NETWork Therapy:
An Integrated Approach
to Treating Alcohol and Substance Addiction

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Dedication

Dedicated to my husband and children: You have given me the support and strength I needed to continue through my educational journey.

To my dearest brother Mitchell, whose struggle with mental illness led to his early passing, yet while on this earth, his encouragement and appreciation of academia inspired me to follow my own personal and professional pursuits.

I will never forget you.

And

To those who struggle with addiction:

You have taught me so much more than any book could.

Your courage to recover has allowed me to understand the truest meaning of survival and I thank you and prey for your continued sobriety.

“God, grant me the serenity to accept the things I cannot change, courage to change the things I can, and wisdom to know the difference.”

Serenity Prayer, Alcoholics Anonymous
Abstract

The purpose of the present research project is to observe the pre effectiveness and post effectiveness of NETWork therapy, a structured, integrative, psychotherapeutic approach in treating substance and alcohol addiction. NETWork is an acronym for Neuro-Experiential TranceWork. The therapy involves an organized protocol that incorporates the use of alpha/theta neurofeedback training, clinical hypnosis and relaxation techniques, and talk therapy to enhance the success of individual treatment of alcohol and substance addiction. The study compared the effect of treatment by examining changes in Pre–/Post–Quantitative EEGs (QEEG), Pre–/Post–Self-Evaluation Checklists including the Depression Adjective Check List (DACL), State/Trait Anxiety Check List, Beck Depression Inventory (BDI), and sobriety maintenance as reported by the subject. Findings suggested overall QEEG decreases in delta and beta brainwave frequencies and increased alpha/theta frequencies, decreased depression and anxiety reported on the diagnostic testing, and sobriety success on 10 of 13 subjects indicating a 77% success rate.
Chapter 1: Introduction

In contemporary psychology, a clinician’s ability to use a short-term, diversified, and integrative treatment approach is imperative because of Western society’s faster paced lifestyle and desire for instant gratification. With a multitude of theoretical approaches available to the mental health practitioner, matching one’s therapeutic style to a specific approach is easily accessible. While a particular approach may match the needs of the therapist, does it equally meet the needs of the client? If not, can the therapeutic alliance become compromised? Therefore, one may ask: Could a truly integrative approach avoid limiting the practitioner to a single perspective and, instead, lend itself to greater therapeutic success through a partnership of orientations and approaches?

The intent of this study is to evaluate the effectiveness of an integrative therapeutic treatment approach that offers diversity in protocol and structure to attend to both clinician and patient needs. This writer presently works at Resurrection Hospital for Northwestern Neuropsychological, a clinic affiliated with Keys to Recovery, a rehabilitation program that provides inpatient and outpatient alcohol and substance addiction care for adults ages 18 to 65 years. Inpatient length of stay is typically 28 days, beginning with a medical detoxification process followed by rehabilitation and group programs dedicated to the understanding and maintaining recovery of addictive behavior. The program’s focus coincides with Alcoholic Anonymous’ twelve-step philosophy, provided through group support systems involving psycho-educational and cognitive–behavioral orientations.
The psychological services affiliated with the recovery unit employ a neuropsychological application: using Quantitative EEGs, also called brainmaps, to assess for brainwave irregularities, as well as biofeedback and neurofeedback training to assist in re-regulating dysfunctional wave frequencies. Through both personal and professional experience, this author has observed the effectiveness of neurological re-regulation training for both psychological and physical dysfunctions. Being on an alcohol/substance abuse unit, large majorities of QEEG’s are given to the hospital inpatients.

Common co-occurring features associated with addiction are anxiety, which is observable by an increased surplus of right, frontal beta wave activity, and depression, which is observable by an increased surplus of left, frontal delta activity (Demos, 2004). In addition, other areas of the brain indicate slowing and/or excess activity due to a variety of causes: damage due to alcohol/substance addiction, head injury, emotional trauma, aging, etc.

Once a brain map is given, a report generates an interpretation of results, which then dictates the appropriate neurofeedback training protocol. For example, it is common to use alpha/theta (slower wave frequencies) training to reduce excess beta activity for an individual whose primary diagnosis is alcohol and/or substance addiction. Alpha/theta waves are the calmer frequencies used to gain self-control and a relaxed state of mind, waves that are typically underutilized in addictive behavior (Huges, 1994). As expected, one of the most beneficial outcomes noted during the patients’ alpha/theta training is the calming effect that tends to follow each session. Traditional neurofeedback typically does not integrate conversations regarding core emotional issues but, rather, general conversations that relate to giving instructions or asking questions about behavioral and/or physical changes. This researcher raised the question of how productive it would be to use this time in session to explore core emotional issues relating to addiction.
Inspired, this writer began to integrate talk therapy in conjunction with patients’ neurofeedback training. There was an observable, immediate change in patients’ insight and understanding of their dependency. Each session was then structured by first connecting the patient to the neurofeedback system to monitor and record changes in brain wave activity from beginning to end of therapy. Prior to engaging in conversation, this researcher employed relaxation techniques as an introduction to educating the patient on how to self-sooth through trancwork exercises. As reported by the patients, the tranquil state with lowered beta frequencies allowed them to improve their abilities to organize, rationalize, and problem solve about issues related to their addiction. Equally salient was the enhanced level of rapport and trust that developed at the onset of treatment between this researcher and the patients. This led to the pursuit of existing research studies with similar intentions: to analyze the value of using an integrative approach to treating alcohol and substance addiction.

Statement of Purpose

The purpose of this research project is to observe the pre effectiveness and post effectiveness of NETWork, an integrative, neuro–psychotherapeutic approach in treating substance and alcohol addiction. The intent of this study is to examine the effectiveness of alpha/theta feedback training integrated with hypnosis and talk therapy on individuals with substance and alcohol addictions. Before discussing the actual application, it is first necessary to review pertinent philosophical and theoretical contributions and research studies that provide information about the promising effects that alpha/theta training, hypnosis, and relaxation techniques, in conjunction with therapeutic discussions, have on alcohol and drug dependency. Due to the inclusion of talk therapy, research examining the effects of the most often utilized orientations--Cognitive–Behavioral Theory (CBT), Experiential, and Psychoeducation are discussed.
Defining NETWork Therapy

The present research study integrates alpha/theta neurofeedback training using relaxation techniques and trancwork in conjunction with integrative talk therapy, as a treatment approach for substance and alcohol addiction. This writer has coined the term NETWork, an acronym standing for Neuro-Experiential TranceWork. Neuro refers to neurofeedback training. Experiential, as it relates to NETWork therapy, is the ability to internalize deepened emotions, having clarity and understanding of core issues that have led to dysfunctional beliefs and behaviors.

Trance is a state of deep relaxation by utilization of alpha/theta brainwaves, imagery, memory, and suggestion (Yapko, 2003). The trance and relaxation process begins concurrently during each of the subjects’ neurofeedback sessions, as they engage immediately in progressive muscle relaxation induction. This component of the therapeutic treatment is vital due to the patient’s inability to relax and self-regulate the physiological symptoms they experience during stressful events, such as a racing heart, sweating, dizziness, headache, and exhaustion, all typical features observed with addictive behavior (Demos, 2004). This aspect of the therapeutic process is also psycho-educational, as it has teaches a patient to learn how to apply the technique when not in session.

An important element of trancwork is recognizing that it is representative of the “alpha state,” or “the hypnotic brain” (London, Hart, & Leibovitz, 1968). This concept is widely accepted as leading to “higher conscious” abilities as well as initiating hypnotic susceptibility both before and during hypnosis. Theta activity is positively associated with focusing and attentiveness (Schachter, 1977), leading to understanding of core issues and problem solving. NETWork therapy defines Work as the dialogue that takes place between the client and therapist promoting profound understanding and insight of experiences that have led to present
dysfunctional thoughts and behaviors. Work process takes place through utilization of integrative “talk” therapies that include cognitive–behavioral, experiential, and psychoeducation.

NETWork is viewed as a structured protocol that guides the therapist through the integrative process. The protocol is referred to as “RKP” (Developer Robin Kroll Protocol). Prior to therapy, each subject was diagnosed with Axis I substance abuse, with co-occurring anxiety and depression. In this researcher’s experience working intensely with addiction, individuals who suffer from addictions tend to have greater therapeutic success when using a multifaceted approach, incorporating an array of communicative styles that enmeshes an empathic, direct, solution-focused and psycho-educational format. Understanding the fragility an addict’s ego is imperative to aiding in recovery. This is because a majority of these individuals come from backgrounds that include trauma and abuse, and with so little ego-strength, recurrent relapse among this population is an unfortunate occurrence (Marlett & Gorden, 1985).

Empirical observations support that alcohol and substance abusers have difficulty maintaining sobriety over time due to poor coping abilities (Marlett & Gorden, 1985). The success involved with NETWork therapy has to do with its intimate quality; it is conducted with the patient’s eyes closed, with light emitting diode (LED) glasses to aid in producing and maintaining a meditative state, and with the lights turned off. The therapist often sits very close to the patient; this writer found herself patting the patients’ arms with one hand while wiping their tears with the other. This writer finds this setting to be of critical importance because it creates a sense of warmth, comfort, and safety—qualities necessary in treating fragile emotional states.

It is for this reason that NETWork integrates those theoretical aspects deemed most successful to an individual’s psychological recovery. To further clarify, it is not this writer’s
attempt to discredit any one treatment approach, but rather to apply diversity into a
client’s/patient’s treatment plan in order to produce greater success. Before any discussion
about NETWork takes place, it is essential to illustrate the separate components behind each of
the integrated individual approaches. In addition, cited research studies that have examined the
effects of similar integrative approaches are introduced.
Chapter 2: Neurotherapy

Defining Neurotherapy

Neurofeedback is training in self-regulation, a necessary part of healthy brain functioning. Self-regulation training allows the central nervous system (CNS), the command system of the body, to function more efficiently with greater control and stability. The CNS, which includes the brain and spine, sends and receives signals through neuronal transmission, an electrochemical event (Demos, 2005). Electrochemical activity, measured in microvolts (amplitude) and cycles per second (frequency), is represented in a graph using an electroencephalogram, or EEG, in both the body and the brain. Neurofeedback acts on the premise that many DSM disorders are attributed to irregularities in electrochemical brainwave timing, or dysrhythmias (Demos, 2004).

Dysregulation of brainwave activity is monitored and rewarded when the client meets goals (set by the clinician), using a sound or visual cue. Dysregulation is caused by a multitude of reasons including a variety of pathological symptoms such as anxiety, attention issues, mood instability, seizure and learning disorders, and cognitive deterioration due to a head injury or alcohol or substance addiction (Sterman, 1996). Retraining occurs through operant conditioning using a signal that is either visual or auditory, motivating the brain to change its activity, re-regulate, and normalize brainwave patterns consistent with a normative database. This is a crucial in teaching patients to learn how to relax, maintain, and gain self-control.

The patients begin each session by being hooked up to a 19-channel QEEG neurofeedback system (Lexicor Medical Technology, Inc., 1999), remaining monitored through the conclusion of the session, approximately 60 minutes in duration. This is an important aspect of the patient’s therapeutic process, as it allows the clinician to monitor brainwave activity to determine the surplus and deficit chemical activities in the delta, theta, alpha, and beta ranges,
and to set goals and thresholds to reward or inhibit those dysfunctional frequencies. Re-regulating is necessary when specific brainwaves fail to fall within normative frequency ranges.

For the purpose of this study, two reference leads are placed on each earlobe and another on scalp site (O1), the determined site recommended for alpha/theta training (Demos, 2004). Patients’ brainwaves are monitored, observing changes in activity as well as information through self-reporting of current behaviors and emotions. This allows the clinician to determine positive correspondence between the feedback that is received and monitored as well as the patients’ own perceptions of their ability to maintain sobriety and reduce their anxiety and depression.

The electroencephalogram (EEG) is an instrument measuring neurochemical activity of the brain. Alpha/theta training began in the 1960s (Evans & Abarbanal, 1999), and was found to be directly linked to relaxation and emotional well-being. Alpha brain wave activity (8 to 12 Hz) produces a calming effect while theta activity (4 to 7 Hz) brings about hypnagogia, inner focus, and sharpened imagery. Research indicates that by reducing one’s anxiety level, the person is better able to think and problem solve with insight and clarity. This process occurs within the deep regions of one’s repressed psychic contents and self-actualization (Evans & Barbital, 1999) through neurofeedback training by producing a higher level of amplitude of alpha/theta brainwave frequency.

**Philosophical, Historical, and Empirical Contributions**

It has been identified since 1949 (Funderburk) that alcohol produces low synchrony and alpha activity deficits. Findings also suggest that individuals who have a genetic predisposition to alcoholism also show deficits in alpha activity (Peniston, 1993). Numerous research studies have linked depression with unsynchronized brain wave activity, which is also associated with alcoholism (Dorus, 1987), presenting the possibility that neurofeedback can target both
disorders simultaneously. Alcoholism, a disorder known to have extremely high relapse rates, has always been difficult to treat, particularly with traditional therapeutic approaches.

In 1983, Marlett hypothesized that prolonged neurofeedback training is the best answer to sustained sobriety. Peniston (1999) suggests that by enhancing EEG training with deep relaxation, sustaining sobriety is further facilitated. This treatment has also shown to be beneficial in treating other areas of addiction as well as post-traumatic stress (Peniston, 1983).

Peniston and Kulkosky Brain Wave Neurofeedback Therapy (PKBNT) is a protocol designed to treat addictions and PTSD. It begins with visualization training followed by 6 pretraining temperature biofeedback sessions. The client is then taught rhythmic breathing techniques and autogenic exercises followed by 30 alpha/theta treatments using guided imagery and constructed visualizations.

Peniston, G. Eugene, and Paul J. Kulkosky, of the Veterans Administration Medical Center, conducted a study using alpha/theta biofeedback training on patients diagnosed with alcohol dependency. The study included a pretraining phase with using temperature controlled biofeedback followed by 15 sessions of alpha/theta training lasting 30 minutes. A control group of nonalcoholics, given the same biofeedback as an alcoholic control group of subjects being treated with “traditional” therapy, was used for comparison. The alcoholics group given biofeedback training showed considerable increases in percentages of EEG recordings in both alpha/theta rhythms and amplitudes.

The alcoholic group receiving biofeedback demonstrated consistent increased alpha/theta brain regularity across the 15 experimental sessions. The experimental biofeedback group also showed increased reductions in Beck’s Depression Inventory scores, a self-assessment depression checklist, compared to the control groups. The alcoholic group receiving traditional medical treatment that included abstinence, group psychotherapy, and
antidepressants showed significant increases in beta-endorphin levels, an indicator of stress and anxiety and a stimulant of caloric (e.g., ethanol) intake at the conclusion of the experiment.

This study was noteworthy to the present research due to the comparable application of biofeedback training and relaxation therapy. Similarly, there appears to be a counteraction of increased beta-endorphin levels as seen in the alcoholic control group. A 1-year follow-up suggested sobriety maintenance in those alcoholics completing alpha/theta brainwave training; this was consistent with self-reports of those in the presenting study when they were contacted a year after treatment.

Another study, conducted by Saxby and Peniston (1991), included 14 alcoholic outpatients treated with the Peniston and Kulkosky (1989, 1991) brainwave treatment protocol for individuals suffering from alcohol abuse. Again, using pretraining of temperature biofeedback, subjects completed 20 sessions, each 40 minutes in length, of alpha/theta neurofeedback training. The experimental group displaying significant depressive features showed sharp reductions in their self-assessment using the Beck’s Depression Inventory. They were also administered the Millon Clinical Multiaxial Inventory-I; again they demonstrated significant decreases on the Broad Range scores including schizoid, avoidant, dependent, histrionic, passive-aggression, schizotypical, borderline, anxiety, somatoform, hypomanic, dysthymic, alcohol abuse, drug abuse, psychotic thinking, and psychotic depression. After approximately 2 years, follow-up information indicated sustained sobriety maintenance in those alcoholics completing the Peniston protocol. This study is critical to the presenting study indicting the influence of alpha/theta feedback saddled with relaxation training and sobriety maintenance, both components of the NETWork protocol.
Defining Hypnosis

Hypnosis, or trancework, has been of interest to the psychological community since the late 1800s when Mesmer began using this technique to treat individuals who suffered from various mental disabilities. Hypnosis has proved to be successful when other more traditional types of therapy have provided little or no results. Both mental health providers and nonprofessionals alike often misunderstand hypnosis. In fact, hypnosis is the most widely accepted form of treatment for a multitude of disorders, including repressed memories, trauma, anxiety, substance and alcohol abuse, and obsessive and compulsive behaviors, and can be used to begin treating those who suffer from a variety of dissociative disorders (Yapko, 2003).

There have, however, been issues related to individual susceptibility that have proven problematic when trying to promote an altered state of consciousness (Brady, 1997). This is largely due to psychosocial factors and/or an unwillingness to transform into an altered state of consciousness. In the 1960s, new standardized measurements were designed to evaluate hypnotic susceptibility. The electroencephalogram (EEG) was introduced to measure both state (real-time, measured physical responses) and individual (patient self-report) responses (Atwater, 1997). More recently, applications of neurofeedback therapy have provided a way of altering individual brainwave activity. This has proven useful in altering both understimulated and overstimulated brain activity. Other areas of improvement include areas such as sleep disturbances, enriched memory and learning, and relaxation; most recently, neurofeedback therapy has been used in treating substance and alcohol dependency (Atwater, 1997).
During the mid-19th century, James Braid explained hypnosis and its effectiveness as being psycho-physiological and neuropsychological (Sabourin, 1982). Hypnosis was also used as a substitute for surgical anesthesia, as well as a variety of pain relief medications, by English physicians John Elliotson and James Esdaile. Its effectiveness has been proven to reduce pre surgical and post surgical anxiety as well as reducing pain and recovery time (Soskis, 1986). The use of hypnosis as a surgical anesthesia and pain reliever is indicative of the physiological perspective of hypnotic susceptibility. Ernest Hilgard (1994) suggests that hypnosis engages in the activation of hierarchical subsystems of cognitive control.

Hilgard’s neo-dissociation model is partially based on his research with hypnotic anesthesia. Hilgard’s patients were successful in developing self-hypnotic analgesia, being fully aware of their pain but able to maintain a comfort level by dissociating from their conscious awareness (Yapko, 2003). The success of his technique greatly relies on the individual’s comprehension of hypnotic induction, physiological and cognitive association, interpersonal therapeutic relationship, and, most importantly, psychological motivation and a desire to alter undesirable behaviors and emotions (Yapko, 2003). From a neuropsychological perspective, an individual’s socio–cultural expectations, as well as their value and belief systems, play a crucial role in how effectively they use their cognitive strategies. This involves having the ability to modify, reduce, or enhance one’s area(s) of surplus or deficits (Krisch & Lynn, 1995).

Hypnosis with alcohol and substance abuse has been studied and shown to reduce and/or eliminate addictions for several types of drugs including barbiturates, opiates, amphetamines, and cannabis (Strauss, 2004). Substance abuse, a pathological dependence that is considered habit forming, has been shown to be successfully altered through hypnotherapy since the late 1940s (LeCron & Bordeaux, 1949). The success, however, is mainly due to the patient’s motivation and desire to recover. The benefits of hypnotherapy include: ego building, self-
regulation with the training of relaxation techniques, increased suggestibility, and cognitive–
behavioral strategies with alternative thinking skills (Wadden, 1982). As with neurofeedback, hypnotherapists believe that the lengthier the treatment protocol, the greater the success. The bibliography Hypnosis by Cork (1997) sites research studies that include hypnotherapy as an approach to treating alcohol and substance addictions:

A study by Pekala et al, 2004, examined the effectiveness of teaching self-hypnosis to patients suffering from alcohol and substance abuse. The outcome indicated overall increase in self-esteem, improved affect, and sobriety maintenance when compared against a control group using a “trans-theoretical cognitive-behavioral” (TCB) orientation and a stress management placebo group.

Participants included 261 veteran inpatients at Substance Abuse Residential Rehabilitation Treatment Programs. Each subject was assessed using pre-intervention and post-intervention. A 7-week follow-up suggested that 87% of subjects contacted reported abstinence. Participants in the three treatment conditions were queried on how often they utilized self-hypnosis. Practicing and minimal-practicing subjects were compared against the control group for each of the three interventions via MANOVAs/ANOVAs. The results suggested significant “Time by Groups” interaction using self-hypnosis intervention with individuals who played the self-hypnosis audiotapes “at least 3 to 5 times a week.”

A 7-week follow-up reported no significant effects found for the trans-theoretical or stress management interventions when comparing the highest levels of self-esteem and tranquility and the least anger/impulsivity, in contrast to the least-practice and control groups. Regression analyses predicted an approximate two-thirds relapse rate of those who did not participate in the hypnosis intervention group. Results of hypnotic susceptibility suggested that self-hypnosis using audiotapes can be a constructive addition in helping persistent substance
and alcohol abusers to increase self-esteem and serenity while reducing anger/impulsivity (American Society of Clinical Hypnosis, 2004).

This study demonstrates the significance of hypnosis training as an adjunct to reducing alcohol and substance addiction. Hypnosis or trancelwork is an equally significant component of NETWork protocol in demonstrating the effectiveness of reducing depression and anxiety.

A study conducted by Potter (2004) utilized hypnosis as treatment for alcoholism via intensive daily sessions, demonstrating that it is a successful method for treating addictions. Eighteen subjects participated over a 7 year period, and they showed a 77% success rate after a 1-year follow-up. This study further supports NETWork protocol’s successful use of hypnosis as an integrated element in treating alcohol and substance addiction.

An additional research study performed by Young (1997) evaluates the usefulness of hypnosis as an adjunct to maintaining sobriety. The study used a random sample of 40 inpatients (23 males, 17 females) from an alcohol treatment program at O’Connor Hospital in San Jose, California. Subjects were assigned to both experimental and control conditions. Each group of 20 received similar treatment and relapse prevention measures. The experimental group included an intensive 3-month hypnosis intervention. All subjects were given the Symptom Checklist-90-Revised (SCL-90-R), the Situational Confidence Questionnaire-39 (SCQ-39), and the Harvard Group Scale of Hypnotic Susceptibility: Form A (HGSHS:A).

Post-testing on the SCL-90-R and the SCQ-39 was given 90 days after post-treatment. The hypnosis group was given a debriefing questionnaire regarding the effects of the hypnosis intervention on their recovery. The independent variable was the treatment group that measured hypnotizability and interaction, moderating the effect of hypnotizability on responsiveness in the hypnotic group. The dependent variables were positive scores on the SCL-90-R and the SCQ-39 and sobriety maintenance at 90-day follow-up. The study revealed no significant results either for the variables considered individually or for the overall multivariate tests.
In addition, none of the independent variables predicted outcome on the SCL-90-R or the SCQ-39. Sobriety maintenance rates were identical for both groups: 17 were abstinent and 3 relapsed. In contrast, the statistical analyses of the nonsignificant effects, as well as the content analysis of the debriefing questionnaire responses given by the hypnosis group, established that every respondent described positive effects. Responses included 5 themes: improved stress management by 95%, improved impulse control by 80%, enhanced feelings of well-being by 75%, increased ability to focus on recovery by 70%, and improved sleep by 65%. These results reflect previous literature regarding this subject matter and add support to NETWork therapy’s use of hypnosis in sobriety maintenance.
Chapter 4: Cognitive–Behavioral Therapy

Defining CBT

Behavioral therapy involves the success of integrated reformulation and internalization of thoughts, emotions, and experiences, leading to a more functional and gratifying way of functioning (Beck, 1995). Cognitive therapy is based on the concept that people have certain patterns of thought about things that they do or experience in daily life. In terms of alcohol and substance abuse, the focus is on determining one’s thoughts related to his or her addiction (Beck, 1995). These thoughts are dysfunctional, maintaining the addiction and making it difficult for the person to rid his or her habit. Typical of these thoughts is the idea that “you believe that they are true, but cannot prove it, and also that you are afraid that these thoughts are true or may become true” (Moelker, 2004).

Philosophical, Historical, and Empirical Contributions

K. M. Carroll (1996) studied relapse prevention as a psychosocial treatment approach and suggests that CBT is among the most widely used psychosocial approaches for treatment of substance disorders with comparatively strong levels of empirical support (American Psychiatric Association, 1995; General Accounting Office, 1996; Holder et al., 1991). Data suggest that over 24 randomized controlled trials have been conducted among adult users of tobacco, alcohol, cocaine, marijuana, opiates, and other types of substances (Carroll, 1996).

Carroll’s review suggests that there is good evidence for the efficiency of CBT compared with no-treatment controls. Carroll’s study asks the question: Is CBT more effective than other widely used treatments? Comparisons have led to less consistent results: While some studies indicate the preeminence of CBT, others have shown it no more effective than other
approaches. Carroll’s review suggests that CBT may embrace particular promise in the severity of relapses reduction, in the enhanced durability of effects, and in patient–treatment matching, especially for those at higher levels of impairment such as psychopathology or dependence severity. Carroll’s review supports NETWork’s belief in an integrative approach to treating alcohol and substance addiction in maintaining long-term sobriety.

In another study by Carroll et al. (1991), CBT was compared to interpersonal psychotherapy (IPT) (Klerman et al., 1984). Carroll felt that comparing two therapeutic treatments would address a number of methodological and ethical questions associated with no treatment or nonspecific control groups, i.e., demand characteristics, credibility of the offered treatments, lack of control of common factors in the therapies, and issues regarding severely impaired individuals in minimal or no-treatment control conditions (Basham, 1986; Kazdin, 1986; O’Leary & Borkovec, 1978).

Subjects were randomly selected for CBT or IPT treatment groups, which ran for 12 weeks using 42 outpatients who met DSM-III criteria for cocaine dependence. Results indicated that CBT subjects were more likely than IPT subjects to complete treatment: 67% versus 38%, with abstinence at 57% versus 33%. Significant differences by treatment group became apparent when subjects were classified by severity of cocaine abuse. With more severe cocaine abusers, CBT subjects were significantly more likely to achieve abstinence than those assigned to IPT: 54% versus 9%. Lower severity subjects were comparable for both treatments (Carroll et al., 1991). Findings suggest that more severely dependent cocaine abusers tend to require the increased structure and direction offered by CBT, by emphasizing learning and reinforcement of specific strategies, to control cocaine use.
Carroll (1994) studied both psychotherapy and pharmacotherapy comparing CBT to clinical management (CM) therapy (Fawcett et al., 1987). CM therapy utilizes the importance of the psychotherapeutic relationship, including a supportive doctor–patient relationship, education, empathy, and hope, in producing long-lasting sobriety maintenance. This writer felt that this study was noteworthy to the present study in that these factors are similar to those utilized in the NETWork protocol.

The study used 121 subjects, all meeting DSM-III-R criteria for cocaine dependence, who were randomly assigned to one of four treatment conditions: CBT in combination with desipramine, CBT plus placebo, CM plus desipramine, and CM plus placebo. Results suggested that both CBT and desipramine would be more effective than CM and placebo. After 12 weeks of treatment, all four groups showed significant reductions in cocaine usage as well as progress in other problematic areas. Significant effects for medication or psychotherapy type were not conclusive and the cocaine outcomes were comparable regardless of whether the patient received CBT or CM, or desipramine or placebo.

There was, however, an interactive effect from baseline severity of cocaine usage: Patients with more severe dependency stayed in treatment longer, attaining longer abstinence, and had fewer positive urine screens for cocaine when treated with CBT compared with CM. The data suggest that cocaine subjects with greater severity usage might benefit from supplementary structure, intensity, and didactic content of CBT, i.e., avoidance of high-risk situations for relapse. Results also suggest that treating lower level users with high intensity approaches may be effective for individuals less severely dependent on cocaine. Carroll’s findings add support to NETWork’s use of cognitive–behavioral strategies as an adjunct to and during the trancework phase of the protocol.
Chapter 5: Experiential Therapy

Defining Experiential Therapy

Experiential therapy encompasses client-centered/person-centered therapy, Gestalt therapy, focusing-oriented psychotherapy, process-experiential psychotherapy, psychodrama, existential therapy, psychotherapy, emotion-focused therapy, and expressive-arts therapies. Experiential therapy blends therapies like Gestalt and family therapy with models like sculpture and role-play. The purpose is to enact or reenact the emotional climate of the family of origin and/or other past and present significant relationships in a person’s life.

In reexperiencing these events and relationships, one is able to release the emotions that may have been blocked and repressed. The goal is to free a person from the unresolved emotions around relationships so that s/he is free to live in the present. By reexperiencing the emotional climate of the family, anger, shame, hurt, rage, guilt, fear, etc. can finally be expressed, released, and healed, making room for feelings of love, hope, inner peace, and forgiveness (Yapko, 2003).

Philosophical, Historical, and Empirical Contributions

Zimmer Höfler, MD et al. (1999) studied attachment transition, addiction, and therapeutic bonding, an integrative treatment approach. Their abstract discusses the notion that addiction is a delayed maladaptive attachment transition in young adults. The study explores the significance of this theoretical structure for adult therapy, particularly for addiction therapy that understands addiction as being correlated with a fear of intimacy and treats the clinical implications of therapeutic bonding as a specialized approach for this condition.
A study by Barb A. Phipps in 2005 investigated the effectiveness of integrative processing (IP) therapy as a therapeutic implement promoting personal development. The study focused on qualifying and identifying the therapeutic values of IP therapy. Ruskan, in 2000, stated that there is an absence of personal growth; healing, “trapped energy” is blocked and negative emotions take “center stage” in therapy.

Integration and the Art of Emotional Clearing is a practice that claims to help individuals to heal on a deep and personal level while improving health, providing a sense of well-being, and helping individuals meet their personal goals. After the researcher’s training and IP certification, interviews were conducted with practitioners to explore their understanding of the efficacy of this proposed therapeutic approach. An interview with the creator of this approach is also part of the findings. Following a qualitative methodology using data obtained from interviews in a questionnaire format, it appears that IP therapy can lead to perceived positive outcomes fostering clients’ personal growth and development.

Eastern spirituality teachings are flooding the West, and Western technology is gravitating toward the East. “We are each hungry for what the other has” (Ruskan, 2000). Ruskan’s therapeutic concepts are the product of the blending of two cultural, intellectual, and spiritual traditions as they relate to personal growth. Ruskan’s therapeutic technique is called emotional clearing (EC) or IP therapy. His integrated, therapeutic approach to treatment is derived from the traditional Eastern philosophies as well as the contemporary Western psychology, combining the main elements from each tradition. Ruskan views this as a holistic, therapeutic approach, designed to support the provision of acceptance and nonresistance toward parts of one’s self or experience in hopes of promoting a greater sense of health and well-being as it relates to personal growth.
Ruskan’s technique functions primarily on a “feeling-related” level. Ruskan (2000) states:

Feelings become painful and problematic only because they are not accepted, or integrated. We create pain through resistance and non-acceptance. To go beyond pain and to enjoy wholeness, we must learn to integrate those parts of life we find painful and would like to avoid. Once integrated, they are no longer painful. Instead, they add new dimensions to our existence.

Ruskan considers a nurturing relationship with the therapist to be an important aspect of the therapy. He views the guru as accepting the “disciple”/client unconditionally, understanding that “acceptance from another is what the disciple needs to develop in himself in order to grow as a human being,” addressing the issue of personal development. Ruskan describes disciplines for strengthening and purifying the mind and body; and his purification has the same rationale as in Western psychology: to bring suppressed matters to the surface by removing unconscious obstructions that interfere with the “productive enjoyment of life” (Ruskan, 2000).

Ruskan’s theory proposes that our limitations have to do with the unconscious rejection of feeling that we are created from painful, blocked emotions. Experience stored as emotional memory affects how individuals behave in their lives. Letting go of dysfunctional patterns will allow one to reach his or her highest potential. Integrating old patterns by changing them to more functional ones allows feelings to form into a whole “to reclaim, accept, and include what was previously apart.” Ruskan proposes that “processing” is a psychological term that refers to the “concept of accepting and staying with the experience of this previously blocked feeling as it begins to manifest, allowing it to unfold by itself in the here and now.” By moving into wholeness through release from integrating rejected parts of ourselves along with blocked energy, we combine the best of both Eastern and Western traditions.
This writer introduces experiential approaches to add support to the significance in reexperiencing core events and relationships in order to then release negative energy and emotions that have been blocked and repressed. The development of NETWork therapy integrates this “bringing to surface” of suppressed matters—by removing unconscious obstructions that interfere with the “productive enjoyment of life” through the use of trancework—believing it is a necessary contribution toward a client’s personal growth.
Chapter 6: Psychoeducational Therapy

Defining Psychoeducation

Psychoeducation is the education of a person in subject areas that serve the goals of treatment and rehabilitation. Psychoeducation involves teaching people about their problem and how to treat it, and how to recognize signs of relapse so that they can get necessary treatment before their difficulty worsens or occurs again. Family psychoeducation includes teaching coping strategies and problem solving skills to families, friends, and/or caregivers to help them deal more effectively with the individual (Psycho-Education, 2003). NETWork therapy includes the use of psychoeducation to provide the addictive client with knowledge and facts that will strengthen and maintain recovery.

Philosophical, Historical, and Empirical Contributions

Psycho-Education (2003) Clinical Preventive Services in Substance Abuse and Mental Health discusses psycho-education in terms of treating addiction, utilizing the combination of health education and behavioral counseling. The counseling component of psychoeducation focuses on emotions, perceptions, coping, relaxation, and self-care. NETWork’s use of psychoeducation is an important aspect of an individual’s recovery, as it instructs a person in subject areas that serve the goals of treatment and rehabilitation by teaching about his or her difficulties, how to treat them, and, in terms of addiction, how to identify signs of relapse so that reoccurrence might be avoided.
Defining Relaxation Therapy

Relaxation strategies are also a central constituent to NETWork therapy. The following abstracts discuss and support their effectiveness in reducing anxiety, a common co-occurring factor in alcoholism and substance addiction. Barlow (1998) suggests that relaxation is not a cure-all and is seldom used on its own. There are a variety of relaxation techniques that include guided imagery, controlled breathing, and progressive muscle and isometric relaxation. Relaxation enforces the use of voluntarily releasing tension and arousal reduction of the central nervous system. Provocation often produces hyperventilation, so training to breathe in a slow, controlled manner counteracts this effect. Anxiety produces muscle tension, so teaching patients to develop an attentiveness to such tension through repeated exercise will allow them to relax the muscles throughout their entire body. Isometric relaxation is a form of muscle relaxation that can be quickly invoked in anxiety-provoking situations. Guided imagery can assist with various forms of relaxation by providing a Thus, relaxation is most effectual when used as a one component of treatment rather than as treatment itself (Barlow et al., 1998).

Relaxation strategies are included in the early stages of treatment because they are a technique that is simple to learn, providing a sense of control over anxiety and passing on a sense of mastery in early stages of treatment. Progressive muscle relaxation (PMR) asks the patient to get comfortable in the chair, clearing his or her mind of any worries or thoughts. The patient practices the slow breathing method for about 1 minute, breathing in for 3 seconds and out for 3 seconds. The patient is asked to imagine that the tension is flowing out of the body with each outward breath. The patient continues to breathe slowly in and out, holding tension for 7–10 seconds and then relaxing his or her muscles. Typically, relaxing muscles follows a
particular order: Lower arms: bend your hand down at the wrist, as though trying to touch the underside of your arm, then relax; upper arms, shoulders: lift them up as if trying to touch your ears with them, then relax; neck: stretch gently to the left, then forward, then to the right, then back in a slow rolling motion, forehead and scalp, then relax; eyes: screw up your eyes, then relax; jaw, chest: breathe in deeply to inflate your lungs, then breath out and relax; stomach: push out to tighten the muscle, then relax; upper back: pull your shoulders forward with your arms at your side, then relax; lower back: while sitting, lean your head and upper back forward, rolling your back into a smooth arc, thus tensing the lower back, then relax; thighs, calves, feet: gently curl your toes down so that they are pressing into the floor, then relax.

As patients progress through the muscles, they are periodically reminded to clear away any thoughts or worries from their mind, and to keep all the other muscles in the body relaxed as they progress through the exercise. Patients remain still for a few moments, experiencing feelings of relaxation throughout the body before being asked to slowly openly their eyes. Slow breathing exercises are used to decrease anxiety and re-regulate and slow breathing. Over-breathing or hyperventilation occurs when a person breathes out too much carbon dioxide, decreasing levels of carbon dioxide in the blood. Decreased carbon dioxide causes a number of problems, including breathlessness and light-headedness, often triggering panic attacks. To rid oneself of these symptoms, carbon dioxide levels in the blood must be steadied by breathing into a paper bag. Re-breathing old air allows one to take in higher amounts of carbon dioxide into the lungs, helping to control hyperventilation and preventing future episodes. Individuals with addiction often experience panic attacks as a result of a trigger. Learning to bring their body back to statis is a technique that is vital to maintaining control over their addiction.
Comorbid Relationship of Anxiety and Depression

As discussed earlier in this piece, anxiety and depression are often co-occurring features of addiction. This writer feels it is necessary to introduce research supporting the relationship between these disorders.

In 2003, John P. Forsytha, Jefferson D. Parkerb, and Carlos G. Finlay presented a study that evaluates anxiety-related psychological risk factors—such as anxiety, loss of impulse control, and emotional avoidance—and their relation to drug of choice and addiction severity with an inpatient substance abuse population. Ninety-four detoxified veterans diagnosed with Axis 1 substance abuse disorder participated in a 28-day residential substance abuse treatment program completing before and after measures that included the Anxiety Sensitivity Index, Body Sensations Questionnaire (BSQ), Acceptance and Action Questionnaire (AAQ), Beck Depression Inventory (BDI; intake only), and Anxiety Control Questionnaire (ACQ). The veterans who reported more distress over bodily sensations (anxiety sensitivity, BSQ) and depressive symptoms (BDI) were those most likely to avoid experiencing affect (AAQ) and perceived themselves as lacking in control (ACQ). Extent of avoidance, and to a lesser extent, controllability, did differentiate between participants as a function of primary and comorbid diagnostic types, whereas anxiety sensitivity did not. However, there was no relation found between anxiety sensitivity and drug of choice, and relations between assessed psychological factors and domains of addiction severity were mixed.
Chapter 8: Literature Review Discussion

The literature provided supports the efficacy of using an integrative therapeutic approach in treating alcohol and substance addiction, rather than using a traditional single therapeutic model. The formalized, integrated approach supplies clinicians with a selection of tools rather than simply one option. The NETWork model allows practitioners to expand their own personal experiences with alternative approaches while permitting them the opportunity to make use of those techniques most suited to their personality style. While NETWork utilizes a structured method, the dialogue that takes place between clinician and patient can vary in orientation. For example, if a patient discusses the types of triggers that cause him or her to relapse, a therapist with a CBT style may choose to focus on changing dysfunctional schemas, an emotionally focused clinician may utilize empathic response and Socratic questioning, and a psychoanalyst may choose to focus on defense mechanisms, with all three being correct and effectual in their usage.

The trend toward integrative therapy began in the 1980s, and by 1992, between 30% and 50% of therapists called themselves “integrative” in their approach (Messina, 2000). While choosing an eclectic style, there is no one structured format in print that guides the clinician through an integrative process. A planned protocol avoids the possibility of haphazardly utilizing techniques from various orientations, relying on a “whatever works” way of thinking. Research suggests that blending theories and orientations strengthens treatment goals. Although the outcome may prove to be successful, the lack of a plan or design protocol can cause disorganization and confusion. NETWork therapy produces an integrative methodology that applies a structured, conceptual framework—the only one of its kind.
The effectiveness of an integrated therapeutic treatment approach has many benefits; for starters, a single therapy approach often proves inadequate for all patients and their problems in comparison to a blend of approaches. Integrative therapies tend to be shorter in duration due to their increased effectiveness, proving to be more cost efficient for the clients. Being able to experience different therapies affords clinicians the opportunity to expand their knowledge and become more proficient in their skills. Integrative trends also bring about unity among clinicians, providing stronger networking systems, affiliations, professional organizations, etc. Blending a repertoire of relationship styles enhances the clinician–patient relationship and demonstrates diversity.

NETWork therapy requires training in a multitude of areas, including hypnosis and EEG instruction. Although additional education may be financially bothersome and working toward specialized certification is timely, it is a necessary construct. This writer has completed her certifications in the areas of biofeedback EEG training, hypnosis, and forensic psychology; training in these areas was of the greatest necessity in working with patients with the NETWork protocol. In hoping to train others in NETWork therapy, this clinician follows the philosophy that only those willing to extend their time and efforts will be those most proficient and passionate, adding validity to a uniquely formalized integrative approach.
Chapter 9: NETWork: Neuro-Experiential TranceWork

Method

There were 13 subjects between the ages of 31 and 55—8 Caucasian males, 2 Hispanic males, and 3 Caucasian females—who participated in the study. All subjects were inpatients at an alcohol/substance addiction rehabilitation unit. There were 3 variables of interest: (1) changes in pre- and post-QEEGs that indicated significant changes in Z Scored FFT Absolute Power, Z Scored FFT Relative Power, Z Scored FFT Amplitude Asymmetry, Z Scored FFT Coherence, and Z Scored FFT Phase Lag; (2) changes in Pre- and Post-Self-Evaluation Checklists using Beck Depression Checklist, Depression Adjective Check List, and State/Trait Anxiety Check List; and (3) sobriety maintenance reported by the subject. Methodology included before and after evaluations, induction protocol including Stanford Hypnotic Susceptibility Scale-C, Consent to Tape/Research form, and NETWork therapy protocol for 15 sessions.

NETWork protocol is divided into 3 parts. Part 1: pretraining preparation to include the Pre-Quantitative EEG, to determine areas of surplus and/or deficits, and the Pretreatment Symptomology Self-Evaluation Checklists: Depression Adjective Check List, BID (Beck Inventory of Depression), State/Trait Anxiety Test, Consent to Tape/Research form. Part 2: RPK protocol for 15 training sessions: 2 times per week for 4 weeks, to 1 time per week until the completion of the 15 sessions, 60 minutes per session. The protocol remains consistent throughout the entire treatment. Part 3: post-training preparation to include the Post-QEEG, Post-Treatment Symptomology Self-Evaluation Checklists (Depression Adjective Checklist, the Beck Depression Inventory, State/Trait Anxiety Test, subjects’ self-report of sobriety maintenance, and a postsurvey questionnaire.
Procedure

There are 3 phases of NETWork therapy. Phase 1: pre-anxiety scale: 1 (lowest) to 100 (highest). Before clients begin the NETWork protocol, ask them to rate their present anxiety level: 1(low) to 100 (high). Phase 2: the Hypnotic Relaxation Induction/trance state (Appendix E); Up-Gaze/Eye-Roll, Initial Induction, Second Induction Progressive Muscle Relaxation technique; and Beginning Deepening/Personal Imagery/Favorite Place technique. Phase 3 is the Work Phase that utilizes deepened induction and talk therapy. During the conversation, the clinician uses an S.E.P.T. sheet (Appendix L), which is a form that allows the clinician to monitor the progress being made during a session and guide the client toward identifying, reformulating, and reconstructing more functional changes as they engage in deepened imagery and emotional connections, producing powerful experiential moments.

The S.E.P.T. form has seven progressive themes: the Subjective experience, which identifies the origin of the event/experience from which dysfunction was rooted, the Emotional issue, which identifies the dysfunctional beliefs and emotions that resulted from the subjective experience, the Processing phase, an in-depth, empathic discussion of the subjective experience, Thought reformulation, a process in which the patient re-thinks the event to identify distorted thinking and to promote a more functional understanding of critical experiences, the resolution and solution phase, past to present connections. Gaining new understanding about and connections to the origin of events that created the dysfunctional beliefs and feelings, working on solutions of change, the reprocessing phase, reviewing and processing the session by summarizing S.E.P.T, and lastly, the relief phase, an anxiety check for the level of symptom reduction, 1 (low) to 100 (high). Phase 4 of NETWork therapy is the Ego Building Phase, using techniques that promote self-esteem, future success, and hope. Phase 5 is Posthypnotic Suggestions, which includes maintenance of appropriate behaviors and motivational support and, finally, trance termination.
Results

Overall data conclude that significant changes were made pretesting and post-testing in 10 of the 13 subjects. QEEG results indicate test–retest and split half reliability ranging 90 to 1.00 and an overall improvement in both absolute and relative power, particularly in the areas of decreased beta and delta activity. While post-QEEGs suggest diminished beta and delta activity, there is an overall increased activity in asymmetry and coherence. Speculations for increased dysregulation may be due to the “uncoupling” of neuro-connections that have been locked collectively over time. As brain re-regulation takes place and the healing process commences, right and left brain hemispheres begin to alter their pattern of synapses. While the releasing and unlocking of brain pattern activity is an indication of healing, coherence and asymmetry changes appear to worsen, but post–1-year studies show that longer sobriety time will bring return Z scores to “normal” range. Changes in coherence, asymmetry, and phase lag may also be the product of alpha/theta training in itself. Working on emotional as well as cognitive connections to addictive behavior will alter areas of the brain in both the left and right hemispheres. As healing takes place, changes will occur within specific regions of the brain that control emotional processing. As insight and understanding evolve, so will brainwave frequencies. These changes will occur at different times, particularly as core issues are addressed and resolved, once again causing “uncoupling” of deregulated brainwave activity. While one area of the brain is stimulated, another area may not be healing at the same pace, causing changes in asymmetry, coherence, and phase lag.

The pre-psychological- and post-psychological assessment batteries indicated that the 10 successful subjects showed significant decreases in both anxiety and depression, from pretreatment scores falling in the severe range compared to the post-treatment scores falling in the normal range. Overall, NETWork therapy had a 77% success rate.
Future research that includes a larger sample population and longer sobriety time is necessary to add credence to the results. Male to female ratios fluctuated by 9 to 3; and the possibility of gender differences influencing sobriety success may be a factor. Individual background history, severity of addiction, past trauma and abuse, as well as the amount and type of external support systems provided during sobriety and training may also influence the results. Current medications may have factored into the data results; some of the patients were on no medications, while others were taking psychotropic drugs to aid in symptom relief.

The issue of defining sobriety is a difficult one in determining how to set criteria that constitute sobriety success. Many may argue that relapse is part of the rehabilitation process; but if so, how do we characterize sobriety success or failure? For the purpose of the presenting study, it was necessary to develop a baseline to establish success over addiction. Elements of success have been settled on by the following three factors: sobriety, reduced anxiety and depression, and psychological well-being (extinguished cravings or urges to use). The complexity in interpreting sobriety involves the use of alcohol and/or drugs during the early phases of NETWork treatment. Case in point: if a patient reports after three sessions that s/he drank two cans of beer over the weekend, does that constitute full-blown relapse or is it considered part of recovery? This is indeed a quandary. It is this researcher’s belief that a single incident during the first third of therapy does not constitute relapse; in fact, this researcher has found it to be therapeutically beneficial. Patients reporting that they have “used” is an indication of client–patient therapeutic trust and a demonstration of willingness to continue with recovery. Relapse may also be seen as an opportunity to explore the emotional and situational events that have led to “using.” Exploration of the experience furthers the recovery process by
allowing the client to reformulate his or her thoughts and behaviors, guiding him or her to use alternate strategies when facing future triggers.

Of the 13 subjects used, 3 males were unsuccessful in obtaining sobriety. Of the 3, 1 relapsed at session 13; the other 2 remained fully compliant in coming to their sessions but were unsuccessful in maintaining sobriety, both relapsing on 3 admitted occasions. Also noted were their self-evaluations that indicated anxiety and depression scales remaining in the severe ranges. Interestingly, of the 12 subjects, those 3 who were unsuccessful in their sobriety were the only subjects who experienced taking a drink during their sessions; the other 9 had none.

Overall, NETWork therapy shows promising effects, and its current research in seeking to improve, enhance, and add credibility to the effects of a formalized integrative process is being reviewed and researched. Follow-up studies will compare and evaluate extended, longer-term sobriety and emotional well-being on current subjects as well as additional ones.
References


Appendix A

QEEG Results

SIDE BY SIDE Z SCORE COMPARIONS

Subject 1/AR: Pre- & Post-Z Scores
Subject 2/JW: Pre- & Post-Z Scores
Subject 3/SS: Pre- & Post-Z Scores

Z Scored FFT Summary Information

Z Scored Peak Frequency
Subject 4/KL: Pre- & Post-Z Scores
Subject 5/VL: Pre- & Post-Z Scores

Z Scored FFT Summary Information

Delta
Theta
Alpha
Beta
High Beta

Z Scored Peak Frequency

Inferotemporal: LEFT

Inferotemporal: RIGHT

Inferotemporal: CENTER
Subject 6/AU: Pre- & Post-Z Scores
Subject 7/MD: Pre--& Post-Z Scores
SUBJECT 8: Pre-Z Scores/MC
SUBJECT 9: Pre--& Post-Z Scores/AB
SUBJECT 10: Pre- & Post-Z Scores/MR
### Z Scored FFT Coherence

**Left Hemisphere: LFT**

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**Right Hemisphere: RHT**

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**Homologous Pairs**

![Diagram](image1)

**Z Scored FFT Phase Lag**

**Left Hemisphere: LFT**

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**Right Hemisphere: RHT**

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**Homologous Pairs**

![Diagram](image2)
Subject 11: Pre- & Post-Z Scores/RK

Z Scored FFT Summary Information

Delta
Theta
Alpha
Beta
High Beta

Amplitude Asymmetry

Coherence

Phase Lag

Z Scored Peak Frequency

Intrahemispheric: LEFT

Interhemispheric: RIGHT

Interhemispheric: CENTER
### Z Scored FFT Phase Lag

#### Hemisphere: LEFT

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#### Homologous Pairs

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### Reference Image

- Image 1: Z Scored FFT Phase Lag
- Image 2: Hemisphere: LEFT
- Image 3: Hemisphere: RIGHT
- Image 4: Homologous Pairs

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**Note:** The images and tables above are placeholders for the actual content of the page.
Subject 12: Pre- & Post-Z Scores/NM
Subject 13: Pre- & Post-Z Scores/JS
SUBJECT 1/AR:
Age: 41  Sex: M  Marital Status: Married
Sexual Orientation: Heterosexual  Ethnic Background: Hispanic
Socio-Economic Status: Middle  Drug of Choice: Alcohol & Heroine
DATE: PRETESTING: 9/30/05  POST-TESTING: 1/23/06

TESTS ADMINISTERED

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REPORTED SOBRIETY SUCCESS: YES

____________________________________________________________________________________

(FORM F)  

NETWork SUMMARY SHEET  
Data Results

SUBJECT 2/JW:
Age: 32  Sex: M  Marital Status: Single
Sexual Orientation: Homosexual  Ethnic Background: Caucasian
Socio-Economic Status: Middle  Drug of Choice: Alcohol & Crystal Methadone
DATE: PRETESTING: 8/18/05  POST-TESTING: 10/27/05

TESTS ADMINISTERED

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REPORTED SOBRIETY SUCCESS: YES
NETWork SUMMARY SHEET
Data Results

SUBJECT 3/SS:
Age: 44  Sex: F  Marital Status: Married
Sexual Orientation: Heterosexual  Ethnic Background: Caucasian
Socio-Economic Status: Middle  Drug of Choice: Alcohol & Valium
DATE: PRETESTING: 3/07/06  POST-TESTING: 5/22/06

TESTS ADMINISTERED

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REPORTED SOBRIETY SUCCESS: YES


NETWork SUMMARY SHEET
Data Results

SUBJECT 4/KL:
Age: 44  Sex: F  Marital Status: Married
Sexual Orientation: Heterosexual  Ethnic Background: Caucasian
Socio-Economic Status: Middle  Drug of Choice: Alcohol & Cocaine
DATE: PRETESTING: 3/06/06  POST-TESTING: 5/16/06

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REPORTED SOBRIETY SUCCESS: YES
NETWork SUMMARY SHEET
Data Results

SUBJECT 5/VL:
Age: 32  Sex: F  Marital Status: Married
Sexual Orientation: Heterosexual  Ethnic Background: Caucasian
Socio-Economic Status: Middle  Drug of Choice: Alcohol & Cocaine
DATE: PRETESTING: 9/16/05  POST-TESTING: 12/02/05

TESTS ADMINISTERED

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REPORTED SOBRIETY SUCCESS: YES

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SUBJECT 6/AU:
Age: 63  Sex: M  Marital Status: Single
Sexual Orientation: Heterosexual  Ethnic Background: Caucasian
Socio-Economic Status: Middle  Drug of Choice: Alcohol & Prescription Pills
DATE: PRETESTING: 10/10/05  POST-TESTING: 12/28/05  1 YEAR: 9/11/06

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REPORTED SOBRIETY SUCCESS: YES
NETWork SUMMARY SHEET
Data Results

SUBJECT 7/MD:
Age: 51  Sex: M  Marital Status: Divorced
Sexual Orientation: Heterosexual  Ethnic Background: Caucasian
Socio-Economic Status: Middle  Drug of Choice: Alcohol & Cocaine
DATE: PRETESTING: 8/31/06  POST-TESTING: 9/19/06

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REPORTED SOBRIETY SUCCESS: NO

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NETWork SUMMARY SHEET
Data Results

SUBJECT 8/MC:
Age: 40  Sex: M  Marital Status: Married
Sexual Orientation: Heterosexual  Ethnic Background: Caucasian
Socio-Economic Status: Middle  Drug of Choice: Alcohol & Prescription Pills
DATE: PRETESTING: 7/14/06  POST-TESTING: NONE

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REPORTED SOBRIETY SUCCESS: NO
NETWork SUMMARY SHEET
Data Results

SUBJECT 9/AB:
Age: 52  Sex: M  Marital Status: Married
Sexual Orientation: Heterosexual  Ethnic Background: Hispanic
Socio-Economic Status: Middle  Drug of Choice: Alcohol & Prescription Pills
DATE: PRETESTING: 10/03/06  POST-TESTING: 1/09/2007

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REPORTED SOBRIETY SUCCESS: YES

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SUBJECT 10/MR:
Age: 51  Sex: M  Marital Status: Married
Sexual Orientation: Heterosexual  Ethnic Background: Caucasian
Socio-Economic Status: Middle  Drug of Choice: Alcohol & Prescription Pills
DATE: PRETESTING: 7/14/06  POST-TESTING: 1/05/07

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REPORTED SOBRIETY SUCCESS: YES
NETWork SUMMARY SHEET
Data Results

SUBJECT 11/RK:
Age: 46  Sex: M  Marital Status: Divorced
Sexual Orientation: Heterosexual  Ethnic Background: Caucasian
Socio-Economic Status: Middle  Drug of Choice: Alcohol & Prescription Pills
DATE: PRETESTING: 10/11/06  POST-TESTING: 1/08/07

TESTS ADMINISTERED

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REPORTED SOBRIETY SUCCESS: NO

NETWork SUMMARY SHEET
Data Results

SUBJECT 12/NM:
Age: 43  Sex: M  Marital Status: Married
Sexual Orientation: Heterosexual  Ethnic Background: Caucasian
Socio-Economic Status: Middle  Drug of Choice: Alcohol & Cocaine
DATE: PRETESTING: 11/17/06  POST-TESTING: 3/10/07

TESTS ADMINISTERED

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REPORTED SOBRIETY SUCCESS: YES
NETWork SUMMARY SHEET
Data Results

SUBJECT 13/JS:
Age: 39   Sex: M   Marital Status: Divorced
Sexual Orientation: Heterosexual   Ethnic Background: Caucasian
Socio-Economic Status: Middle   Drug of Choice: Alcohol & Prescription Pills
DATE: PRETESTING: 11/17/06   POST-TESTING: 3/10/07

TESTS ADMINISTERED

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REPORTED SOBRIETY SUCCESS: YES
## Subject Sobriety Chart

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Appendix D

Split-Half/Test–Retest Reliability

### Subject 9

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| Sample Size   | 128   |                   |
| Collection Hardware |        | Improved          |

### Subject 5

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| Sample Size   | 125   |                   |
| Collection Hardware |        | DataLogger       |
### Subject 10

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**Sampling Rate**

- 120

**Calibration Parameters**

- Degraded

### Subject 2

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**Sampling Rate**

- 120

**Calibration Parameters**

- Degraded
Subject 13

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Appendix E

NETWork
Neuro-Experiential TranceWork

_A Formal Integrative Therapeutic Approach to Treating Addictive Disorders_

Treatment protocol includes neurofeedback training, hypnosis, and talk therapy (experiential, cognitive-behavioral, and psycho-education in combination). A brief description of each will follow.

**NETWork: A Step-by-Step Process**

**Neuro:** Alpha/theta feedback training; lights off, eyes closed, resting in reclining chair the entire session. Therapist sits in close proximity to the patient

**Experiential:** Deepened emotional experiences and insight through therapist guidance using relaxation training

**Trance:** Relaxation deepening inductions

**Work:** Client and therapist dialogue, using techniques derived from cognitive–behavioral, experiential, and psycho-educational approaches to probe deepened insight and understanding

**PHASE 1: Preanxiety Scale:** 1 (Lowest) to 100 (Highest)

- Before clients begins the NETWork-p protocol, ask them to rate their present anxiety level using SUDs (i.e., 70) and document on the _ANXIETY CHECK FORM_.

**PHASE 2: The Hypnotic Induction**

- _Profile (HIP)/Stanford Hypnotic Clinical Scale:_ General assessment of patient’s susceptibility level. The purpose of using the profile is to assess the subject’s initial hypnotic ability, determining a baseline ability level. Hypnotic Induction Profile (HIP)
A. Up-Gaze/Eye-Roll

(Spiegel Induction) “Now look toward me or (look at the spot across the room. Keep your head straight). As you hold your head in that position, look up toward your eyebrows or (my thumb); now, toward the top of your head.”

B. Initial Induction

Beginning with “As you continue to look upward, close your eyelids slowly (eye continue looking upward as your eyelids slowly come down, eyes up, and eyelids down); that is, right, close, close, close, and ‘at ease’ breathing. Take a deep breath in...hold it...and release; take a deep breath in...hold it... and release. Now begin breathing naturally, at ease....”

C. Second Induction

Progressive muscle relaxation technique:

“Focus your attention on your forehead and allow all the tiny little muscles to spreading apart, relaxing. Allow this sensation of relaxation to drift down the bridge of your nose, across your cheeks, down your jaw line, and let your whole face just relax and go limp. Now allow this sensation of relaxation to flow down your neck and across your shoulders, allowing your shoulders to drop with ease. Then down your arms and to your hands, and your hands feel so heavy and relaxed, you do not want to move or lift them.”

“Now focus on the back of your neck and feel the sensation of relaxation to loosen up all the muscles in your neck and then down your shoulder blades and spine, to your lower back. As the warm sensation flows down your back, you can experience all those muscles becoming looser and tension free, as you are allowing yourself to become so very relaxed.”
“Now feel the warm sensation of relaxation drift toward the front of your body to your chest, allowing any heavy feelings or tightness to lift off your chest and dissipate. Allow yourself to experience how light and free your chest now feels. Allow this feeling to transcend to your stomach, allowing any tightness or constriction to float out of your body, and your stomach muscles begin to loosen and relax. Now experience that warm sensation of relaxation filling up inside of you, with feelings of satisfaction, contentment, comfort, and ease. Now send this sensation of relaxation down your legs and to your feet, and you feel so heavy and so relaxed, you do not want to move or lift them.”

D. Beginning Deepening/Personal Imagery/Favorite Place Technique:

“Now that your body is in a deep relaxed state, allow your mind to do the same. Think about a special place that you enjoy being at. Maybe it’s somewhere you visited as a small child, or perhaps a place you visited as an adult. Perhaps it’s a tropical island or a cabin in the woods. Maybe it is a special place in your home, in a particular room, on a particular chair or sofa. Wherever your special place is, allow your mind to take you there and experience what it is about this place that makes you feel so good.”

“As you experience being in your special place, look around you and take particular notice of the colors around you. Notice all the bold, bright colors and the soft, subtle colors. Allow yourself to feel the temperature in the air, perhaps a breeze that brushes past you. Feel the textures around you, smooth, soft surfaces and hard, rough surfaces. Listen to the sounds that surround you, perhaps voices or nature in the distance, or just comfortable silence. Maybe you are even able to smell the smells associated with your special place, and even the taste of food and drinks. What matters is that you have the ability to take yourself to your special place.
any time you want so that you can experience internal gratification. Allow yourself to take this moment to reflect and experience your internal peace.”

PHASE 4: Work Phase (Deepened Induction)

“I’m going to count from 5 down to 1; while remaining in your special place, allow thoughts, images, and emotions to enter into your conscious; do not try to control them, just let them float through your mind freely, without directing them. Remember, you are in your safe place and I am right here, next to you, giving you support; 5, 4, 3, 2, 1.” Allow the patient 1 minute and ask him or her “What are you thinking about?” Through my experiences using NETWork, I have observed that it is during this deepened phase that the most significant core issues begin to surface. It is during this phase of the protocol that the therapist engages in “talk therapy” skills to initiate deeper probing of these issues.

It is during this phase that specific attention is paid to increased wave frequencies due to anxiety provoking emotions and memories. Monitoring frequencies makes the therapist aware of significant experiences that provoke stress. Observing spiked brainwaves guides the therapist in how to respond to the patient and demonstrate added support during a particularly difficult core moment.

PHASE 5: Projection Deepening: Using Dream Sequence/Progression Phase (Suggesting Images of Success)

Once the therapist and patient reach a comfortable point of resolution, the therapist should then ask the patient about the successes s/he has had in sobriety as well as achievements in life. It is important that the patient finish the session by identifying his or her abilities to begin building ego strength and the concept of “hope and courage.”
PHASE 6: Posthypnotic Suggestions/Trance Termination (Using Suggestions of Maintaining Sobriety, Self-Confidence, Energy, Motivation, and General Well-Being)

“I am going to begin counting from 10 down to 1; as I do, imagine energy flowing back through your body. It is the type of energy that is relaxed, controlled, and keeps you moving in the direction of sobriety. Remember your strength and courage, remember your support systems, and, most of all, remember to follow the path that truly makes you happy and content; 10, 9, 8, 7, 6, 5, 4, 3, 2, 1.”

PHASE 7: Anxiety Check

At the end of each session and beginning of the following session

PHASE 8: After 15 Sessions

- QEEG Postevaluation to compare pretraining and post-training
- Post-Treatment Symptomology Self-Check Lists (BDI, DACL, State-Trait)
- Questioners
- Demographic Survey
Appendix F

Sample Demographic Survey After Questioner Is Completed:

Age:
Sex:
Marital Status: Married___ Single___ Divorced___
Sexual Orientation: Homosexual___ Heterosexual___
Ethnic Background: _____________
Socio-Economic Status: Lower____ Middle____ Upper____
Drug of Choice: ____________________________

Subject Characteristics

Recruiting Criteria: Patients will volunteer for training

- Sample population is from the Keys to Recovery Alcohol and Substance Rehabilitation Program
- Illinois residents
- Multiethnic population
- English speaking
- Multigender
- Ages 18 to 65
- Lower-middle-upper socio-economic backgrounds
- 8th grade reading ability level
- Health status/physical health requirements: deemed physically fit as determined by a board certified physician with examination documentation that is within the past 1 week of the beginning treatment

Recruitment Site: Treatment will take place at Northwest Neurological, at Holy Family Hospital, Des Plaines, Illinois, The Keys to Recovery Rehabilitation Unit.
Research Materials Obtained

- Identification of research material obtained from subjects will be in the form of data
- The data will be obtained specifically for research purposes
- Data will be collected and analyzed using Pre– and Post–QEEG Mapping, Beck Depression, Depression Adjective Check List, State/Trait Anxiety Check List

Subject Recruitment and Informed Consent Process

- Written informed consent by subjects and physical/mental documentation is to be turned in by hand, or via e-mail/fax/mail prior to test administration.
- The nature of the information to be provided to prospective subjects will include only themes of alcohol and/or substance dependency.
- Informed consent about the study will be in English (study will be conducted on only English speaking individuals).

Managing Side Effects & Potential Risks

- Subject confidential data will be managed by using a number to identify each test taker in place of a name.
- The researcher will manage the subject’s care if a research-related event arises.

Risk-to-Benefit Ratio

Low risk potential

Intended Use of Results

Research purposes

Timing

Approximately 60-minute sessions
Appendix G
QEEG Interpretation and Information Guide

**Absolute Power:** Measures exactly what is under the sensor

**Relative Power:** Takes into account the physical characteristics of the skull

**Amplitude:** Microvolt/Hertz (uV)

**Power:** Microvolt squared (uV²)

**Ways to Detect Slowing:** Eyes closed theta amplitudes exceeds alpha amplitudes

**Link vs. Laplacian Montages:** Link (similar to referential) monopolar (can cause temporal lobe contamination. Laplacian (the electrical activity of surrounding electrodes)

**Eyes Open vs. Eyes Closed:** Eyes closed (more accurate, minimizes eye movement artifacts)

**Single-Hz Bins vs. Frequency Bandwidths:** Single-Hz provides data that are more exacting

**Coherence:** Measurement of similarity of frequency between 2 sites of the scalp

**Contralateral:** Both hemispheres vs. ipsilateral coherence (each hemisphere)

**Asymmetry:** When two scalp locations are significantly different

**Dominated Frequency:** The frequency with the highest microvolt reading

**Compressed Spectral Array (CSA) of Brainwave Frequencies:**

- **Delta** 1-4 Hz
- **Theta** 4-8 Hz
- **Alpha** 8-12 H
- **SMR** 12-16 H
- **Beta 1** 16-20 Hz
- **Beta 2** 20-24 Hz
- **Beta 3** 28-32 H
- **Gamma** 32-60 Hz
Appendix H

Patient Protocol Form

PATIENT NAME: ____________________
Age: ____________________
Sex: ____________________
Marital Status: Married___  Single___  Divorced___
Sexual Orientation: Homosexual___  Heterosexual___
Ethnic Background: ___________
Socio-Economic Status: Lower____  Middle____  Upper____
Drug of Choice: ___________

DATE: PRETESTING: ___________  POST-TESTING: ___________

TESTS ADMINISTERED

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<tr>
<td>DACL</td>
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<td>RANGE____</td>
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<tr>
<td>TRAIT</td>
<td>RANGE____</td>
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QEEG Data Information: Key Factors to Present:

- **Peak Value Differences**
  - Delta (1.0–3.5 Hz)  __________  __________
  - Theta (4.0–7.5 Hz)  __________  __________
  - Alpha (8.0–12.0 Hz) __________  __________
  - Beta (12.5–25.0 Hz) __________  __________
  - High Beta (25.5–30.0 Hz) __________  __________
  - Beta 1 (12.0–15.0 Hz) __________  __________
  - Beta 2 (15.0–17.5 Hz) __________  __________
  - Beta 3 (18.0–25.0 Hz) __________  __________
• **Relative Power % Differences**  
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<tr>
<td>Alpha (8.0–12.0 Hz)</td>
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<tr>
<td>High Beta (25.5–30.0 Hz)</td>
<td>______</td>
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<tr>
<td>Beta 1 (12.0–15.0 Hz)</td>
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<tr>
<td>Beta 2 (15.0–17.5 Hz)</td>
<td>______</td>
</tr>
<tr>
<td>Beta 3 (18.0–25.0 Hz)</td>
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</tr>
</tbody>
</table>

**COHERENCE:**  
**ASSYMMETRY:**  
**PHASE LAG:**

**REPORTED SOBRIETY SUCCESS:** YES____  NO____

**RESEARCH QUESTIONS:**

- Is there a change?
- What are the changes?
- What changes occurred in the QEEG in terms of prevention?
Appendix I

Patient Feedback Protocol Form

NAME:_________________________     DATE: / / 

Areas of Surplus & Deficits

• ____________________________
• ____________________________
• ____________________________
• ____________________________
• ____________________________
• ____________________________

________________________________

PROTOCOL

PLACEMENT: _____     _____

(1) EYES OPEN____   EYES CLOSED____     HOUR____  MINUTE____

PLACEMENT:_____     _____

(2) EYES OPEN____   EYES CLOSED____     HOUR____  MINUTE____

INHIBIT: DELTA_____ to ____Hz

THETA_____ to ____Hz

ALPHA_____ to ____Hz

BETA 1_____ to ____Hz

BETA 2_____ to ____Hz

REWARD: DELTA _____to ____Hz

THETA _____to ____Hz

ALPHA _____to ____Hz

BETA 1_____ to ____Hz

BETA 2_____ to ____Hz
Appendix J

NETWork-p
Neuro-Experiential TranceWork-processed
Experience Questionnaire

Please fill out the following questions honestly; it is important that I provide treatment that incorporates the quality and success that you are deserving of.

1) How has Network-p therapy helped your emotional growth?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

2) What aspects of the treatment process work particularly well for you?  
   (Relaxation, talking, special place....)
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

3) Does this treatment match your personality style? If so, how?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

4) How much of a role does your therapist's personality style play in your recovery? What are those specific qualities?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

5) What suggestions can you make about your therapist’s personality style that might improve the quality of your treatment?
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
6) Do you think that Network-p can be useful to a majority of populations?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

7) Have you had any prior experience with individual therapy?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

8) If so, does Network-p encourage deeper internalization, and if so, how? If not, why?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

9) What criticisms do you have about Network-p therapy?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

10) What suggestions do you have to strengthen Network-p therapy?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Additional Comments:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Appendix K

Therapeutic Goals Summary Sheet

Patient Name: __________________________________ Date ____

Presenting Problem: ______________________________________

Co-Occurring Features (1)______________________   (2)______________________

Short-Term Goals
1. ____________________________________________
2. ____________________________________________
3. ____________________________________________

Long-Term Goals
1. ____________________________________________
2. ____________________________________________
3. ____________________________________________

Identified Critical Events:
1. ____________________________________________
2. ____________________________________________
3. ____________________________________________
4. ____________________________________________

Identified Primary Emotions
1. ____________________________________________
2. ____________________________________________
3. ____________________________________________

Core/Dysfunctional Thoughts
1. ____________________________________________
2. ____________________________________________
3. ____________________________________________
Appendix L

NETWork PROGRESS SHEET (S.E.P.T. 3R’s)

Name: ___________  Date: ___________  Session #: ___________

1. **Subjective experience** (the external experience that triggered the dysfunctional emotion[s]):
   1. ____________________________________________________________ 2. ____________
       ____________________________________________________________ 3. ____________
       ____________________________________________________________ 4. ____________

2. **Emotional Issue** (the emotions that resulted from the subjective experience):
   1. ____________________________________________________________ 2. ____________
       ____________________________________________________________ 3. ____________
       ____________________________________________________________ 4. ____________

3. **Processing Phase** (discussion of the subjective experience):
   1. ____________________________________________________________ 2. ____________
       ____________________________________________________________ 3. ____________
       ____________________________________________________________ 4. ____________

4. **Thought Reformulation** (rethinking the event to promote a more functional understanding of how the experience directed the manufactured emotions):
   1. ____________________________________________________________ 2. ____________
       ____________________________________________________________ 3. ____________
       ____________________________________________________________ 4. ____________

5. **Reprocessing Phase** (review session by summarizing S.E.P.T.3R’s):
   1. ____________________________________________________________
   2. ____________________________________________________________ 3. ____________
       ____________________________________________________________ 4. ____________

6. **Resolution Phase** (changes that need to occur):
   1. ____________________________________________________________ 2. ____________
       ____________________________________________________________ 3. ____________
       ____________________________________________________________ 4. ____________

7. **Relief Phase** (anxiety check to discover level of symptom reduction):
   1. ____________________________________________________________ 2. ____________
       ____________________________________________________________ 3. ____________
       ____________________________________________________________ 4. ____________
Appendix M

Pretreatment Consent Form

Name: __________________________
Phone: _________________________
Pretest Date:______ Post-Test Date:______
Age:_________ Sex:________

Martial Status: M:______ S:______ D:______
Homosexual:______
Ethnicity/Race: ______________________
Drug of Choice:_____________________

Identify your primary concerns:
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

What do you hope to get out of this treatment?
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________

I give Robin Kroll consent to audio/video tape our therapy sessions and to use my background information for publication under the terms that my identity will remain anonymous by changing the names of myself and others.
Appendix N

Argosy University/Schaumburg Institutional Review Board Submission Protocol for Research Involving Human Subjects

**Project Title:** The Effects of NETWork Therapy in Treating Alcohol and Substance Addiction

**Date Submitted:** October 2005

**Principal Investigator:** Robin B. Kroll

**Address:** 2201 RFD Long Grove, IL 60047

**Phone:** (847) 726-9322

**Name:** Argosy University/Schaumburg

**Faculty Sponsor:** Dr. Donna Mahoney

**Persons Authorized to Obtain Documented Informed Consent:**

**Duration of Project:** From September 2005 until March 2007

**Subjects:** Total number: 10; number of control subjects: 10

**Selection of Subjects:** Random, volunteers from rehabilitation addiction unit

**Material Inducements:** Quantitative EEG, biofeedback instrumentation, RKP

**The Protocol Proposes to Include as Subjects:**

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<tr>
<th></th>
<th>Yes</th>
<th>No</th>
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<tr>
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<td>___</td>
<td>X</td>
</tr>
<tr>
<td>Mentally retarded</td>
<td>____</td>
<td>X</td>
</tr>
<tr>
<td>Mentally infirm</td>
<td>___</td>
<td>X</td>
</tr>
<tr>
<td>Inpatients/outpatients</td>
<td>X</td>
<td>___</td>
</tr>
<tr>
<td>Institutionalized persons</td>
<td>___</td>
<td>X</td>
</tr>
<tr>
<td>Minors</td>
<td>___</td>
<td>X</td>
</tr>
<tr>
<td>Prisoners</td>
<td>___</td>
<td>X</td>
</tr>
</tbody>
</table>

**Specific Locations Where Data Will Be Collected:** Holy Family Hospital/Key to Recovery Rehabilitation Program

**Other Institutions/Organizations Involved** (Provide documentation of approval to proceed from all other entities involved): N/A
May a product or procedure with potential commercial value result from this study? If so, explain: Protocol Design, teaching of protocol may promote commercial value

Is this protocol being submitted for FULL review?
If submitted for partial IRB review, under which category? N/A

I, Robin Kroll, will be the principle investigator on this project. I herewith declare that I have read the Ethical Principles in the Conduct of Research with Human Participants published by the American Psychological Association. I declare that I am familiar with Title 45 of the Code of Federal Regulations as it applies to the conduct of research involving human subjects. I finally declare that the proposed project complies with the letter and spirit of both the Ethical Principles and all applicable state and federal codes and regulations.

Signature:___________________________       Date:____________

I, Robin Kroll, will be the faculty sponsor of this project. I herewith declare that I have reviewed the protocol appertaining to this project and believe it to be in compliance with applicable ethical standards and state and federal codes and regulations. I further declare that I believe this proposal to be prepared in compliance with the Policies and Procedures of the AU/Schaumburg Institutional Review Board.

Signature:___________________________       Date:____________