The Brooklyn Program—Innovative Approaches to Substance Abuse Treatment

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THE UNITED STATES PROBATION Department is charged, inter alia, with executing orders of the federal court regarding the correctional treatment of federal offenders. Among the orders enforced by the probation department are those requiring substance abuse treatment. Some offenders have already completed extensive treatment regimens while in prison. Others report that they have misrepresented their substance abuse histories to obtain more lenient sentences or become eligible for the Bureau of Prisons' early release program (for offenders who have completed their 500 hour in-house program). Beyond the normal burden of persons with various levels of substance abuse problems and history, these categories of offenders account for a large amount of wasted time, effort, and funds.

In addressing its own need to care for persons with a spectrum of substance abuse issues, the United states Probation Department for the Eastern District of New York has undertaken an innovative substance abuse treatment program that is cost effective, has high rates of retention, and provides powerful tools for abstinence, recovery, and life.

Conceptual Foundations of the Program

The Brooklyn Program is designed from the perspective that addictions and substance abuse issues are chemically enhanced learning that do not differ substantially from other learned patterns of behavior. The single exception to this similarity is that the problems we classify as addictive are usually illegal or destructive. Evidence for the soundness of this approach emerges daily from neuro-scientific examinations of the dopaminergic systems in the midbrain. This research reveals that substance abuse problems are connected to basic neural structures involved in the development of hope and normal habit acquisition (Blomqvist, 1998; Changeux, 1998; Doweiko, 1996; Malapani, et al., 1998; Ruden, 1997; Schultz, et al., 1997; Waelti, Dickenson and Schultz, 2001; Zickler, 2001).

The approach taken by the Brooklyn Program is also rooted in the literature of wholeness, which emphasizes that people are fundamentally not broken and that they have the resources within them to solve the problems they face. This is especially true of addictions and substance abuse. There is a significant literature on the wholeness perspective that covers Social Work (Saleeby 1996, 1997; van Wormer, 1998; Gray, 2001), Solution Focused Therapy (Cade and O'Hanlon, 1993, Miller and Berg, 1995; Walters, 1993); Hypnotherapy (Erickson, 1954; Grinder and Bandler. 1979; Rossi, 1986; Rossi and Cheek, 1995; Gray, 1997; 2001) and Neuro-Linguistic Programming (Andreas S, and Andreas, C., 1987; Andreas C. and Andreas, S., 1989; Bodenhamer and Hall, 1998; Bandler and Grinder, 1975; Dilts et al., 1980; Haley, 1973; James and Woodsmall, 1988; Linden and Perutz, 1998; Robbins, 1986; Sternman,1990).

The wholeness approach does not view addiction as a disease, but as a learned response to the problems of everyday life. Typically, it is a response that may have worked in the short term but grew to become a problem in its own right. In the literature of Neuro-Linguistic Programming (NLP), the underlying utility of a destructive or limiting behavior is referred to as its *positive intent*. Every behavior is presumed to have, on the level of biology, a positive intention for the survival of the organism. Those intentions may be wrong, they may persist from an immature or disempowered period of the organism's life, but each represents the persistence of an answer that at some time or place served a useful purpose. Addictions are short-term solutions that generalize into long-term problems (Bandler and Grinder, 1979; 1982; Andreas, S. and Andreas, C., 1987; Andreas, C. and Andreas, T., 1994; Sternman, 1990).

Recent research (Prochaska et al, 1994; Miller et al. 1995, Gray, 2001) has focused upon three necessary elements in substance abuse treatment: Self-efficacy, Futurity, and Self-esteem. The term self-efficacy comes directly from the literature of Social Learning Theory, especially as formulated by Albert Bandura (1997). It holds that people need to have experiences of success in order to attempt a task, find the motivation to continue in a task, and feel good about themselves in the context of that task. Its entry into the field of addictions comes especially through the work of Miller and Marlat, who, with others, have shown that a sense of self efficacy is crucial to positive treatment outcomes (Miller et. al. 1995; Shattuck 1994; Doweiko, 1996).

In Social Learning Theory, self-esteem refers to feelings of positive self-regard that result from experiences of efficacy in multiple activities, across multiple contexts. Our approach uses this Banduran Model with one crucial change. Drawing from the depth psy-

chological models of Jung and Progoff and the humanistic view of Maslow, we focus esteem on an appreciation of and a connection to a deep and continuing sense of Self. This is that Self that points in the direction of the life calling or that unique niche that represents the fullest manifestation of what life can mean for the individual (Bandura, 1997; Gray, 1996; Progoff, 1959; Maslow, 1970; Hillman;1996).

Futurity is a paraphrase of one of the signal insights of James Prochaska, co-author of *Changing for Good* (1994), and creator of the "stages of change" model. While reviewing results from various applications of the model, he discovered that a significant amount of the progress from Pre-contemplation to Action was predicted by the degree to which the changer came to positively desire and seek after some future good so that the benefits of change outweighed the costs of the change. This is a crucial transition and one that heralds real readiness for change. Futurity, as applied here, entails the discovery of goals and activities that are inherently meaningful to the offender. It is, in many cases, the discovery of a life goal or spiritual mission that provides the appropriate impetus to change (Prochaska, Norcross and DiClemente, 1994; Hillman, 1996; Campbell, 1988; Ruden, 1997).

Our approach to futurity works on Jungian and Maslowian assumptions that every individual has a calling, life goal or meaning towards which they must, of necessity grow or else die unfulfilled. The same phenomenon has been referred to as finding one's place in the universe (Peck, 1998), realizing one's call (Hillman, 1996), awakening to the higher self (Assagioli, 1971), retelling the story of one's life, and other goal-directed metaphors.

In the context of "change work," especially with regard to addictions and substance abuse, this idea—that there exists in every person a dynamism propelling them towards their highest good—can be useful in awakening the subject's ability to set future goals, determine personal direction, and develop feelings of personal efficacy and hope.

The basic presuppositions upon which the Brooklyn Program is founded may be summarized as follows:

- Addictions, substance abuse and other problem behaviors are false or immature answers to life's problems that have become habitual and have generalized to multiple contexts.

- There are better answers available for those questions and those better answers are

determined by the natural directions for personal growth that exist in each person.

- That direction, calling or ecological niche can be discovered by assembling a set of experiences that will come together synergistically to create or constellate a sense of personal direction.

- By directing his efforts towards future behavioral change in areas implied by those self-generated directions, the substance abuser or addict can come to a fuller, more positive and rewarding answer to the questions of life and so (as predicted by Progoff,1959; Glasser, 1985; Prochaska et. al. 1994) begin to choose to leave the problem behavior behind.

These aims are approached using some very basic psychological tools. For example, most of our techniques are rooted in basic Pavlovian conditioning. Other techniques involve visualization, the capacity to decompose memory experience into its component sensory elements, and the ability to project oneself into an imagined future. All of the techniques used come from a discipline known as NLP or Neuro-Linguistic Programming. The program may be viewed as an application of the practical tools developed by NLP to the problems of addiction and substance abuse viewed from the Depth Psychological and Humanistic perspectives. (Andreas, C. and Andreas, S., 1989; Andreas, S. and Andreas, C. 1987; Bandler and Grinder, 1975, 1975b, 1979, 1982; Bodenhammer and Hall, 1998; Dilts, Grinder, Bandler, and De Lozier, 1980; Gray, 1997a, 1997b, 2001; Linden and Perutz, 1998; Robbins, 1986).

In brief, the program consists of a series of exercises designed to create a deepened sense of Self and personal direction by assembling successive layers of positive experience into deeper, more global and more accessible approximations of a core identity with the direction implied thereby.

Methods

The Brooklyn Program is about six years old. During that time it has graduated more than 200 participants. It is rooted in the idea that substance abuse and dependency are part of the normal continuum of learned behaviors and seeks to provide skills for living that make life without drugs more appealing, intuitive and available. The program is 16 weeks long and meets in a classroom format for two hours every week. Participants must attend two one-on-one sessions during the course of the pro-

gram, and more if they return a positive urine specimen or miss a group session.

Program participation is limited to persons under criminal justice supervision in the federal system. They must be fluent in English, not in active relapse and free from serious mental or psychiatric impairment. After a brief intake and introduction to the program, participants begin with the formal exercises. Beyond these constraints, all referrals are usually accepted.

The Brooklyn Program differs significantly from other substance abuse and dependancy programs because, after the first session, there is no formal mention of substance abuse. If issues related to substance abuse arise, or participants have personal experiences using the program tools to combat slips or relapses, they are discussed. The program is radically committed to the idea that program time should be used to teach skills and install states that can be actively employed to meet the needs of everyday life, and not just substance abuse issues.

The first half of the program is devoted towards developing a series of skills to enhance the participants' recall of resource states and to develop the ability to choose emotional states. Participants are taught to select and stabilize memories of five resource states. A resource state is any memory of a positive emotional experience. Our first exercise includes examples of focused attention, good decision-making, a moment of discovery (Aha!), fun, and confidence in a practiced skill. These selections are based on the work of Carmine Baffa (1997).

Once the participants have selected memories exemplifying the five categories of resource states, they are taught to examine the states to discover their sensory composition, how each unfolds as a sequence of sensory impressions, and other parameters of the experience. By doing so, the participants gain control over the emotional quality of the states and their intensity.

Perhaps the most important contribution of the founders of NLP is their re-discovery that all subjective information can be described in terms of very specific sequences of sensory information. That is, any memory or current experience can be described in terms of its Visual, Auditory, Kinesthetic, Olfactory and Gustatory (VAKOG) components. Further, by manipulating the dimensions of these sensory data (the submodalities as they are called in the literature of NLP), one can manipulate intensity, emotional valence and

other features of the experience (Grinder and Bandler, 1975; Bandler and Grinder 1979; Bandler and MacDonald, 1987; Bodenhammer and Hall, 1998).

So, recalling a memory of being very focused (I often use the example of watching an engrossing adventure film), one can begin to notice that if the size of the memory image is increased, the intensity of the experience is often increased as well. If the brightness and focus of the recollection are enhanced, the quality of the experienced memory will change again. If sound is associated with the memory, increasing the imagined volume and noting the direction from which it comes can make a significant impact. If no sound is associated with the memory, imagining that one can turn on the sound can have a surprising effect. Each person will find that a different part of the sensory information associated with their memories has an idiosyncratic impact on their personal experience. Each person must discover for themselves the peculiar sequence of senses and the manipulations that will enhance or soften the memory. Lists of sensory submodality distinctions can be found in Andreas, S. and Andreas, C. 1987; Bandler, R. and MacDonald, W. 1987; Bandler 1985; Dilts 1993.

Having chosen five resource states, the participants are asked to systematically manipulate the sensory details of their memories and to notice which changes have the most impact. In the process, participants accomplish the following tasks: 1) They learn how to manipulate their own feelings. 2) They gain increased access to positive states of mind through state-dependent learning effects. 3) Many begin to notice that their memories work much better than they have ever suspected. 4) They learn how to access strong, positive memories that can be used to create other anchors (or conditioned stimuli) for use in multiple contexts.

Once the participants have "stabilized" an appropriate exemplar for each state by revisiting it and enhancing it several times, they are taught how to connect the feeling associated with the memory to specific triggers or Anchors.

The conditioning, or Anchoring process is very simple. It consists of fully evoking the memory and repeatedly associating the emotional tone of the memory with a gesture. After several repetitions, the feeling from the memory becomes associated with the gesture. Participants receive the instructions in written form and are always guided by an experienced facilitator. All participants are instructed to use a set of standard, neutral gestures for use as conditioned stimuli. (In the order of the resource states they are: Focus—touching tip of thumb to tip of index finger, Solid—tip of thumb to first joint of index finger, Good—tip of thumb to tip of middle finger, Fun—tip of thumb to first joint of middle finger, Yes—tip of thumb to tip of ring finger.)

After mastering the technique on each of the five states, the participants are equipped with a set of conditioned responses that can immediately change their mood. Effects depend upon the amount of practice that participants apply. Subjective responses range from just enough effect to provide the realization that choices are available, to substantial shifts in mood.

In subsequent exercises, the participants are taught several techniques for enhancing the quality of the experiences, finding real-life situations where these states will be found useful and creating five novel Anchors of their own choosing. Participants are encouraged to practice the techniques at home to gain maximum benefit from the skills and to separate the skill from the probation or treatment context.

These exercises have several very clear benefits:

Simple behavioral effects. The Anchoring exercises provide affective tools for counteracting negative states. They comprise a behavioral tool set that can be used as simple conditioned stimuli in counter conditioning paradigms and in more extensive desensitization paradigms (Schaeffer and Martin, 1969; Wolpe 1958, 1982).

State-dependent reframing. By orienting the participants towards positive states of mind, making them available in new ways, and enhancing those states, participants become more likely to experience positive aspects of their past through state-dependent recall effects. As a result, their present experience is susceptible to more positive interpretation (Rossi, 1986; Rossi and Cheek, 1995).

Response generalization. Once positive responses are learned and appropriately framed, we use specific techniques to foster generalization of the responses to other contexts (Bandler and Grinder, 1979; Linden and Perutz, 1998; Bandura, 1997; Bodenhammer and Hall, 1998).

Body awareness. An essential part of the program is learning to pay attention to the kinds and sequence of sensory responses that signal emotional and physical states. As a result, participants become more aware of their own physical reality.

Affective choice training. Participants who learn the Anchoring skills attain significant training in the process of choice. The most important dimension of this learning is the understanding that one can choose his or her emotional state. As a result, reactive patterns begin to give way to the possibility of conscious choice. In the context of substance abuse and addictions, this amounts to being able to choose a state other than craving (Gray, 2001, Goleman, 1995).

Positive Self-efficacy. As participants become more expert at defining their own affective state, they become aware of their own capacity for choice and self-control. Self-efficacy is generated at a fundamental feeling level that is linked to a personal experience of making effective choices (Bandura, 1997; Gray, 2001).

State orientation shift. As they continue to practice the states and other exercises, the participants become more fully oriented towards their own positive potential. Past experience becomes a source of inspiration for positive change and choice.

Resistance destroyer. In the process of learning the basic states, each participant begins to discover good feelings within. In each session, a strong effort is made to have each participant experience intense positive feelings that s/he has personally generated. As a matter of simple conditioning, the basic patterns attach positive feelings to the facilitators and tend to make the sessions inherently rewarding.

Awakening the choosing Self. As a result of the synergistic interplay of personal experiences in the program, participants become aware of a transcendent whole, or Self, which represents them on a deeper level. This "choosing Self" becomes a center for positive future action (Gray, 1996, 1997a, 2001).

While these exercises have an immediate behavioral utility, the more important task comes as the states are assembled into a single complex state that we understand to be a constellation of a deeper sense of Self. In Jungian theory, the Self represents the unrealized whole towards which healthy personal development strives. While the individual states are useful as building blocks, their capacity to assemble a much deeper and continuing sense of this Self provides more permanent and enduring changes. It is in itself a resource state, but it also begins to awaken the individual to his or her identity with a continuing Self who can transcend the momentary vagaries of existence (Gray 1997a, 1996).

To attain the complex resource state, "NOW," the participants are invited to fire

off the five core states, one at a time. Each state is fired off just as the state that precedes it is moving into peak. The sequence is repeated several times and anchored to another gesture—making a fist and punching it out (as if in emphasis).

In the second half of the program, a new set of resource states is assembled. This set is based on childhood dreams, meaningful jobs and roles, innate capacities, skills and experiences of self-esteem. Six examples from each category are assembled into complex anchors and the whole melange is stacked together with the "NOW" state. On this level, the complex Anchor provides a sense of personal depth and suggests a direction. It is often experienced as empowering, peaceful, highly energized and directed.

The next exercise requires the participants to fire off the "NOW" resource and use it to explore possible futures rooted in the feeling tone associated with that state. The specific intervention makes use of a technique called pseudo-orientation in time. The technique depends upon the complementary ideas that people have the resources that they need in order to accomplish their outcomes; that any outcome rooted in a deep sense of personal identity and direction will be highly motivating, and that imagination is a form of practical experience (Erickson, 1954; Bandler and MacDonald, 1987; Hammond, 1990; Bandura, 1997).

As one of our aims is to generalize positive experiences of efficacy and self-esteem into multiple contexts, we explore five varieties of futures. All are rooted in the complex anchor, "NOW." This is a crucial step. Erickson (1954) and Bandura (1997) take some pains to show that an empowering image of the future must be rooted in real capacities and create reasonable expectations of success; otherwise it is no more than a pipe dream. "NOW" provides just such a foundation. The futures examined are: spiritual-life, relationships, intellectual life, occupation/work life, and health. Participants are instructed to get in touch with the "NOW" resource state and visit each of these future contexts. From this state, how will they experience the future and how will it feel?

Well-formedness constraints are an important part of NLP interventions. The idea itself is derived from structural linguistics and refers to the idea that there is a necessary set of constraints that determine whether an outcome can become motivating or even possible. A well-formed outcome is an outcome that is self-motivating and whose logic is ap-

parent to the participant (Andreas, C. and and Andreas, S., 1989; Bandler and Grinder, 1975; 1979; Bodenhamer and Hall, 1998; Robbins, 1986; Linden and Perutz, 1998). Each of the possible futures noted is subjected to a series of behavioral tests to ensure that it fulfils the criteria for well-formed outcomes.

Once these basic *well-formedness criteria* are met, participants are invited to use their imaginations to step into the outcome through the "NOW" state. As they enter fully into the experience of the futures that they have created, they are encouraged to imagine how they got there and to enumerate the specific steps that they took to reach that imagined goal. Recent research by Pham and Taylor (1999) has shown fairly conclusively that imagined futures produce benefits only when they specify the concrete steps needed to get there.

For the last several weeks of the program, there remain a number of exercises that cannot be described in detail at this time. The last exercise, Sponsoring a Potential, ends the program with an initiatic experience of the future Self. Many participants have a powerful, emotional experience of themselves and end the program on a high note.

Complete details on the exercises can be obtained from the author.

Results

Statistical measures

Statistical measures were provided by an outside contractor who created an SPSS (Statistical Package for Social Sciences) file based upon data elements collected during approximately one year of treatment (n=127). Twenty-eight records were removed because of ambiguous or missing data. This left 99 valid cases with observable measurements (urinalysis results).

Of the ninety-nine valid cases, eighty (80.8 percent) were program graduates. A total of nineteen (19.2 percent) were non-graduates, with two of those due to the fact that they were excluded from the program (failed to attend the four initial sessions). Pre- and post-urinalysis data were available for the two excluded cases, so they are grouped with the other non-graduates for analysis.

Analyses of variance for several conditions were performed with no significant differences appearing between completers and non-completers, whether or not positive specimens had been submitted before treatment.

Fifty-five percent of Brooklyn Program graduates for whom appropriate data were

available remained abstinent after completion of the program. Roughly one-third (32.5 percent) of those who submitted positive urinalyses were determined to be in need of further treatment. Among non-graduates, 16 percent remained abstinent and 68.4 percent of the remainder were determined in need of further treatment. The difference between these groups in terms of the mean number of positive urinalysis results submitted after graduation date failed to be statistically significant at either the .01 or .05 levels of confidence.

An examination of program participants with documented recent drug use prior to the program (n=47) reveals that 70.3 percent of those who graduated (n=37) submitted positive urinalysis results, and slightly more than half of those (51.4 percent) were determined in need of further treatment following program completion. By way of comparison, the 10 non-graduates all submitted positive urinalysis, and 80 percent were determined in need of further treatment. The difference between graduates and non-graduates in this smaller subset in terms of the mean number of positive urinalysis results submitted after graduation date also failed to be statistically significant at either the .01 or .05 levels.

An examination of several variables, namely those detailing treatment history and the timing of the last positive urinalysis submitted before program graduation date, revealed no significant correlations with the need for further treatment. Several of these calculations involved such a small number of cases that the analysis simply could not run.

A larger, more complete dataset could yield more detailed and perhaps even slightly different results. As such, this analysis might best be viewed as a preliminary evaluation whose results highlight data elements essential to a comprehensive measure of program effectiveness. Given the current available data, however, the outcomes among program graduates and non-graduates are not statistically different.

Personal Responses

Every participant in the program must complete an evaluation in order to complete the program. Before submitting the evaluations, the participants are informed that their suggestions are taken very seriously and that the program is adjusted with each presentation based upon input received from the participants. An examination of those evaluations finds high levels of satisfaction on the part of program completers.

Informal interviews with participants reveal striking attitude changes through the course of the program. Participants regularly report being angry or resentful about their mandated status in the program and others complain of the unfairness of the placement. By program's end, most such attitudes have been resolved and those graduating with negative attitudes are few and far between.

When asked what exercises or skills developed in the program were most effective, an overwhelming majority of respondents indicate that the anchoring exercises were by far the most effective and the most useful. The most often requested change in the program has been a request that the anchoring exercise be reviewed throughout the remainder of the program. Participants reported that these simple conditioning exercises had provided them with new perspectives on their own capacity for flexibility and change. They regularly associated the control of these states with enhanced choice and self-esteem. Many participants reported an enhanced sense of personal control.

Participants also found the process of designing and visiting possible futures highly rewarding. Many report that these exercises gave them a sense of direction and provided them with an attainable life goal.

A certain number of participants have suggested that the program be extended for a longer term and/or that more sessions be added on a weekly basis. One group was so pleased with their achievement that they requested a change on the completion certificate. They asked that the certificate reflect the program's personal growth dimensions so that they could feel free to display it. The certificates were changed to reflect "The Brooklyn Program: a 16-Week Personal Enhancement Program."

In general, most participants readily make the connection between the presented skills and substance abuse. Nearly all reflect on the positive emphasis as a valuable element contributing to the program's efficacy.

Discussion

The current study examined an in-house, strength-based program for substance abusers operated in the context of the United States Probation Department for the Eastern District of New York. Based on a learning model of substance abuse and seeking to capitalize on the personal strengths of the participants, the program is characterized by high rates of retention and low relapse rates.

Retention and drug-free status

Descriptive statistics indicate that 80 percent of enrollees complete treatment and, of those, 55 percent remain drug free after completion. While these rates do not reflect a statistically significant difference (p<.099), on a human level, they are very impressive. When the results are narrowed to only those graduates who returned positive specimens before entering the program, the abstinence rate falls to 30 percent. Again, although not statistically significant, the success rate matches well with much more time-consuming and expensive treatment options.

Retention rates are an important predictor of future success and the retention rates in the instant study compare favorably with those from other treatment modalities.

The Federal Bureau of Prisons recently released its three-year followup study on persons who completed their 1,000 hour inpatient treatment program. The Project Triad report indicates that after three years, slightly fewer than 50 percent of treated offenders remained drug-free while 52 percent of those not treated tested positive for substances of abuse. (BOP 2001).

Local results reported here compare favorably with the results obtained by the bureau, and at a significant savings of time and resources. Although the time frame differs for the three studies, there is significant literature suggesting that most relapses occur in the first year post treatment (Doweiko, 1996).

With regard to abstinence, typical results among substance-dependant populations are reported as follows: Alterman (1993) reported 58 percent abstinence from cocaine at 7 months post treatment for day treatment patients at the Philadelphia VA Hospital. Grabowski et al. (1993) report that 60 percent of their clients receiving behavioral treatments were able to maintain abstinence from cocaine for 6 weeks, as opposed to 10 percent for standard therapies. Followup from NARA commitments to inpatient treatment from the early 80s found only 13 to 14 percent of those completing the program abstinent after 6 months (Maddox, 1988). According to the Harvard Mental Health Letter, total abstinence after one year for all conditions of the Project Match study of Alcohol treatments was only 25 percent. This, in a population from which every possible complicating factor (psychiatric problems, homelessness, criminal history) had been removed (HMHL, 2000). In a study that examined the relationship between cocaine abuse and anxiety

(O'Leary, 2000), all patients received standard substance abuse treatment. A 90-day post-treatment followup found that 66 percent used some substance (alcohol, cocaine, and/or another drug) during the followup period. This represents a 34 percent abstinence rate.

While not strictly comparable due to our non-medical approach, the reported abstinence levels from the Brooklyn Program compare favorably to results observed in much more intensive programs.

An important factor in retention is the motivation of the participants. Most programs rely either on the force of external coercion or the "treatment readiness" of the client. Although the Brooklyn program relies on coercion for the first several weeks, offenders regularly report that they enjoy the program and experience positive results in their personal lives. This is an important factor. If we can sustain continued attendance, good attitude and positive results without the negative baggage attached to overcoming denial and treatment readiness, there is good reason to believe that these are red herrings.

The literature of NLP suggests that resistance is the problem of the clinician, not the patient. In every case it is the standard presupposition of NLP that it is the responsibility of the therapist to exhibit sufficient flexibility so that the change goes forward. The meaning of your communication is reflected in the client's response. If we encounter resistance, we may be asking the wrong questions (Bandler and Grinder, 1979; Linden and Perutz, 1998; Bandura, 1997; Bodenhammer and Hall, 1998).

Although the current study failed to find a significant difference between completers and non-completers, some inferences may be made based simply on the raw data.

The first is this: The Brooklyn Program has to a large extent replicated the level and results of Project Match with a much more difficult and diverse population. Project Match was the most expensive and extensive test of treatment modalities ever performed.

Project Match involved two independent randomized tests of three treatment modalities on alcohol-dependent patients. One group received outpatient therapy (N = 952); another group was referred for aftercare following inpatient or day hospital treatment (N = 774). Clients in both groups were randomly assigned to one of three 12-week manual-based individual treatments: Cognitive Behavior Coping Skills Therapy (CBT), Motivational Enhancement Therapy (MET),

or Twelve-Step Facilitation Therapy (TSF). Monthly follow-ups were conducted during the year after the end of treatment. Outpatient subjects had abstinence rates of 25 percent at 180 days post treatment, and 20 percent at one year. About 25 percent of all patients had returned to heavy drinking at 180 days.

By comparison, the Brooklyn Program has a 55 percent abstinence rate for all program completers. Of those having positive urine specimens before treatment, 30 percent of Brooklyn Program participants remained abstinent post treatment.

Project Match differs from our program in that it was populated by voluntary participants whose sole problem was alcoholism. All were employed, not dependant on multiple substances, healthy and psychiatrically stable. All of the participants in the Brooklyn Program suffer one or more complicating conditions, including criminal justice status and poly-substance abuse, that would have excluded them from Project Match.

A second possible conclusion is that the frame of "treatment" may be the most important variable in overcoming problems with substance abuse and dependency. Project Match found that there was no significant difference in treatment outcomes between CBT, MET and 12-step enhancement modalities. In the present study, a pilot program that focuses away from the issue of substance abuse obtained results at least as good as more traditional approaches and better than most with a much less significant outlay of provider expense and effort. This result reinforces the perspective of Peele and Brodsky (1991) that addiction and substance abuse are not diseases but choices and habits that are overcome by the reassertion of personal values and choice criteria.

Insofar as the instant research has not completed further follow through and our data collection efforts require further refinement, we hold forth the hope that a strengths-based approach may hold more promise than a contextual frame.

A third conclusion that we may draw from our results is some confirmation that substance abuse is less about the substances abused, or about the "disease of addiction/substance abuse," than it is about choice and personal efficacy.

The Brooklyn Program has taken the radical stance that substance abuse and addiction are not diseases so much as learned strategies for dealing with problems which, in the course of normal learning, become the definers of re-

ality for the victim. In choosing to focus on building access to positive resources, developing choice and creating a future orientation, the Brooklyn Program has achieved results that are at least as good and often better than standard problem-centered approaches. In the course of creating those results, it has manifested a significant savings of time and energy over standard treatment modalities.

Standard contract treatment in the Federal Probation System typically consists of two sessions of group therapy and one individual counseling session for each offender per week. The basic treatment/evaluation period is six months (often more). Costs for these services can range between $150 and $175 per week, amounting to $3,600 per offender over the course of a six-month evaluation period. By contrast, the Brooklyn Program operates with in-house personnel and requires a maximum of 4 hours per facilitator per week. Using only the number of program completers who required no further treatment (n=62), the Brooklyn Program has produced savings of more than $200,000.

Enlarging upon the psychological dimensions of our perspective, the relevance of Prochaska's futurity to change lies not so much in the simple presence of a future goal but in its personal meaning. Jobs, relationships, hopes and outcomes are meaningless unless they embody a deep commitment by the client. They cannot be imposed from without, they must arise from within.

This is the stumbling block upon which many well-intentioned applications of the Stages of Change model fall. If I dictate the future or allow the client to settle upon a goal that is not congruent with his needs for development, the enterprise will fail. The logical value of the outcome means nothing if it is not sufficiently valued by the client. When future goals are appropriately structured upon the foundation of inner values, precontemplation moves to effective action. This is the source of change in the 85 percent of addicts who are self-changers (Peele and Brodsky, 1991).

Directions for Further Research

The program as it now stands developed out of an understanding of addiction and substance abuse rooted in Jungian and Maslowian concepts of personal growth. It built upon these assumptions using concepts drawn from classical conditioning and NLP to create a program of experience in personal growth that provides results that are at least

as good as, and often better than, more expensive and time consuming programs.

Statistical measures must be refined and for all intakes beginning in October 2001, participants have completed SASSI-3 evaluations of substance dependence. These will help to provide more depth to our statistical analyses. Further, the instant research was hampered by incomplete access to urinalysis records for all offenders. At this point all urinalysis records from 1999 forward are available in a computerized database. Further statistical analyses will be enhanced by access to these materials.

It is the belief of the originators that one of the important effects of the program is the growing capacity of participants to directly regulate the chemical state of their organism by creating and modifying affective tone and by creating and enhancing specific states of mind. It would be very interesting and instructive to compare dopamine and serotonin levels in persons who have completed the Brooklyn Program with other substance abusers or dependant persons who have not learned the self-regulatory practices that are at the heart of the program. We would predict that dopamine and serotonin levels vary with the states produced and represent a direct means of overcoming the neurochemical depletions that are common to substance abusers.

Although not derived from specifically spiritual practices, the exercises presented here have a certain affinity with classical meditative practices. The decomposition of emotional states and the enhanced focus used in the conditioning exercises strongly resonate with Hinayana Buddhist practices described in the Abhidamma literature of the Pali Cannon (Bodhi,1993). In light of the researches by Newberg, D'Aquili and Rause (2001), it would be very interesting to compare the brain activation levels of persons who are actively accessing the "NOW" state with persons who are actively meditating.

Implicit in this research, moreover, are multiple directions for research into the matters of personal motivation and the salience of craving. The creation of continuing, non-contingent motivators (an essential factor in Self-actualization/Individuation) may be an important key to success in recovery. The motivational factor has been explored by Peele and Brodsky (1991), Prochaska et al. (1994) and Bandura (1997). This research may open up certain methods to ensure that motivations are personally relevant in a continuing manner. Further, in line with

Prochaska's observations about the nature of positive futurity, we have assumed that the behavioral salience—the tendency for the addictive behavior and related perceptions to be the most highly valued—of addictive craving is relativized by the presence of more personally relevant futures. This is born out in part by Bandura's (1997) assertion that self-efficacy is crucial to the development of believable futures.

Finally, this program points directly to the relevance of the tool sets derived from NLP and the production of spiritual and depth psychological outcomes using simple behavioral techniques. This is a field ripe for study and should not be overlooked. While the author by no means takes a reductionist approach to behavior, here is fruitful ground for the integration of multiple levels of psychological research.

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