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Family Behavior Therapy for Substance Abuse and Other Associated Problems

A Review of Its Intervention Components and Applicability

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A comprehensive evidence-based treatment for substance abuse and other associated problems (Family Behavior Therapy) is described, including its application to both adolescents and adults across a wide range of clinical contexts (i.e., criminal justice, child welfare). Relevant to practitioners and applied clinical researchers, topic areas include its theoretical and empirical background, intervention protocols, methods of enhancing motivation for treatment, and future directions.

Keywords: *Family Behavior Therapy; drug abuse; treatment; intervention*

Overview of Family Behavior Therapy for Substance Abuse

Family Behavior Therapy (FBT) is a robust intervention approach that, in addition to substance abuse and dependence, is capable of addressing a wide-array of problems, including conduct disorders, child maltreatment, depression, family discord, and unemployment. FBT has demonstrated efficacy in both adolescents and adults (see reviews by Carroll & Onken, 2005; Dutra, Stathopoulou et al., 2008; Waldron & Turner, 2008). Its component interventions are also demonstrating great promise in substance abusing parents within the child welfare system (see initial study by Donohue & Van Hasselt, 1999). FBT includes up to 20 treatment sessions ranging from 60 minutes to 2 hours. Sessions are usually scheduled to occur between 6 months and a year. One therapist usually implements FBT in outpatient settings, whereas two therapists implement FBT in client homes when substance abuse and other comorbid problems are especially severe and children are involved (e.g., child maltreatment). When therapy is initiated in homes, one therapist assumes primary responsibilities with adults, while the other treats children.

Therapists utilize checklists to prompt implementation of prescribed protocols, as well as intervention handouts and assignment sheets to assist in generalizing skill acquisition to the home environment. All treatments are skill-oriented, and therapy is initiated with a semistructured Program Orientation to engage patients. Clients are then assisted in developing Behavioral Goals that are incompatible with antecedents to substance use and HIV infection, and anchored to a Contingency Management system. When substance abusers are parents, particularly those involved in child welfare systems, they are prompted to set goals that are relevant to effective parenting behaviors. Behavioral goals are reviewed during each session, and contingent rewards are provided by significant others when goals are accomplished. Following establishment of Behavioral Goals, Treatment Planning is initiated wherein clients choose the order and extent to which

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specified interventions are implemented from a menu of treatment options consisting of the various FBT interventions. All sessions are initiated with the client completing a checklist to assure Basic Necessities in the home are being met (e.g., bills are paid, violence is absent), and when Basic Necessities are absent, such problems are resolved expeditiously utilizing a structured problem-solving method that borrows from the tenants of Self Control (see below).

FBT interventions include strategies to avoid substance use and HIV infection. For example, Stimulus Control involves teaching clients to avoid, and escape from, stimuli that precede substance use and other problem behaviors (e.g., child neglect), and teaching skills that facilitate more time with stimuli that are incompatible with substance use and HIV while promoting goal-oriented behavior. When reviewing antecedent stimuli (i.e., “triggers”) in Stimulus Control, clients are taught to utilize other FBT interventions to resolve problems that are spontaneously indicated. There is a Self Control intervention that may be utilized to reduce the intensity of problematic impulsive behaviors (e.g., unprotected sexual activity) and generate opportunities to engage in behaviors that are incompatible with substance use (e.g., use of condoms). Communication Skills Training may be utilized to positively request nondrug using people to engage in “clean” activities or resolve conflicts that often end in substance use or other problem behaviors (e.g., child neglect, domestic violence). There are therapies to assist in obtaining desired employment (i.e., Job Club methods) and maintaining effective Financial Management. Family members are taught to acknowledge reinforcing positive attributes and behaviors of one another in “I’ve Got a Great Family.”

When substance abusers are parents, children receive child-focused treatments while adults receive treatment in another room. The child-focused treatments are designed to increase the reinforcement value of children, thereby decreasing their risk of child neglect and increasing desire of parents to spend more time in nondrug associated activities with their children. These treatments include teaching children to differentially reinforce desired parental behaviors (i.e., Catching My Parents Being Good), teaching them to increase rate and quality of assistance to their parents (i.e., Offering to Help My Parents), performing talent shows and activities to “show-off” positive personal qualities and skills taught in therapy (Showing My Parent How I’m Special), and teaching them home safety skills (Safety Skills Stories).

There are treatments available to teach parents how to differentially reinforce desired behaviors and ignore undesired behaviors (i.e., Catching

My Children Being Good), and manage noncompliance of children through clearly stated directions and consequences (i.e., Child Compliance Training). Parents learn a nonaversive discipline strategy (i.e., Positive Practice) to utilize when their children perform undesired behaviors. When therapy is implemented in the home, home tours are utilized to identify and remove home hazards and encourage cleanliness and aesthetic enhancements (i.e., Home Safety and Beautification), thus making family home activities more reinforcing and safe.

Once implemented, skill-based interventions are usually reviewed in all remaining sessions to a progressively lesser extent, and involve therapy assignments between sessions to enhance generalization of skill acquisition. Role-playing and behavioral rehearsal are also utilized extensively to improve the confidence of clients, and prepare them for difficult in vivo situations. That is, after 1 intervention skill is implemented, it is usually implemented in all remaining sessions.

Historical, Theoretical, and Empirical Background

In 1989, Nathan Azrin was awarded a grant from the National Institute on Drug Abuse to develop and formally evaluate the first comprehensive behavioral therapy for drug abuse in adolescents (NIDA R01DA05295). At the time of this award, there were very few behavioral treatments for illicit drug abuse available, and existing drug treatments did not comprehensively address complicated factors, such as comorbid diagnoses, poor therapy session attendance, and therapist drift. Behavioral treatments for alcohol abuse were more advanced than those for illicit drug abuse, albeit still in their infancy. The Community Reinforcement Approach (CRA; Hunt & Azrin, 1973), for instance, was among the most effective treatments for alcohol abuse (see empirical review by Hester & Miller, 2003). In this approach, alcohol is conceptualized to be a strong inherent reinforcer, thereby maximizing the importance of spending time in activities that facilitated alcohol use. CRA is aimed at restructuring the environment to make alcohol use more difficult, and nonalcohol associated activities more reinforcing. CRA was innovative in the 1970s because it was one of the first evidence-based treatments to involve significant others and community support systems in the treatment plan, utilize multiple behavioral therapies to address problems that contributed to alcohol abuse (e.g., contingency contracting, communication skills training, job club), and encourage the significant others of those who abuse substances to permit negative consequences of alcohol

use to naturally occur (Azrin, Sisson, Meyers, & Godley, 1982). For instance, relevant to the later development of evidence-based treatments for domestic violence, CRA was the first behavioral treatment to explicitly encourage female victims of domestic violence to consequence violence by moving in with relatives, and utilize escape routes when signs of intoxication were indicated.

Thus, CRA provided a strong foundation in which to develop behavioral treatments specific to drug abuse (i.e., FBT; see initial study by Azrin, Donohue et al., 1994). In this intervention, youth were encouraged to review their negative consequences of drug use early in therapy to instill motivation, and a point system similar to the programs found effective in conduct disordered youth by Gerald Patterson and colleagues (Patterson & Reid, 1973) was developed to reinforce nondrug associated behavior.

The development of contingency management in FBT was also greatly inspired from the pioneering work of Higgins, Budney and their colleagues in contingency management (Budney, Higgins, Delaney, & Kent, 1991; Higgins, Delaney, Budney, & Bickel, 1991). In controlled trials, these investigators found significant reductions in adult drug use occurred upon administration of vouchers that could be exchanged for rewards (e.g., money) when drug abstinence was indicated in urinalysis testing. FBT contingency management was anchored to objective urinalysis testing. However, instead of therapist-generated vouchers, youth received rewards from family members for doing behaviors that were incompatible with drug use. Family members were also taught to withhold reinforcement when signs of drug use (e.g., smell of marijuana, late for curfew) were recognized, thereby improving sensitivity of drug use detection in youth. CRA communication skills training exercises were utilized to encourage youth to appropriately request nondrug associated reinforcers, improve relationships with significant others, and obtain job interviews. Parents were chiefly involved in the treatment plan, and shaping was used to obtain increasingly greater commitments of youth to reduce drug use when abstinence was refused (a technique shown to be quite effective in alcohol abusers in trials performed by the Sobell's; Sobell & Sobell, 1973, 1976).

Although CRA was founded on the tenets of stimulus control (i.e., arranging stimuli in the environment to inhibit substance use behavior and facilitate actions that are incompatible with alcohol use), this stimulus control method was not formalized. Therefore, in treating illicit drug abuse for adolescents, stimulus control involved teaching substance abusers to first identify antecedents to drug use and nondrug use, and systematically praise clients for completion of drug incompatible behaviors.

To assist in eliminating urges or strong desires to use drugs, an urge control intervention was influenced by Cautela's (1967) covert sensitization therapy. In Cautela's intervention, clients are instructed to imagine aversive stimuli when alcohol is about to be ingested. Through multiple trials, desire for alcohol use becomes less intense due to its pairing with aversive images. Two issues occurred in early FBT trials when piloting Cautela's method in predominately nonmotivated adolescents who abused substances. First, many adolescents were unwilling or unable to vividly imagine the scenarios due to their lack of motivation and developmental limitations, respectively. This problem was solved by instructing youth to describe their thoughts and images to the therapist "aloud" when conducting the trials. Thus, they were able to receive timely instructional prompts and feedback regarding their drug use avoidance and escape experiences. Second, FBT was developed in south Florida in the 1980s when crack cocaine use was emerging in the United States. Thus, many clients complained that by imagining their drug use situations immediately prior to drug use, they could not effectively lower their urges due to powerful positive images of this form of cocaine. Therefore, they were instead instructed to escape from the very first thought or image (initial antecedent or "trigger") associated with drug use in the response chain. That is, an attempt was made to terminate the urge or craving when it was first recognized in the environment, and thus relatively weak.

Therefore, although relying heavily on the CRA approach, FBT differed from this and other treatments in a number of meaningful ways, including greater emphasis on contingency contracting, utilization of impulse control strategies specific to drug use scenarios, and explicitly monitored environmental stimuli relevant to substance use. It was eventually coined FBT due to its increased emphasis of various family members.

About the time FBT was being developed for youth drug abusers, several extenuating circumstances resulted in an initial lack of youth referrals. Although youth recruitment issues were later successfully addressed, these concerns led the investigative team to additionally recruit adults. Treatments were modified to accommodate both adult and adolescent drug abuse. A "quid pro quo" contingency contract was developed with adults instead of a level system, and developmental factors were considered when implementing skills training (e.g., parents were recruited as significant others for youth, whereas spouses were utilized in adults; school attendance was targeted in youth instead of employment in adults). This unplanned incorporation of adults resulted in a robust treatment capable of treating substance abuse across the life span. In a sample of predominately adult substance

abusers, FBT led to significant reductions of alcohol, marijuana and hard drug use, mood, work/school attendance, conduct, and family functioning relative to a control therapy (Azrin, Donohue et al., 1994; Azrin, McMahon et al., 1994). Importantly, these positive effects were demonstrated irregardless of age (adolescent, adult), type of substance abused, or ethnic background, and maintained up to 9 months posttreatment (Azrin, Acierno et al., 1996).

In 1995, Dr. Nathan Azrin received funding from the National Institute of Mental Health to further develop FBT in the first controlled clinical trial involving youth who were formally diagnosed with comorbid conduct and substance use disorders. The core FBT interventions were essentially the same, with the exception that contingency management incorporated a level system instead of the previously utilized point system to increase its administrative ease for parents, and an enlistment and retention telephone intervention was developed to assist in session attendance. FBT was compared with an intervention that was similar to Alan Kazdin's problem solving therapy that had previously demonstrated efficacy in conduct disordered youth (Kazdin, Bass, Siegel, & Thomas, 1989). Results indicated that both interventions were able to significantly enhance family relationships, employment, school attendance, conduct, ameliorate psychological disorders, and reduce substance use from baseline to posttreatment, and these results were maintained at 4-month follow-up (Azrin, Donohue et al., 2001). According to the results of their meta-analysis, Bender, Springer, and Kim (2006), found this FBT version to be one of only two treatments to produce large effect sizes in dually diagnosed adolescents across externalizing, internalizing, and substance abuse domains.

FBT has evolved for use in severe behavioral disturbances that are known to coexist with substance abuse and dependence (e.g., child maltreatment; Donohue & Van Hasselt, 1999). Its core interventions (i.e., stimulus control, self-control, contingency contracting) have also been significantly enhanced to address severe mental health related problems found in child welfare (i.e., domestic violence). Moreover, John Lutker's groundbreaking work in developing the Ecobehavioral Approach to ameliorate child maltreatment (Lutzker & Rice, 1984) and Hanf and Forehand's parent training methods for improving youth conduct (Forehand & McMahon, 1981) was invaluable in the origination of behavioral treatments to concurrently and explicitly address these problem areas when working with substance abusing parents. For instance, because unintentional injuries remain the leading cause of death for children in the United States after the first year of life (Centers for Disease Control and Prevention,

2004) and the majority of these injuries occur in the home environment (Danseco, Miller, & Spicer, 2000; Nagaraja et al., 2005), FBT now includes home safety and cleanliness tours to identify and ameliorate these concerns in the homes of parents with substance abuse (as originally found effective by Tertinger, Greene, & Lutzker, 1984). Similarly, other empirically validated skill-based interventions have been developed to address commonly experienced problems, such as financial management. Efficacy of the newest version of FBT is currently being compared in a randomized controlled trial to community treatment services as usual in a sample of mothers who abuse drugs and have been founded for child neglect (NIDA 1R01DA020548-01A1). Preliminary single case trials have indicated benefits of FBT in these mothers, including reductions in drug use, DSM-IV symptoms, problems associated with parenting, child abuse potential, reduction of home hazards, and improvements in family relationships.

Thus, FBT has demonstrated effectiveness in treating a wide array of problem behaviors across several controlled trials for both adults and adolescents, and these results have consistently been maintained at follow-up assessments. Among all treatments for substance abuse listed in SAMHSA's National Registry of Evidence-Based Practices and Programs (NREPP), FBT is rated among the top by anonymous reviewers in its ability to be disseminated. It is also among an impressive group of treatments for substance abuse listed in the National Institute of Drug Abuse's Principles of Drug Addiction Treatment (NIDA00-4180, 2000), and regarded as an "emerging developmentally sensitive approach" for drug use problems by the National Institutes of Alcoholism and Alcohol Abuse (NIAAA, 2005).

FBT Intervention Components

This section describes the FBT treatment components, including a brief rationale and overview of each method. First, the core foundation interventions will be described, as these treatments are initially implemented with all types of substance abusers in the following order: (a) Program Orientation, (b) Development of Behavioral Goals and Contingency Management, (c) Standardized Treatment Plan, (d) Assurance of Basic Necessities, and (e) Stimulus Control. Skill-specific treatments are subsequently implemented based on preference ratings completed by clients from a menu of therapy options. Most of the skill-based treatments are applicable to all types of substance abuse (i.e., Self Control, I've Got a Great Family, Positive Request, Arousal Management, Job Getting Skills Training, and Financial

Management). However, when parents are the ones abusing substances, there are several additional treatments available, including Catching My Child Being Good, Child Compliance Training, Positive Practice, Home Safety and Beautification tours (the latter intervention is available only if therapy is provided in the client's home), Catching My Parents Being Good, Offering to Help My Parents, Showing My Parents How I'm Special and Safety Skill Stories.

Program Orientation

Prior to implementing treatment components, therapists provide an orientation to the program. They explain that sessions are audiotaped to permit supervisors and other program staff to determine the extent to which therapy procedures are appropriately implemented (i.e., treatment integrity). The format and nature of therapy are then reviewed, including guidelines for therapy sessions. Importance of maintaining confidentiality is emphasized, including its limitations. Indeed, there is an attempt to explicitly differentiate FBT therapists from third parties, such as Probation and Family Service agencies. However, as a method of increasing motivation for therapy, clients are encouraged to sign releases so therapists can acknowledge their attendance and efforts to the referral agent. The client and adult significant others are prompted to disclose reasons for referral, problems they may have experienced with the referral agency, and why therapy is being pursued. Of course, therapists provide empathy and query how they may be of assistance.

Prior to disclosing results of pretreatment assessment, clients are queried if they have any concerns with the assessment process, or interpretation of results. The review of assessment findings is initiated by verifying the circumstances that were reportedly associated with higher and lower rates of substance use. Positive and negative consequences of use are reviewed to assist in the treatment plan, and an initial commitment to avoid drug use is obtained, whenever possible. The results of satisfaction scales are reviewed to determine why areas in the substance abuser's life are most and least reinforcing, including what would need to be done to bring about 100% happiness in each of the assessed areas (e.g., communication, drug use, child care). The therapist also reviews various methods that have been utilized to support others in therapy (e.g., letters to court officials, relaxed control of authority figures due to therapy gains), queries if these methods would be helpful, and queries how the substance abuser will be able to accomplish therapy goals. Lastly, communication guidelines for use during

therapy sessions are reviewed, and commitments are obtained to follow these guidelines.

Behavioral Goals and Contingency Management (BGCM)

Clients referred to FBT have individual needs that must be accommodated into their treatment program. However, it is also important their treatment plan is consistent with the goals that are set forth by the referral agent (e.g., Judge, Juvenile Justice, Child Protective Services). In BGCM, clients are provided a list of commonly experienced antecedents to drug use (i.e., boredom, upset), and queried to indicate how often these stimuli occur prior to their own drug use (never, sometimes, a lot). For each stimulus that is endorsed "sometimes" or "a lot," the client is queried if the stimulus should be targeted in treatment. All stimuli are constructed, a priori, into behavioral goals that can easily be monitored throughout treatment (e.g., "Knowing you sometimes get bored before you use drugs, would you like to stay busy doing things that do not involve drug use as a goal for treatment?"). Clients are prompted to identify potential obstacles to accomplishing selected goals, and these generic goals are customized, whenever necessary. Similar goals are established for the prevention of HIV risk behaviors because clients who abuse drugs are at increased risk for contracting and spreading HIV in the United States. Generic goals are also available to assist in effectively performing caretaking responsibilities, and enhancing the parent–child relationship.

Goals are transferred to a written contract that permits them to be easily monitored and contingently rewarded by adult significant others. Unique to most programs, clients are encouraged to change the focus of their targeted goals on a weekly basis, and adult significant others are able to flexibly adjust their rewards each week to match the extent of effort necessary to accomplish targeted goals. That is, focusing on (and subsequently accomplishing) more goals that are more difficult will ultimately result in greater rewards. Behavioral goals are monitored in each of the subsequent treatment sessions, and clients are encouraged to spontaneously add goals when reviewing other treatments.

Standardized Treatment Plan

Once behavioral goals and accompanying contingencies are established, treatment planning is initiated. This is a standardized process whereby clients determine which skill-based interventions will be emphasized in treatment. Treatment planning is initiated with the therapist providing a brief

one-sentence description of each FBT treatment component available, and the client is queried to indicate whether or not each of the treatments would be "helpful." When clients are minors, their caregivers are also encouraged to indicate if the treatments would be helpful. All treatments that are deemed helpful are then rank ordered to determine the order in which they will be reviewed during treatment. Rankings of minors are averaged with their parents. Two interventions (i.e., see Assurance of Basic Necessities and Stimulus Control below) are not rank ordered because they are foundation modules that will be initially implemented regardless of choice.

Assurance of Basic Necessities

Clients who have been found to abuse drugs, particularly those who are parents, often experience domestic related emergencies that threaten maintenance of their basic needs (e.g., violence, having utilities turned off due to nonpayment, loss of job, eviction) and often disrupt the therapy process. Of course, emergency situations necessitate immediate priority in therapy. However, these emergencies should be approached with a structured plan that emphasizes skills to address the underlying problems that are likely to recur. Therefore, Assurance of Basic Necessities was developed to be implemented immediately prior to each treatment session to teach clients how to monitor antecedent conditions that have been found to increase the likelihood of emergencies, and integrate emergency management into their treatment plan. This intervention begins by instructing the client, with assistance from significant others when appropriate, to indicate from a generic list any domestic emergencies that may soon occur or have recently occurred. When emergencies or potential emergencies are identified, clients are encouraged to utilize Self Control strategies (see Self Control module below) to assist in resolving the emergencies. Solutions that are selected during the Self Control intervention are subsequently monitored in BGCM (see this module described above) during each remaining treatment session until the emergency is resolved.

Stimulus Control

There are antecedent stimuli in the environment that make drug use more likely or less likely to occur. For instance, people influence drug use by encouraging such use, or bringing about thoughts to use drugs due to their past associations with drug use. Time spent in locations or places, as well as contact with objects (e.g., drug paraphernalia, cash) that have

become associated with drug use are notorious triggers for drug use. Situational antecedents that lead to drug use include arguments, being fired from work, stressors, boredom, ill health, pain, excitement, celebration dinners, and parties. Aversive stimuli (e.g., death of a loved one) trigger substance use due to negative reinforcement. Conversely, people who do not use drugs usually act to buffer against drug use, as these individuals are more likely to engage in nondrug associated activities (e.g., jogging, employment, child care) and spend time in places that are not associated with drug use (e.g., school, employment, family houses).

There are also behaviors that increase or decrease likelihood of contracting HIV. For instance, since HIV is spread through contact with blood and bodily secretions, spending time with people who frequently engage in or encourage such contact (e.g., sex without condoms, multiple sex partners, illicit drug use via needle injection) will increase risk of contracting HIV. There are also stimuli that predispose individuals to engage in HIV risk behaviors (e.g., going to clubs where alcohol use may act to decrease inhibitions to unprotected sex, living in impoverished environments were HIV is more prevalent). Conversely, there are stimuli that are incompatible with such behavior (e.g., affectionate monogamous sexual partners, spending time at home with close friends who do not inject drugs).

Lastly, when parents are drug users, there are stimuli that make effective caretaking of children more likely or less likely to occur. These stimuli include people who engage in drug use (i.e., drug use in front of a child is neglectful) or encourage activities that do not foster appropriate supervision or care of the child (e.g., suggesting to leave a child unattended, reporting that child does not need requisite medical attention). Situational stimuli that lead to child neglect are often similar to those stimuli that lead to drug use, and include stressors that distract from caregiving activities, medical illnesses that lead to painful distractions, and depression.

Therefore, in Stimulus Control the therapist first assists the client and adult significant other(s) in creating a comprehensive list of behavioral stimuli that decrease (safe list) or increase (at-risk list) the client's likelihood of drug use, HIV infection, and if a parent, poor caretaking behavior of children. Once these lists are assembled, the client and significant other are instructed to monitor the client's time spent with safe and at-risk stimuli. Together with the client and significant other, the therapist reviews methods of spending more time with safe stimuli and less time with at-risk stimuli utilizing FBT skill-based intervention components. In reviewing stimulus control items, the therapist is also provided an opportunity to add goals to BGCM.

Self Control

The Self Control intervention is a behavioral skill set that is conceptualized to assist in the management of antecedent stimuli to drug use, such as escape from locations (e.g., crack house), objects (e.g., rolling papers, pipe), and specific events (e.g., 5 pm payday, wakes) that bring about cravings for substance use. Through their association with substance use, these conditioned stimuli (i.e., triggers) often initiate feelings of excitement or thoughts about the reinforcing aspects of substance use and in turn increasingly motivate performance of behaviors that lead to substance use. It is generally easiest to terminate drug cravings and thoughts when the aforementioned antecedent stimuli are initially recognized, that is, before feelings of excitement or thoughts about the reinforcing aspects of substance use are permitted to intensify. Indeed, it is upon first recognition of these triggers that individuals are most likely to focus on drug incompatible alternative behaviors. In addition to recognizing drug triggers early in the response chain, it is important to punish drug related thoughts and reward goal-oriented, drug-incompatible behavior. It is also true that antecedent stimuli both inhibit (e.g., monogamous relationships), and facilitate (e.g., unprotected sex, sharing needles used to inject illicit drugs), HIV risk behaviors.

Relevant to substance abusing parents, child neglect involves the omission of appropriate caretaking behaviors (e.g., bathing, changing diapers). The parent ignores or does not recognize environmental stimuli that indicate caretaking behaviors are warranted (e.g., seeing dirt on a child's body, children asking parents to play). Therefore, Self Control is used to prevent child neglect by teaching caregivers to activate appropriate caretaking behaviors immediately in response to environmental stimuli that indicate these behaviors are warranted. For instance, it is best to change a baby's diaper as soon as the bad smell is discovered. If the antecedent cue (i.e., bad smell) is ignored or not recognized, the parent can become desensitized to its potential to signal harm (i.e., rash), resulting in failure to perform the appropriate caretaking behavior. Thus, it is easier to engage in responsible caretaking behavior when antecedent stimuli are first recognized. Indeed, recognizing these cues early permits timely generation of the negative consequences associated with ignoring these cues to assist in motivating the parent to generate appropriate alternative caretaking behaviors.

In Self Control, clients are instructed to imagine trials in which they recognize antecedent stimuli that act to trigger drug use, HIV infection, or the need for child care. For each trial, the client is instructed to imagine aloud a series of prescribed procedures that are relevant to effectively

escaping from at-risk stimuli so the therapist can provide instructional prompts and feedback. For instance, upon first recognition of a drug use cue in an imagined trial scenario involving an offer to use cocaine, the client would (a) interrupt pleasant feelings, thoughts or images of cocaine use by shouting, "Stop!" (b) state at least 1 negative consequence for self and 1 negative consequences for others that could occur if drug use occurred, (c) scan and relaxing muscles while taking a few deep breaths, (d) state four prosocial alternatives to drug use in the solicited situation, (e) imagine engaging in one or more of the generated alternatives, (f) imagine telling a loved one how drug use was avoided, and the person responding positively, and (g) state at least two positive consequences that are likely to result from avoidance of drug use. These steps are similarly performed in response to early detection of stimuli that precede HIV risk behaviors, negative emotions (e.g., anger), ignoring cues that necessitate parenting, and other undesired behaviors that intensify as reinforcing thoughts and images are permitted to occur. Therapists provide descriptive praise and assistance in correct responding throughout trials, and trials are assigned to be practiced at home. Therapists must determine mutually with the client, whether adult significant others are permitted to watch the trials. In some cases, observation by others appears to motivate better performance, whereas for other clients observation appears to disinhibit performance.

Communication Skills Training (Reciprocity Counseling)

I've got a great family (IGGF). Poor communication (e.g., derogatory and critical comments, inability to solve conflicts) often results in stimuli (e.g., avoidance, stress, emotional upset, anger, depression, lack of concern) that lead to drug use. Indeed, poor communication is common in families affected by drug use. IGGF is based on the assumption that effective relationships are ones in which abundant reinforcement is equitably provided and appreciated between family members, thus acting as a buffer to drug use. In IGGF, each family member is instructed to share "things" that are loved, admired or respected about all other family members. Family members are also encouraged to express statements of appreciation, while the therapist provides feedback about these interactions. This intervention is often implemented toward the beginning of each session, or spontaneously subsequent to family arguments, to bring about positive affect during the remaining session.

The *positive request* (PR) procedure involves teaching clients and their family members to obtain desired reinforcers from others in a socially

acceptable manner, and preventing potential arguments that often lead to drug use and result when perceived needs are left unresolved. PR may also be utilized to improve the likelihood of child compliance when parents who abuse substances initiate directives, thereby preventing potential for maltreatment. Through modeling and behavioral rehearsal participants are taught to effectively request reinforcers. Components include (a) briefly stating when a specific behavior is desired, (b) reporting benefits that are likely to occur if the action is performed, (c) stating why the requested action might be difficult or inconvenient to perform, (d) offering to assist in accomplishing the action, offering to reciprocate reinforcement, and (e) suggesting alternative actions. After positive request components are effectively performed in simulated scenarios, participants are assigned to practice positive requests at home, and these assignments are, of course, reviewed during subsequent sessions.

Arousal management (AM). Individuals with a history of drug abuse often evidence problems associated with anger and upset. Along these lines, various illicit substances have been indicated to exacerbate irritability, stress, and decision making, which in turn negatively influence child caregiving activities and family relationships. AM may be utilized spontaneously to decrease upset during sessions, and proactively in situations for which upset is likely to occur in the future. Through modeling and behavioral rehearsal, the therapist teaches the client to (a) identify antecedents to anger and other negative emotional states, (b) conduct a brief relaxation exercise, (c) state the problem in a neutral way, (e) blame environmental circumstances (not others), (f) state something that may have been done to contribute to the behavior that resulted in upset. After sufficient practice during the session, the client is assigned to practice the intervention at home, and subsequently review their performance of this intervention in remaining sessions.

Job Getting Skills Training (Job Club)

Parents who abuse substances often have a difficult time obtaining drug incompatible employment that is both satisfying and pays well. Being un/underemployed makes it difficult to provide basic necessities for family members, and is associated with antecedent conditions that make drug use more likely, such as stress and boredom. Job club is designed to assist substance abusers in obtaining job interviews from potential employers, and enhance their job interviewing skills and behaviors. Skills include

calling prospective employers, disclosing positive qualities and skills that are relevant to employment, and arranging to meet with employers to discuss professional aspirations. Clients are taught to solicit job referrals, and basic interviewing skills. After Job Club components are performed effectively in simulated interview scenarios, clients are prompted to call potential employers and request job interviews in the presence of their therapists.

Financial Management (FM)

Creating financial well-being is extremely important to substance abusers and their family, as they are often unemployed, spend a significant amount of their resources on illicit drugs, do not have intimate partners with whom to share expenses, lack basic vocational and financial management skills, and if parents, often evidence difficulties supporting their offspring. Therefore, FM is focused on assisting clients in balancing their income (e.g., salary, welfare checks, food stamps) and expenses. Learning to identify antecedent stimuli to financial deficits, prioritize spending, and generate methods of gaining and managing additional income, prevents financial crises that are likely to increase urges to use drugs or other related undesired behaviors. Utilizing standardized forms and handouts, therapists assist clients in generating a list of all monthly expenses, and types and amounts of monthly income. Clients are then taught to identify the extent of their financial deficit or surplus, and obtain and manage additional income. When deficits are determined, the client is taught to prioritize expenses from highest priority to lowest priority, and attempt to eliminate or reduce low priority expenses. In cases where eliminating or reducing low priority expenses are infeasible or undesirable, therapists teach clients to brainstorm methods of increasing their monthly income.

Child Management Training

Catching my child being good (CMCBG). CMCBG is appropriate for substance abusing parents, or substance abusers who are expecting to have children in the future. Parental irritability, depression and other negative emotional states that are influenced by the physiological effects of substances, make it difficult for parents who abuse substances to consistently focus on providing their children positive attention for desired behaviors. Also contributing to their failure to provide such attention, many parents who abuse substances have not received sufficient positive attention when

they were children, and therefore have not learned through modeling to appreciate the importance of positively reinforcing their own children for desired behaviors. In turn, noncompliant children are notorious antecedents for drug use. Therefore, teaching parents to reinforce their children consequent to their desired behaviors while ignoring undesired behaviors has been shown to improve conduct of children, and enhances quality in the parent–child relationship. Indeed, focusing on desired behaviors is incompatible with criticism and underlying negative perspective.

CMCBG is a standardized method that incorporates instruction, role-playing, feedback, and therapy assignments to guide and reinforce parents in delivery of positive attention to their children. Clients are first taught basic parenting techniques through extensive role-playing with the therapist, including skills that are relevant to attending, reinforcing immediately, providing descriptive praise, tactile reinforcement, pleasant tone, incidental teaching, queries, avoiding criticism, and ignoring undesired behaviors. After parents are able to demonstrate the aforementioned parenting skills in simulated role-play encounters with the therapist enacting the role of a child in a pleasant activity, the target child is brought into the room so the parent can practice these learned skills in vivo. Finally, parents are assigned to practice catching their children being good while ignoring undesired behaviors at home. Their practice assignments are extensively reviewed in subsequent sessions.

Child compliance training (CCT). Many parents who abuse substances lack effective parenting skills relevant to the effective management of child noncompliance. Often responding critically and harshly to children when they are noncompliant or perform undesired behaviors, these parents are likely to interpret developmental delays and other child misbehaviors as being intentionally and spitefully motivated rather than being influenced by insufficient or inconsistent learning. CCT is a child management procedure that may be utilized to teach clients to effectively direct their children to perform desired behaviors, provide warnings when the child is noncompliant, and consistently punish undesired behaviors with nonaversive consequences. The intervention involves the therapist modeling CCT with the parent enacting the role of a noncompliant child, and the therapist subsequently enacting the role of a noncompliant child while the parent enacts the parenting role. There are facilitated opportunities for clients to practice CCT with their children during session, and practice assignments to practice CCT between sessions.

Positive Practice (PP). PP is a child management procedure that may be utilized by parents to nonaversively punish undesired behaviors that have already occurred by first blaming undesired behaviors on situational factors that are outside the child's control, and subsequently instructing the child to practice alternative desired behaviors. In this manner, the caregiver is provided an opportunity to assist the child in learning to perform desired behaviors more effectively.

Home Safety and Beautification Tour (HSB)

Parents who abuse substances are often unaware of potential home hazards that may harm or create an unsafe environment for their children. Their homes are often messy, and may have household items that need to be replaced or repaired. In addition, their homes often lack things that can be used to stimulate the development of their children (e.g., toys, books, pictures on bedroom walls). Basic stimulating props are frequently absent because caregivers are restricting these objects as punishment, do not think these things are important, or are unable to afford such possessions. Thus, it is important to help these caregivers recognize the importance of maintaining a safe, clean, and stimulating home. The HSB intervention involves a tour of the home to descriptively praise family members for their efforts to prevent home hazards and maintain a clean, stimulating and beautiful home. To accomplish this task, therapists utilize a checklist of common hazards and cleanliness issues to assure sufficient review of requisite information, and monitor progress in therapy. Items on this checklist are pertinent to home and health hazards (i.e., toxins, electrical hazards, home access, adequate food/nutrition, maintenance of medical check-ups, etc.), home cleanliness and beautification, and include home equipment and materials that facilitate personal and social growth for children (i.e., toys, books, clothing, home decorations). During home tours, family members are prompted to recognize hazards, praised for discovering and implementing solutions, and assisted with the generation and implementation of solutions.

Child-Focused Treatment Components

Parents who abuse substances often fail to acknowledge positive behaviors in their children, and perceive their children as being relatively problematic. In search of parental attention, their children are thus more likely

to engage in misconduct. Their children are also less likely to descriptively praise their parents, in part because they lack appropriate modeling of such behavior. Along operant conditioning lines, if children are perceived by parents to be reinforcing to them, parents are more likely to reciprocate positive behaviors with their children. Similarly, positive relationships lower stress, making drug use less likely to occur. Therefore, child-focused interventions are utilized to increase parental perceptions of the reinforcement value of children, thereby motivating these parents to engage in non-drug associated pleasant activities with their children.

Catching my parents being good (CMPBG). This intervention involves first generating situations with children in which their parents have performed behaviors that are appreciated. The therapist then models how to descriptively praise parents for these behaviors, and instructs the child to role-play descriptive praise in similar scenarios with the therapist enacting the parent. Homework assignments are established for the child to practice descriptively praising the parent, and to record these efforts. Parents are taught to assist the child in this endeavor (e.g., "Did you like how I cooked your soup," "Would you like me to write how you liked my soup in your practice book?"), and homework is assigned and subsequently reviewed in all remaining sessions.

Offering to help my parents (OHMP). In this therapy, the child is provided an example in which it is appropriate to offer to assist the parent (e.g., bringing home groceries). The therapist then assists the child in generating ways the parent can be assisted, and models at least one of the generated offers to assist the parent. The child subsequently role-plays similar offers, and is assigned to practice spontaneous offers to help parents at home. Parents are taught to assist children in the completion of this assignment, and completed assignments are reviewed during each subsequent session and rewarded by the parent.

Why I'm special show (WISS). In WISS, therapists utilize a checklist to assist children in choosing activities that are fun, educational, developmentally appropriate, and skill-oriented. For instance, a child might engage in singing a song, writing a poem or reading a literary passage. The children practice these activities with the therapist and their siblings, and later "show-off" these skills in a "talent show" for their parents. Parents are instructed to provide their children enthusiasm and prompted to lead their children in a similar planned activities at home.

Child home safety skills. This treatment incorporates results from a home tour, parental input, and behavioral role-plays in children to determine specific home hazards that will be a focus during the course of treatment. Once home hazards are prioritized according to their potential for harm, corresponding safety skill stories are read to the children. Primarily through modeling and role-playing, children are taught to identify home hazards, generate negative consequences for each hazard, and determine skills relevant to decreasing each home hazard. Children demonstrate newly learned skills to other family members in the home, and family members are encouraged to praise and practice the safety skills with the children.

Methods of Enhancing Motivation for Treatment

Enlistment and Retention Telephone Calls

Individuals who abuse illicit drugs are notorious for missing scheduled sessions, arriving late to scheduled sessions, demonstrating poor participation and compliance during treatment sessions, and prematurely terminating treatment (Gariti et al., 1995). Missed appointments waste available resources (i.e., therapist time), delay the provision of treatment, and limit treatment opportunities for others. Involvement of the client and additional family members in telephone interventions has been found to increase session attendance of families in FBT by about 27%, as well as promptness to sessions attended (Donohue, Azrin et al., 1998). Therefore, several enlistment and retention procedures are implemented to enhance motivation of families for treatment, most of which have evidenced success in controlled trials (see review by Lefforge, Donohue, & Strada, 2007). For instance, a telephone intervention is implemented by either enlistment and retention specialists or FBT therapists on a weekly basis. These telephone calls include introductions, expressing congratulations for getting accepted into the program, indicating the purpose of the client services team is to assure clients are getting their needs met, requesting permission to speak with significant others openly unless requested to keep information confidential, and specifying FBT is a model program by both the National Institutes of Health and the Substance Abuse and Mental Health Services Administration. Clients are queried to briefly report tentative goals for therapy, their personal strengths and things they can do to motivate themselves to do well in therapy, solicitation of family members who could participate in their therapy, and if there's anything that can be done to strengthen their relationships with referral

agents, significant others or court. The enlistment specialist discloses positive qualities of the therapists, and how therapists can make treatment more relevant. There are prompts to assess drug urges/cravings, difficulties with children and adult family members during the past week, and solicit solutions to cope with any difficulties that may have occurred. Clients and adult significant others are also asked how treatment goals were achieved during the past week. Practice assignments may be reviewed, and the next scheduled appointment is verified, including brainstorming solutions to potential problems that may interfere with attendance.

Similar content is reviewed before future scheduled sessions. However, the last call (scheduled to occur within 48 hours of completing treatment) follows a different protocol. Specifically, there is a statement of congratulations for completing program, an assessment of what was liked about program and how the client will utilize acquired skills. There is also an attempt to provide additional referrals, if needed. When clients do not have telephones, arrangements are attempted to call clients when they are at the homes of significant others, or they are mailed letters with content similar to the telephone calls. Although not yet implemented, FBT clients will soon be provided cell phones, including paid minutes each time a session is attended. With the client's permission, similar telephone calls occur with the client's significant other to enhance familial participation.

Structured Feedback Relevant to Compliance

Therapists are primed to expect client noncompliance, and trained to effectively manage noncompliance when it occurs. Indeed, individuals with a history of substance abuse and associated problem behaviors are often unmotivated to initiate treatment procedures. They may refuse to do role-plays, forget their homework, argue with family members during session, or fail to comply with other established therapeutic guidelines. Therefore, to decrease likelihood of such noncompliance, several strategies have been adopted within the FBT model. First, therapists review generic letters that show how their behavioral efforts will be evaluated, and disseminated to others (e.g., Juvenile Justice, Child Welfare). They are informed that immediately after each intervention component is implemented, they will be queried to report how helpful the intervention component was utilizing a 7-point scale of "helpfulness" (1 = *not at all helpful*, 7 = *helpful*). Low scores signal opportunities for therapists to problem solve discontents relatively early in the therapeutic process. Similarly, clients are informed therapists will rate their extent of participation (i.e., completion of homework,

role-play performance, participation of significant others) after each therapy component is reviewed utilizing a rating scale measuring compliance (i.e., 1 = *extremely noncompliant*, 7 = *extremely compliant*). The family is told these ratings will be sent to the referral agent to support the client, assuming a release of information is provided. Thus, clients know what is expected of them. When noncompliance is recurrent, and session audiotapes indicate significant noncompliance even after therapists have attempted procedures that were recommended during supervision to address such noncompliance, the supervisor will colead the next available session with the therapist. These coled sessions offer the therapist on-site supervision in difficult cases, thus facilitating their ability to manage difficult cases in the future.

On-going Contact with Referral Agents

It is important that clients who abuse substances have good relationships with their referral agents, as these individuals (e.g., caseworkers) often control powerful reinforcers (financial assistance, child visitation and custody, transportation). Therefore, an attempt is made to call referral agents at least once a month to disclose progress of clients in therapy. Content includes the client's strengths that were noted by therapists during sessions and favorable outcome results. Therapist ratings of the client's compliance with interventions (1 = *extremely compliant*, 7 = *extremely noncompliant*), their record of attendance, and their promptness to sessions are disclosed. When areas of growth are mentioned, the retention specialist attempts to emphasize extenuating circumstances that may have made it difficult for the client. Solutions to enhance client goals are reviewed, including continued support from judges and additional referrals. Similarly, each month the therapist completes a standardized progress note that is sent to the referral agent. This report includes information about the client's attendance, promptness to sessions, compliance ratings for each intervention attempted, and recommendations. Much of the information reported is redundant with the monthly retention call. However, most referral agents appear to appreciate written documentation.

Future Directions

FBT is a comprehensive evidence-based treatment for substance abuse and associated problems that has been effectively applied in adolescent and adult populations. While empirically evaluated in substance use populations,

its application is not limited to substance use disorder, with a growing body of evidence indicating that it is also effective in addressing problem behaviors including child maltreatment and comorbid psychiatric disorders. In our current ongoing randomized controlled trial involving women who abuse drugs and have been reported for child neglect, the integration of HIV prevention strategies suggested by staff at NIDA has potential to substantially influence this growing and serious health risk among those who abuse substances. Future applications may include development of more comprehensive components that address psychiatric disorders that occur at high rates among those who abuse substances (e.g., physical and intellectual deficits). In addition, application in populations such as those involved in child protective services is an ongoing development, and may serve as a model for the application of FBT in still other populations.

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