue within the framework of their current situation. The therapist takes this presenting issue and develops an intervention designed for that client's particular situation. So if a client comes in with an issue that is making them depressed or anxious, the therapist would work on a direct intervention to correct that situation. For example, if an adolescent is getting in trouble in school and feels that he cannot achieve in the classroom, the clinician would design a specific plan for the adolescent such as staying in his or her seat, listening, or finding someone in class that can help him or her stay out of trouble. As a result, the treatment plan would be very concrete, specific, and behavioral.

This technique has been shown to work well with families and adolescents (Haley, 1988). This treatment has also been used with the elderly and chronically ill populations with some success (Katon et al., 2002). In an experiment with geriatric patients, Problem-Solving Therapy has been shown to help reduce depressive symptoms after 12 weeks of treatment (Alexopoulos et al., 2003). In a study comparing Paroxetine and Problem-Solving Therapy with placebo for symptoms of depression as measured by Hamilton Rating Scale, the combined therapy of medication and problem-solving was superior to placebo (Katon et al., 2002). These treatments have also shown to have a low rate of remission of depressive symptoms (Frank et al., 2002).

In a meta-analysis of the data, researchers have seen that people treated with Problem-Solving Therapy show significantly greater improvement in scores for depression, hopelessness, loneliness, and improvement over their problems than patients who were in control groups (Townsend et al., 2001; Lerner & Clum, 1990; Nezu & Perri, 1989). The research has also shown that clients with emotional disorders treated with Problem Solving therapy as compared to just general treatment from their family

practitioner were seen to have fewer disability days and fewer days off work (Mynors-Wallis, Davies, Gray, & Barbour, 1997). The research also has shown that psychopharmacology can help enhance results when working with some clients using Problem-Solving Therapy (Resnikoff & Lapidus, 1998).

Medication Therapy

The next technique that is widely used in practice today is Medication Therapy. There is increasing evidence that depression may result from physiological mechanisms. This evidence comes from ongoing research, which has been studying the chemical changes that occur in the body when someone is experiencing symptoms of depression. Studies have found that when someone is going through depression, their levels of norepinephrine and serotonin in their urine will decrease (Bunney, Murphy, & Goodwin, 1970). Later studies have confirmed that these two chemicals play a major role in a person's mental state by studying the norepinephrine and serotonin levels in clients experiencing manic symptoms. These researchers have found that when someone is experiencing an episode of mania, their levels of norepinephrine are very high, but when they are depressed, the levels are very low in their brain (Bunny et al., 1972). These theories were again confirmed at a later date when researchers changed an individual's serotonin and norepinephrine levels through changing their diets. These changes in chemical levels affected the client's mood. When the client was taken off the special diet, their mood and chemical levels returned to what it was before the experiment (Delgado et al., 1990).

Medications help alleviate the symptoms of depression, especially eating, sleeping and mood. Unfortunately, unlike CBT and Problem solving therapy that are

intended to provide lifelong skills to combat depression and its symptoms, medications are intended to alleviate the symptoms of the depression as long as medications are taken.

There are many different medications on the market that have shown to work well for symptoms of depression. Some of the medications that have been demonstrated to work best with depression are the antidepressants known as Tricyclic Antidepressants (TCA's), Monoamine Oxidase Inhibitors (MAOI's) and Selective Serotonin Reuptake Inhibitors (SSRI's) (Belanoff, DeBattista, & Schatzberg, 1998).

Tricyclic Antidepressants are a class of medication that exert their effects by blocking the reuptake of excitatory neurotransmitters and secondary 5-HT and thereby increase the amount of neurotransmitter that is present in the synaptic cleft. These medications are good because they are not affected by the intake of food. These medications have some side effects but they usually subside over time. Although TCA's are good for treating depression, they can be dangerous because an overdose on these medications can be fatal (Buelow & Herbert, 1995; Bremner, 1984).

Monoamine Oxidase Inhibitors (MAOI) are used when clients are unresponsive to other antidepressant medications. MAOI's work by inhibiting the enzyme that breaks down the serotonin in the synaptic cleft. Therefore, by increasing the amount of serotonin left in the synaptic cleft, the resulting increase of serotonin will help elevate the client's mood. Unfortunately, MAOI's interact with many over the counter medications as well as many foods. These medications are usually not tolerated by clients and are rarely used as a first line defense against depression (Buelow & Herbert, 1995).

Selective Serotonin Reuptake Inhibitors (SSRI) work similarly to the TCA's by blocking the reuptake of 5-HT neurotransmitter. SSRI medications tend to also help

control obsessive rumination and have important anti-anxiety effects. SSRI medications appear to work better than the TCA's since they have fewer side effects and are rarely lethal in overdoses (Belanoff, DeBattista, & Schatzberg, 1998; Carrasco, Diaz-Marsa & Saiz-Ruiz, 2000).

One medication that is commonly used in the treatment of depression is Paroxetine, which is an SSRI. Paroxetine was developed in 1993 under the name Paxil. This medication increases the amount of serotonin in the brain by inhibiting serotonin reuptake. Fluoxetine (SSRI) is one of the most prescribed drugs for comorbid depression and anxiety. It works on the 5-HT receptors by preventing the reuptake of serotonin in the brain. Fluoxetine is also said to work on the 5-HT2 receptors. 5-HT2 is said to be important in the regulation of mood. Sertraline (SSRI) tends to have the same effects as fluoxetine by inhibiting the reuptake of serotonin. Unlike Fluoxetine, the effects of this medication are delayed (Buelow & Herbert, 1995).

Combination of CBT and Medication

Clinical practice guidelines often suggest that the best results in treating depression come from medication and therapy together (Koocher, Norcoss, & Hill, 1998; Oei & Yeoh, 1999; Klerman, 1988). However, few studies have used methodologically sound studies to empirically investigate the effectiveness of CBT and medication (Frank, Kupfer, Perel, Cornes, & Jarrett, 1990). Other research suggests that a combination of CBT and medication is no more effective than CBT alone (DeRubeis et al., 1999; Jarret et al., 1999). In the current study, a combination of medication (specifically Prozac) and CBT will be used, consistent with the typical clinical practice guidelines for treatment of depression.

Treatment of Depression in Individuals with Physical Challenges

The empirically supported treatments reviewed thus far (CBT, Problem Solving and Medication) are commonly used in isolation or combination to treat the symptoms of depression. However, the majority of the literature has investigated their effectiveness for depression in physically healthy adults. Unfortunately, not much research has been done on people with physical disabilities and depression. Although the research suggests that there is a higher rate of depression among people with physical limitations than in the normal population (VanGundy & Schieman, 2001), I have not found any studies that examine the effectiveness of interventions for depression with clients who are non-ambulatory or disabled physically by accidents or birth defects.

The few published studies in this area involve the treatment of depression in the elderly or people with physical illness (Van Gundy & Schieman 2001; Ban, Guy & Wilson 1984; Bruce, 2001). The research that has been published suggests that treatment of these individuals is not much different than the treatment of typical clients with depression except that certain limitations have to be discussed and recognized (Rodin, Craven, & Littlefield, 1991). Because the Cognitive Behavioral approach relies on homework assignments involving physical tasks (i.e., going out to a crowded mall and talking to a person for someone with social phobia), these therapeutic assignments have to be considered more carefully by the therapist when working with individuals facing physical challenges. If the client is not physically able to achieve the objective of the assignment, the resulting client reaction may add more to the depression instead of helping to reduce it through accomplishment. This will also add to the client's already

negative schema that they may have saying that they are "worthless" or cannot achieve anything on their own.

People who are physically challenged often receive multiple medications for their physiological problems. These medications can have side effects that mimic depression or anxiety (Ban, Guy & Wilson, 1984). A clinician treating someone in this population needs to be aware of the medications the client is taking and be in constant contact with the client's primary care physician in order to be updated on any medication increases or changes that may occur. It is also necessary to recognize that a client with a physical disability may not have issues with the physical side of their health or even the social stigma. The client may be depressed over other life events such as family turmoil, divorce, lack of socialization, or a death in the family (Rodin, Craven, & Littlefield, 1991; Bruce, 2001).

Overall, it appears that the best treatment of depression in general is to use a combination of Cognitive Behavioral Therapy as well as Medication. The best medication to use in stabilizing mood appears to be the Fluoxetine since it helps with both depression as well as anxiety. These empirically supported and commonly used treatment approaches for depression have not yet been investigated systematically in individuals with physical limitation without physical illness. The purpose of this study is to investigate the effectiveness of combined treatment of cognitive-behavioral therapy and medication for the treatment of depression in an individual with physical limitations using a single case design.

Chapter 2

Method

Participant

Sally is a 21-year-old non-ambulatory client that sought help from a community mental health agency for symptoms of depression and anxiety. Sally presents as an intelligent and well-spoken 24-year-old white female with a slight stutter. She was born with a birth defect that led to her being wheelchair bound and requiring extensive medical treatment during her entire life. She comes from a middle class socioeconomic status and is partially supported through disability and social security. She has lived at home with her family, which consists of her mother, two sisters and one brother. She is the oldest sibling in the family.

During her initial assessment she reported depression over her lack of family involvement, social activities and friends. Sally reported that she has been generally feeling "down" since she was 16 years old and her parents divorced. She reported frequently losing her appetite, but still eating because she knew she had to take her medications with food. Her sleeping patterns consisted of either sleeping too much some days or not being able to sleep at all during others. She also appeared to have very low self esteem and spoke about herself in a very negative fashion. She reported that the majority of her day is spent by herself either reading or just staring out the window.

Sally reported feeling depressed about her current family situation. She felt that she had no connection to her family after her parents' divorce. She also reported that the family had separated into two fighting groups; the group that still had contact with her father, and the group that wanted nothing to do with him.

Sally also reported anxiety and depression when dealing with social situations. She felt that no one would want to talk to her and she was embarrassed to start conversations with people because of her stutter. While exploring the origin of these feelings, Sally reported that when her parents were divorcing, she had one friend she felt she could talk to about everything in her life. When things started to get messy with the divorce, Sally perceived that her friend rejected her. This caused Sally to hold in most of her feelings and blame herself for most of her difficulties in life.

Sally's feelings of anxiety and depression were impacted by many stressors including lack of reliable transportation, lack of physical adaptations in her home, her mother's tendency to leave her in charge of the care of the siblings, the family's schedule, and a house without adequate physical support.

Sally had previously been in treatment for the same issues during the previous year. Those sessions were terminated early when the therapist had to leave the agency. Before Sally sought therapy, she started receiving Prozac from her family physician to help combat her depression. Once Sally had started treatment at this facility, the agency's psychiatrist took over her medication monitoring. Prozac is the only medication Sally was taking at the start of this study.

Measures

The measures used in this study were the Beck Depression Inventory and the Leahy Anxiety Checklist for Patients.

Beck Depression Inventory. The Beck Depression Inventory (BDI) is a 21 item self-report questionnaire assessing symptoms of depression. The questions break down depression into different areas such as physical symptoms, feelings, and cognition. These

items are rated on a scale from 0 to 3, with three being the most severe and zero meaning that the symptom does not exist. The scores are then added up and the total indicates the severity of the depression or the absence of depression. A score of 5-9 indicates a typical experience, 10-18 indicates mild to moderate depression, 19-29 indicates a moderate to severe level of depression and anything over 30 indicates a severe level of depression. The coefficients alpha estimates of reliability for the BDI with an outpatient population of adults was .92 and the test-retest reliability coefficient across the period of a week was .93. The BDI and the Hamilton Psychiatric Rating Scale for Depression – Revised are correlated .71 providing some support for the validity of the BDI as a measure of depression.

Leahy Anxiety Checklist for Patients (LACP). The Leahy Anxiety Checklist for Patients is another self-report questionnaire that measures symptoms of anxiety as well as the severity of anxiety as reported by a client. This is a 17-question assessment that uses a rating number scale of 1-4; 1 being the lowest (Not at all) to 4 being the highest (Very true). This scale examines physical symptoms as well as the inner worries and fears. Scores between 5 and 10 reflect mild anxiety, 11 – 15 moderate anxiety, and 16 or higher significant anxiety (Leahy & Holland, 2000).

The LACP is intended to be used in conjunction with other measurements as a way to detect changes in anxiety over time. The LACP was taken from a treatment Planner called "Treatment Plans and Interventions for Depression and Anxiety Disorders" (Leahy & Holland, 2000). The instrument was not tested for reliability or validity but was instead used as a way to compare the anxiety levels from session to session.

Design

The design of the study was a single subject AB design where A was the baseline and B was Cognitive Behavioral Treatment. A baseline was taken during the first session for Depression and the baseline for the anxiety was determined at the 8th session of treatment. Both anxiety and depression were monitored through the administration of the two assessments. The measures were given to the client in the waiting room before the treatment to assess her general mood during the week.

Procedure

Informed consent. When Sally first entered into treatment at the agency, she was informed of her rights as a client. She was also given all the limits of confidentiality and was told that I was a student intern at the agency. She was given the name and number of my supervisor as well as my thesis sponsor. She was informed that her identity would be disguised and her participation in the study would have no affect on her treatment and she was allowed to withdraw her participation at anytime. At this time Sally provided informed consent for the study.

Baseline. When Sally first entered treatment, her initial complaint was depression. She described herself as being very depressed and we used that as our first treatment goal. At the end of the first session, I described to Sally the type of treatment we would be doing and how we would have to measure our progress. The first BDI was administered in the office on that day and Sally was told that she would be filling these out every other week in the waiting room so we could track our progress and use it to see what was working and what was not working. After that initial assessment, the measure

was left on a clipboard in the waiting room for Sally so she could begin working on it as soon as she came into the agency.

Midway through the treatment, Sally began experiencing symptoms of high anxiety. It was at this time that the Leahy Anxiety Checklist for Patients was introduced. Once again it was explained to Sally that we would use this instrument to measure her level of anxiety from session to session. The Leahy was administered every other week and was left on a clipboard in the waiting room. The Beck and the Leahy measurements were not given on the same week, and were instead alternated so Sally would not have to spend too much time in each session filling out assessments.

Both of these measurements were graphed and presented before each session as a way to see what was working and what was not working.

Treatment. In this study, Cognitive Behavioral Treatment was used to address Sally's symptoms of depression and later on to help lower Sally's feelings of anxiety. The first part of the treatment explored some of Sally's negative schema and cognition. This was the cognitive part of the treatment that was done primarily in the office. We discussed much of what was occurring in Sally's life as well as how she saw herself in each situation. Some of the techniques used were role-playing, challenge, and empty chair. These techniques were used as a way for Sally to practice how she would handle a negative situation, as well as a way for her to see how her actions and negative schema affected her mood. These techniques were also used by myself to model better coping mechanisms as well as a way to show Sally's how she was acting and how others could perceive what she was doing. All of this was done in the office and we were able to stop

periodically to show how her negative cognition was directing her behavior and mood. All together we met for 15 sessions and sessions lasted 50 minutes a piece.

The behavioral side of the treatment came when Sally was expected to act out situations in the office that caused her to feel bad and then play out a possible scenario where she would leave not feel as bad. By allowing Sally to experience both sides of a conversation or scenario, she was able to see how one might feel about her and how she could perceive herself in a positive light. This was a way for her to demonstrate and begin using her now positive schema that the cognitive side of our treatment allowed her to build.

The behavioral side of the treatment began outside of the office after Sally began to feel more comfortable and was ready to begin asserting her new skills. This part of the therapy was given as homework assignments. These homework assignments were small tasks designed to get Sally asserting herself and to test other's reactions to her behavior. By allowing her to be assertive in small doses and being successful in making small changes in her life, she was challenging her negative schema that was the root of her depression. These challenges did not always work out the first time, and when they did not, we would revert back to the office for more role-playing and cognitive examination of what occurred. Once Sally was more confident in her new skill and approach, she was given the same homework assignment over again until she was successful in making the change that she had wanted. Once these small changes were complete, Sally was ready to confront some of the larger issues in her life. These homework assignments were given periodically during the 15 sessions and Sally was able to successfully complete about 50% of the assignments given on the first try. When given another try at the same

homework assignment, Sally was almost always able to complete it. The few assignments she was not able to complete, she was at least able to make an attempt and be able to explain why she was not successful. These failures proved to be helpful to Sally since she saw herself able to see herself trying and not getting overly depressed when failing.

During Sally's 5th session, she reported signs of anxiety and described herself as suffering from symptoms of panic attacks. These panic attacks, as well as being scary to Sally, elevated her levels of depression. To better deal with the panic and anxiety, deep breathing and relaxation exercises were introduced. Because Sally's mobility was limited due to her disability, we concentrated more on deep breathing, progressive muscle relaxation, and meditation. At this same time Sally's psychiatrist was consulted to check her Prozac levels and decrease her prescription to help combat the anxious thoughts and feelings. Over the next few sessions we worked together on the anxiety as well as continued to monitor and deal with the depression. Sally's medication was lowered after the 10th session and this appeared to make a major difference in her reported symptoms of anxiety.

The cognitive component of this treatment was educating Sally on possible causes of her anxiety and letting her know that the anxiety, although scary, would not result in permanent harm. Sally learned ways to reduce the level of her anxiety. The behavioral side of the treatment came with practicing the various deep-breathing techniques in the office until Sally felt confident enough to do them on her own at home.

Over the last few sessions, Sally had completed all the challenges that were assigned as well as becoming comfortable with her relaxation exercises. At this point we

set up a termination date for her treatment and decided on one last follow-up session scheduled three weeks after the last session to check up on her progress.

Chapter 3

Results

Baseline for Depression

On the first administration of the Beck Depression Inventory (BDI) Sally scored 26 placing her in the "moderate to severe depression" range. Figure 1 depicts the data on depression.

Treatment on Depression

After the first month of treatment, Sally's score changed from an average of 26 (moderate to severe depression) to an average of 16 (mild to moderate depression) on the BDI. This was a dramatic decrease for only a month of treatment. Her score stayed at this level for the next two sessions. At session 6, her score once again dropped dramatically and stayed around the area of 1 to 4 (considered normal).

During the session eight, there is a slight increase in Sally's level of depression. This was attributed to Sally's report of "anxiety attacks" as well as a change in her transportation service. Sally had also had an increase in her medication and all these factors appeared to be causing a significant amount of anxiety. It was at this point that we began using the Leahy Anxiety Checklist for Patients.

Baseline for Anxiety

The first baseline measure was administered in the office during session 8 (see Figure 2). The initial baseline score was 37, which was in the severe range for anxiety. This was a very high score for someone who was still functional. When we talked about the checklist, Sally explained that the panic attacks had been overwhelming and she felt it was necessary to score herself high on all levels of the anxiety checklist.

Treatment on Anxiety

Sally's anxiety level started out at 37 and quickly dropped to 23, then finally to around 2 near the end of treatment. This drop occurred over a period of 4 months and at no time did the score rebound during the process (see Figure 2).

Both the anxiety and depression levels dropped dramatically during treatment and aside from the small increase in the BDI score at around the 8th session when Sally began experiencing her anxiety, there was little to no fluctuation in scores.

Sally's follow up appointment occurred 3 weeks after our last appointment. She completed both the BDI and the LACP. She scored a 0 on the BDI and a 3 on the LACP while verbally reporting that she felt no signs of anxiety or depression since our last appointment.

Chapter 4

Discussion

A non-ambulatory client was treated for 22 weeks with a combination of Cognitive Behavioral Therapy and Medication. Over that 22-week span of treatment, the client was able to successfully overcome her depression and anxiety symptoms and began to see a higher rate of functioning overall.

The Cognitive Behavioral Therapy techniques that were used were role-playing, challenge, empty chair, and modeling. Through practice in the office, examination of schema, and challenge in the form of homework assignments, Sally was slowly able to decrease her level of depression.

Midway though treatment, Sally began to experience symptoms of anxiety. We were able to decrease the symptoms of anxiety through progressive muscle relaxation, positive visualization, deep breathing, meditation, and a change in her current medication. Through the use of these techniques, Sally's score on the Beck Depression Inventory as well as her score on the Leahy Anxiety Checklist for Patients dramatically decreased back to a normal range of functioning.

There were some changes made to the treatments used due to the client's physical handicap. When discussing any changes that would have to be made in Sally's overall daily tasks, other factors had to be taken into consideration. An example of this adjustment was when Sally discussed wanting to become financially independent. Sally had to take into account her disability insurance, as well as her Social security since she would lose both once she began working full time. If Sally would discuss wanting to go

off to do something on her own, her limitations and personal care had to be taken into account since she was restricted due to cathitarization as well as wheelchair mobility. Any small changes that were going to be made had to be made in the context of her physical limitations. These limitations also had to be taken into account when thinking up challenges for Sally to test her skills. If the challenge was not appropriate for her condition, the eminent failure that would have resulted would have fed into her negative schema, and therefor resulted in an increase in her depression.

During the treatment, there was a sudden rise in anxiety symptoms. Sally had experienced some anxiety in her past; she identified her current state as one of panic. This sudden rise in anxiety symptoms could have been the result of an increase in her Prozac or a change in the current family situation. At the time of the anxiety, Sally was currently making some changes in her role in the family. She was declaring more independence and although she stated that her new sense of independence felt good, it also worried her since it was a new feeling. This sudden change from depression to anxiety could have been a direct result of the treatment, but Sally was able to work quickly to combat these symptoms through a decrease in her medication as well as numerous relaxation techniques.

This study can be readily applied to almost any person with a physical disability that allows them to function in society with minor aide. If a person comes to treatment with signs of depression and is completely paralyzed, the use of CBT may not be appropriate and the treating therapist should seek other forms of treatment that would be more appropriate.

When doing Cognitive Behavioral Therapy, the ideal treatment rate would have been to see the client about three times a week. This was not possible in our agency due to appointment availability as well as transportation for the client. I would have also felt it to be beneficial to have had some sessions out of the office where Sally would be able to take me through her physically limited situations and then suggest direct changes. I feel that by using this very direct technique, Sally would have been able to see immediate results and therefore improve faster. I would have also liked to use more measurements in the study. Due to a limited time frame before and after our sessions, we had to limit the number of measurements we used.

One of the major obstacles that we encountered was the transportation to and from the sessions. Since Sally had to rely on county assisted transportation that was not very reliable; we missed many sessions in the beginning of treatment. Another limitation to the treatment was my schedule. Since I was only at the agency two nights a week, it did not allow for flexibility in our appointments. So if Sally was not able to make her appointment at a certain time, it was very difficult to reschedule for another time before the next week.

During the treatment, the client also experienced a major shift in her role in the family when her sister left the household. When this change occurred, we were able to work it into the treatment as a challenge and worked on ways to make this shift in family dynamics work in her favor. There is no way of telling how this change in family would have affected Sally if she were not in the current treatment. Since this was not a controlled situation, these minor changes over time could have affected the data instead of just the Cognitive Behavioral Therapy.

There were several limitations of this study. First, the design utilized was a quasi-experimental design. Therefore, it does not control for confounding variables that might have lead to changes in reported symptoms of depression and anxiety. Some of the obvious confounds in this study were: statistical regression to the mean, changes in medication during the study, family events, and repeated measurement. There was no way to tell if it was the Cognitive Behavioral Therapy that was the sole factor in the alleviation of depressive symptoms.

If this experiment were to be conducted again, I would have made a few changes. The first change I would have made would have been to use numerous measurements in the treatment. This would require clients to arrive early for the appointments and fill out measurements each week. I would have also liked to have the flexibility to have more sessions in the beginning of treatment as well as reliable transportation for the clients so there would be no chance of missed appointments.

I believe it would have been good to be able to see many different clients with different disabilities to see what the effect would have been on clients who were not only non-ambulatory, but were maybe missing other appendages, as well as clients from different backgrounds both cultural and socioeconomic. I believe that future research should focus in on these other groups within the handicapped population in order to really gain a full understanding on how Cognitive Behavioral Therapy will work with clients of different abilities.

References

Ablon, J.S., Jones, E.E. (2002). Validity of controlled clinical trials of psychotherapy: Findings from the NIMH Treatment of Depression Collaborative Research Program. American Journal of Psychiatry, 159, 775-783.

Alexopoulos, G.S., Raue, P., & Arean, P. (2003). Problem-solving therapy versus supportive therapy in geriatric major depression with executive dysfunction. American Journal of Geriatric Psychiatry, 11, 46-52.

American Psychiatric Association (2000). Diagnostic and Statistical Manual of Mental Disorders (4th ed. Revised). Washington, DC: American Psychiatric Association.

Ban, T. A., Guy, W., & Wilson, W. H. (1984). The Psychopharmacological Treatment Of Depression in the Medically Ill Patient. Canadian Journal Of Psychiatry, 29, 461 – 466.

Beck, A.T. (1976). Cognitive therapy and the emotional disorders. New York: International Universities Press.

Belanoff, J. K., DeBattista, C., & Schatzberg, A.F. (1998). Adult Psychopharmacology, Common Usage. In S.S. Hill, G. P. Koocher, & J. C. Norcross (Eds.), Psychologists Desk Reference (pp. 395 – 400). New York: Oxford University Press.

Bremner, J. D. (1984). Fluoxetine in Depressed Patients: A Comparison with Imipramine. Journal of Clinical Psychiatry, 45, 414 – 419.

Bruce, M. L. (2001). Depression and Disability in Late Life. American Journal of Geriatric Psychiatry, 9, 102 – 112.

Buelow, G., & Herbert, S. (1995). Counselor's Resource on Psychiatric Medications, Issues of Treatment and Referral. Pacific Grove, CA: Brooks/Cole Publishing Company.

Bunney, W.E., Goodwin, F.K., & Murphy, D.L. (1972). The "Switch Process" in Manic-Depressive Illness. Archives of General Psychiatry, 27, 312-317

Bunney, W.E., Murphy, D.L., & Goodwin, F.K. (1970). The Switch Process from Depression to Mania: Relationship to Drugs, which alter Brain Aminies. Lancet, 1, 1022.

Carrasco, J. L., Diaz-Marsa, M., & Saiz-Ruiz, J. (2000). Sertraline In The Treatment Of Mixed Anxiety and Depression Disorder. Journal of Affective Disorders, 59, 67 – 69.

Coon, D.W., Thompson, L.W. (2003). The relationship between homework compliance and treatment outcomes among older adult outpatients with mild-to moderate depression. American Journal of Geriatric Psychiatry, 11, 53-61.

Corey, G. (2001). Theory and Practice of Counseling and Psychotherapy (6th Ed.). Belmont, CA: Thompson Learning Inc.

Craighead, W.E., Evans, D.D., & Robins, C.J. (1992). Unipolar Depression. In S.M. Turner, K.S. Calhoun, & H.E. Adams (Eds.), Handbook of Clinical Behavioral Therapy (2nd ed., pp. 99-116). New York: Wiley.

Depression Guideline Panel. (1997). Depression in primary care: Detection and diagnosis. Rockville, MD: U.S. Department of Health and Human Services.

DeRubeis, R.J., Gelfand, L.A., Tang, T.Z., & Simons, A.D. (1999). Medications versus cognitive behavior therapy for severely depressed outpatients: Mega Analysis of four randomized comparisons. American Journal of Psychiatry, 156, 1007 – 1013.

D'Zurilla, T. J. (1986). Problem Solving Therapy, A Social competence Approach to Clinical Intervention. New York: Springer Publishing Company

Ellis, A. (1962). Reason and emotion in psychotherapy. Secaucus, NJ: Citadel.

Frank, E., Kupfer, D.J., Perel, J.M., Cornes, C., Jarrett, D.B. et al. (1990). Three year outcomes for maintenance therapies in recurrent depression. Archives of General Psychiatry, 47, 1093-1099.

Frank, E., Rucci, P., Katon, W., Barrett, J., Williams, J.W., Oxman, T., Sullivan, M., & Cornell, J. (2002). Correlates of remission in primary care patients treated for minor depression. General Hospital Psychiatry, 24, 12-19.

Gaynor, S.T., Weersing, V.R., Kolko, D.J., Birmaher, B.U., Heo, J., & Brent, D.A. (2003). The prevalence and impact of large sudden improvements during adolescent therapy for depression: A comparison across cognitive-behavioral, family, and supportive therapy. Journal of Consulting & Clinical Psychology, 71, 386-393.

Haley, J. (1988). Problem-Solving Therapy. San Francisco, CA: Jossey-Bass Publishers.

Hersen, M., & Bellack, A. (1982). Perspectives in the Behavioral Treatment of Depression. Behavior Modification, 6, 95 – 106.

Hersen, M., Bellack, A.S., Himmelhoch, J.M., & Thase, M.E. (1984). Effects of social skill training, amitriptyline, and psychotherapy in unipolar depressed women. Behavior Therapy, 15, 21-40.

Hollon, S.D., DeRubeis, R.J., & Seligman, M.E.P. (1992). Cognitive therapy and the prevention of depression. Applied and Preventive Psychology, 1, 89-95.

Hollon, S.D., DeRubeis, R.J., Tuason, V.B., Weimer, M.J., Evans, M.D., & Garvey, M.J. (1989). Cognitive therapy, Pharmacotherapy, and combined cognitive-pharmacotherapy in the treatment of depression: 1. Differential outcome. Unpublished manuscript, Vanderbilt university, Nashville, TN.

Jacobson, N.S., Martell, C.R., Dimidjian, S. (2001). Behavioral activation treatment for depression: Returning to contextual roots. Clinical Psychology: Science & Practice, 8, 255-270

Jarrett, R.B., Schaffer, M., McIntire, D., Witt-Browder, A., Kraft, D., & Risser, R.C. (1999). Treatment of Atypical depression with cognitive therapy or phenelzine: A double blind, placebo-controlled trial. Archives of General Psychiatry, 56, 431-437.

Katon, W., Russo, J., Frank, E., Barrett, J., Williams, J.W., Oxman, T., Sullivan, M., & Cornell, J. (2002). Predictors of Nonresponse to Treatment in Primary Care Patients with Dysthymia. General Hospital Psychiatry, 24, 20-27.

Klerman, G.L. (1988). Depression and related disorders of mood (affective disorders). In A.M. Nicholi, Jr. (Ed.), The New Harvard guide to psychiatry. Cambridge, MA: Harvard University Press.

Klosko, J. K., & Sanderson, W. C. (1999). Cognitive–Behavioral Treatment of Depression. Northvale, NJ: Jason Aronson Inc.

Koocher, G. P., Norcross, J. C., & Hill, S. S. (1998). Psychologists Desk Reference. New York: Oxford University Press.

Kovacs, M., Rush, A.J., Beck, A.T., & Hollon, S.D. (1981). Depressed outpatients treated with cognitive therapy or Pharmacotherapy: A one-year follow-up. Archives of General Psychiatry, 38, 33-39.

Leahy, R. L., & Holland, S. J. (2001). Treatment Plans and Interventions for Depression and Anxiety Disorders. New York: The Guilford Press.

Leichsenring, F., (2001). Comparative effects of short-term psychodynamic psychotherapy and cognitive-behavioral therapy in depression: A meta-analytic approach. Clinical Psychology Review, 21, 401-419.

Lerner, M.S., & Clum, G.A. (1990). Treatment of suicide ideators: A problem-solving approach. Behavior Therapy, 21, 403-411.

Lewinsohn, P.M., & Gotlib, I.H. (1995) Behavioral and cognitive treatment of depression. In E.E. Becker & W.R. Leber (Eds.), Handbook of Depression (pp. 352 – 375). New York: Guilford Press.

Mynors-Wallis, L., Davies, I., Gray, A., & Barbour, F. (1997). A randomized controlled trial and cost analysis of problem-solving treatments for emotional disorders given by community nurses in primary care. British Journal of Psychiatry, 170, 113-119.

Nemeroff, C.B., & Schatzberg, A.F. (1998). Pharmacological treatment of unipolar depression. In P.E. Nathan & J.M. Gorman (Eds.), A Guide to treatments that work (pp. 212-225). New York: Oxford University Press.

Nezu, A.M., & Perri, M.G. (1989). Social problem-solving therapy for unipolar depression: An initial dismantling investigation. Journal of Consulting & Clinical Psychology, 57, 408-413.

Oei, T.P., & Yeoh, A. E. (1999). Group CBT Is Effective In Conjunction with Antidepressants. Australia and New Zealand Journal of Psychiatry, 33, 70-76.

Oxman, T. E., Barrett, J. E., Sengupta, A., Katon, W., Williams, J. W., Frank, E., & Hegel, M. (2001). Status of Minor Depression or Dysthymia in Primary Care Following a Randomized Controlled Treatment. General Hospital Psychiatry, 23, 301 – 310.

Resnikoff, R., & Lapidus, D.R. (1998). Psychopharmacology in conjunction with family therapy. Journal of Family Psychotherapy, 9, 1-19.

Rodin, G., Craven, J., & Littlefield, C. (1991). Depression in the Medically Ill. New York, NY: Brunner/Mazel Inc.

Rush, A.J., Beck, A.T., Kovacs, M., & Hollon, S.D. (1977). Comparative efficacy of cognitive therapy and Pharmacotherapy in the treatment of depressed outpatients. Cognitive Therapy and Research, 1, 17-39.

Sackeim, H.A., Prudic, J., Devenand, D.P. et al. (2000). A prospective, randomized double-blind comparison of bilateral and right unilateral electroconvulsive shock therapy at different stimulus intensities. Archives of General Psychiatry, 57, 425-434.

Schatzberg, A. F., & Nemeroff, C. B. (1995). Textbook of Psychopharmacology. Washington, DC: American Psychiatric Press.

Segal, Z.V., Williams, J.M., & Teasdale, J.D. (2001). Mindfulness-based cognitive therapy for depression. New York: Guilford.

Segrin, C., (2000). Social skills deficits associated with depression. Clinical Psychology Review, 20, 379-403.

Shapiro, D.A., Barkham, M., Rees, A., & Hardy, G. (1994). Effects of treatment duration and severity of depression on the effectiveness of cognitive-behavioral and psychodynamic-interpersonal psychotherapy. Journal of Consulting & Clinical Psychology, 62, 522-534.

Simon, G.E., Von Korff, M., Rutter, C.M. & Peterson, D.A. (2001) Treatment process and outcomes for managed care patients receiving new antidepressant prescriptions from psychiatrists and primary care physicians. Archives of General Psychiatry, 58, 394-401.

Simons, A.D., Murphy, G.E., Levine, J.L., & Wetzel, R.D. (1985). Sustained improvement one year after cognitive and/or Pharmacotherapy of depression. Archives of General Psychiatry, 43, 43-48.

Task Force on Promotion and Dissemination of Psychological Procedures. (1995). Training in and dissemination of empirically-validated psychological treatments: Report and recommendations. Clinical Psychologist, 48, 3-23.

Taylor, M.A., (2000). Medication treatment versus cognitive behavioral therapy. American Journal of Psychiatry, 157, 1025.

Teasdale, J.D., Segal, Z., & Williams, J.M. (1995). How does cognitive therapy prevent depressive relapse and why should attentional control (mindfulness) training help? Behavior Research & Therapy, 33, 25-39.

Townsend, E., Hawton, K., Altman, D.G., Arensman, E., Gunnell, D., Hazell, P., House, A., & Van Heeringen, K. (2001). The efficacy of problem-solving treatments after deliberate self-harm: Meta-analysis of randomized controlled trials with respect to

depression, hopelessness and improvement in problems. Psychological Medicine, 31, 979-988.

Tremont, G.B., Stern, R.A. (2000). Minimizing the cognitive effects of lithium therapy and electroconvulsive therapy using thyroid hormone. International Journal of Neuropsychopharmacology, 3, 175-186.

Wampold, B.E., Minami, T., Baskin, T., & Tierney, S.C. (2002). A Meta-(re) analysis of the effects of cognitive therapy versus "other therapies" for depression. Journal of Affective Disorders, 69, 159-165.

Van Gundy, K., & Schieman, S. (2001). Looking Inward: Introspectiveness, Physical Disability, and Depression Across The Life Course. International Journal on Aging and Human Development, 53, 293 – 310.

Figure 1

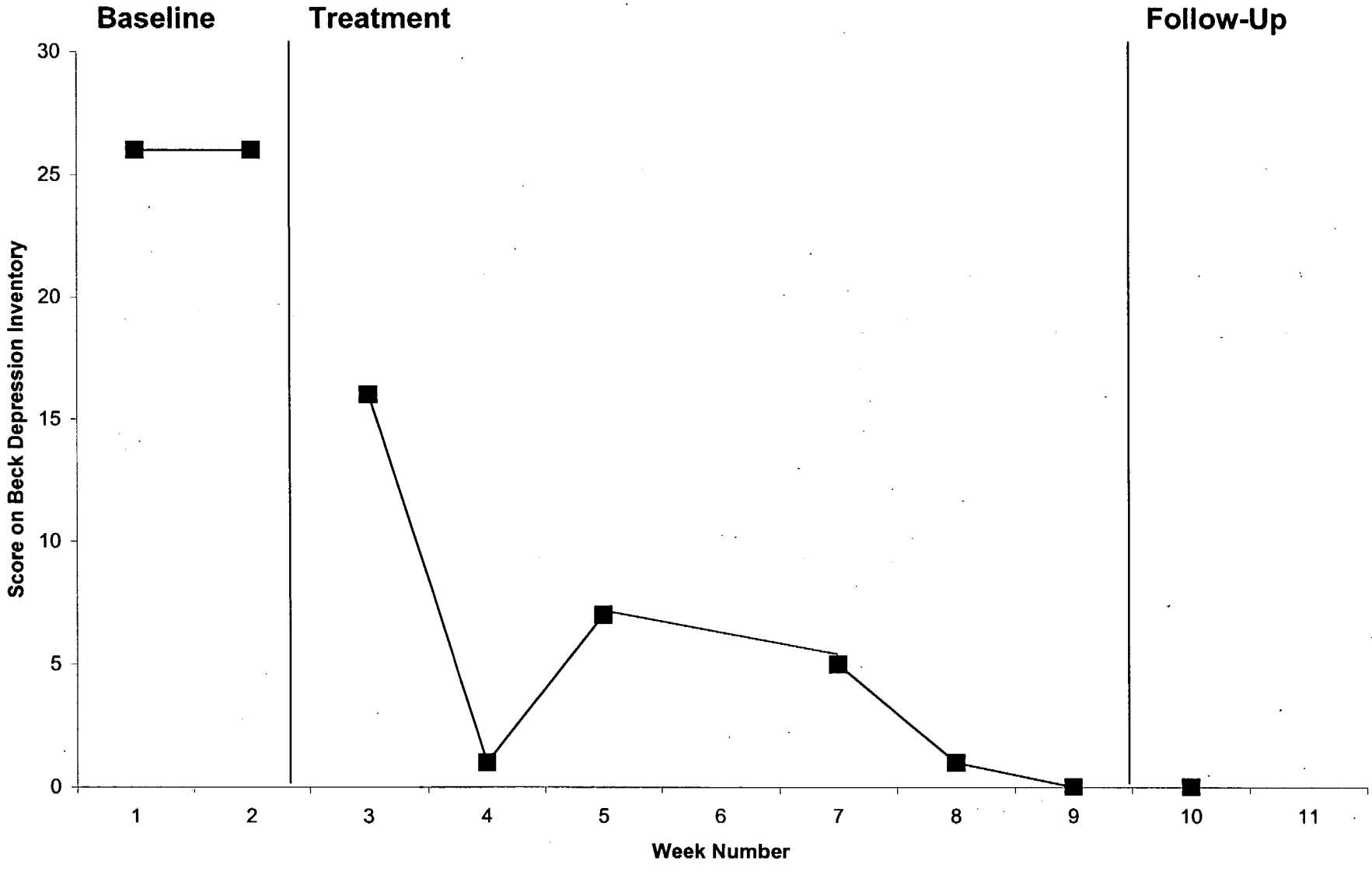
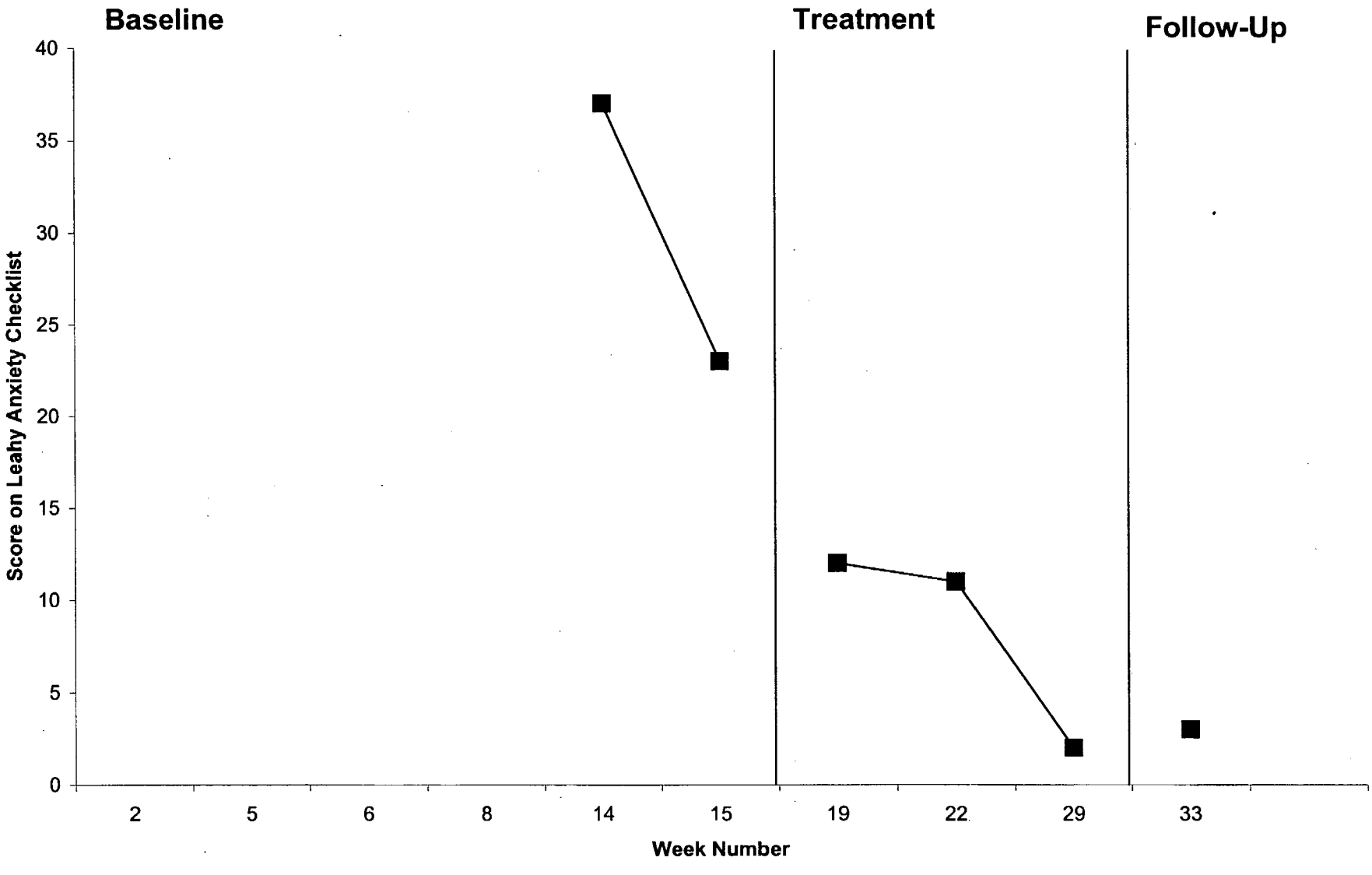

Baseline
Treatment
Follow-Up
30
25
20
15
10
5
0
Score on Beck Depression Inventory
1
2
3
4
5
6
7
8
9
10
11
Week Number

Figure 2


Baseline
Treatment
Follow-Up
Score on Leahy Anxiety Checklist
40
35
30
25
20
15
10
5
0
2
5
6
8
14
15
19
22
29
33
Week Number