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Behavioral Couples Therapy for Alcoholism and Drug Abuse: Where We've Been, Where We Are, and Where We're Going

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Among the various types of couple and family therapies used to treat substance abuse, Behavioral Couples Therapy (BCT) has the strongest empirical support for its effectiveness. During the last 3 decades, multiple studies have consistently found participation in BCT by married or cohabiting substance-abusing patients results in significant reductions in substance use, decreased problems related to substance use (e.g., job loss, hospitalization), and improved relationship satisfaction. Recently, investigations exploring other outcomes have found that, compared to traditional individual-based treatments, participation in BCT results in significantly (a) higher reductions in partner violence, (b) greater improvements in psychosocial functioning of children who live with parents who receive the intervention, and (c) better cost-benefit and cost-effectiveness. In addition to providing an overview of the theoretical underpinnings of BCT, methods used with this intervention, and the literature supporting its use, this article also examines the future directions of BCT research for substance abuse.

Keywords: couples therapy; drug abuse; alcoholism; intimate partner violence

Although alcoholism and drug abuse have been historically viewed as individual problems best treated on an individual basis (e.g., Jellinek, 1960), there has been a growing recognition over the last 3 decades that the family often plays a crucial role in the etiology and maintenance of substance misuse. In turn, increased emphasis has gradually been placed on treating the family, as either a primary or ancillary intervention, to reduce or eliminate abusive drinking or drug use, with the substance-abusing patient's behavior conceptualized and understood as occurring within a family system. In a special report given to the U.S. Congress in the early 1970s, the National Institute on Alcohol Abuse and Alcoholism described couple and family therapy as "one of the most outstanding current advances in the area of psychotherapy of alcoholism" and called for controlled studies to test the effectiveness of these promising methods (Keller, 1974, p. 161). Since that time, the call to examine family-based treatment approaches for substance abuse has been answered by many different research groups; initially with small-scale studies and, as evidence of effectiveness accumulated, followed by large-scale randomized clinical trials. Taken as a whole, the results of the investigations indicate that the early promise of family treatment for alcoholism and drug abuse has, to a large degree, been realized. As a case in point, meta-analytic reviews of randomized clinical trials have concluded that, compared to individual-based interventions that focus exclusively on the substance-abusing patient, family-involved treatments result in higher levels of abstinence, for both alcoholism (O'Farrell & Fals-Stewart, 2001) and drug abuse (Stanton & Shadish, 1997).

Although many different types of couple- and family-based interventions are available and have been used with alcoholic and drug-abusing patients, Behavioral Couples Therapy (BCT) has, to date, the strongest empirical support for its effectiveness (O'Farrell & Fals-Stewart, 2003). In this review, we provide a brief discussion of (a) the theoretical rationale for the use and effectiveness of BCT with substance-abusing patients, (b) typical treatment methods used as part of the BCT intervention with substance-abusing patients and their partners, (c) past and ongoing research findings supporting the effectiveness of BCT in terms of the targeted primary outcome domains (i.e., substance use and dyadic adjustment), and (d) the results of recently completed investigations exploring the effects of BCT on secondary outcomes (i.e., outcomes not primarily targeted by BCT, but deemed to be of considerable importance, such as intimate partner violence, children's emotional and behavioral functioning, and cost outcomes, such as cost-benefit and cost-effectiveness). In addition, we also discuss some important gaps in the BCT literature and, within that context, describe the directions in which this programmatic line of research is now heading.

Purpose of BCT for Substance Abuse

Theoretical Rationale for Use of Couples Therapy to Treat Substance Use Disorders

The causal connections between substance use and relationship discord are complex and appear to interact reciprocally. For example, chronic substance use outside the home is correlated with reduced marital satisfaction for spouses (e.g., Dunn, Jacob, Hummon, & Seilhamer, 1987). At the same time, however, stressful marital interactions are related to increased problematic substance use and are related to relapse among alcoholics and drug abusers after treatment (e.g., Fals-Stewart & Birchler, 1994; Maisto, O'Farrell, McKay, Connors, & Pelcovitz, 1988). Thus, the relationship between substance use and marital problems is not unidirectional, with one consistently causing the other, but rather each can serve as a precursor to the other, creating a vicious cycle from which couples that include a partner who abuses drugs or alcohol often have difficulty escaping.

Viewed from a family perspective, there are several familial antecedent conditions and reinforcing consequences of substance use. Poor communication and problem solving, arguing, financial stressors, and nagging are common antecedents to substance use. Consequences of

substance use can be positive or negative. For instance, certain behaviors by a nonsubstance-abusing spouse, such as avoiding conflict with the substance-abusing partner when he or she is intoxicated or engaging in care-taking behaviors during or after episodes of drinking or drug taking, are positive consequences of substance abuse and can thus inadvertently reinforce continued substance-using behavior. Partners making disapproving verbal comments about the substance users' drinking or drug use is perhaps the most commonly observed negative consequence of substance abuse (e.g., Becker & Miller, 1976). Other negative effects of substance use on the family, such as psychological distress of the spouse, increased social, behavioral, academic, and emotional problems among children, and raised levels of stress in the family system, can lead to or exacerbate substance use (Moos, Finney, & Cronkite, 1990).

Taken as a whole, the strong interrelationship between substance use and family interaction would suggest that interventions that address only one aspect of this relationship would be less than optimal. However, traditional interventions for substance abuse, which focus largely on the individual substance-abusing patient, often do just that. In contrast, BCT (and, for that matter, family-based treatments for substance abuse in general) have two primary objectives that evolve from a recognition of the interrelationship between substance use and family interaction: (a) eliminate abusive drinking and drug use and harness the support of the family to support positively the patients' efforts to change and, relatedly, (b) alter dyadic and family interaction patterns to promote a family environment that is more conducive to sobriety. Viewed from a marital or intimate relationship context, a high priority is to change substance-related interaction patterns between partners, such as nagging about past drinking and drug use and ignoring or otherwise minimizing positive aspects of current sober behavior. Thus, abstinent alcohol- and drug-abusing patients and their partners are encouraged to engage in and are provided training in behaviors that are more pleasing to each other. Continued discussions about and focus on past or "possible" future drinking or drug use increases the likelihood of relapses (Maisto et al., 1988).

Taking into account our conceptual understanding of the cyclic interplay between substance use and family distress, the BCT intervention for substance abuse is founded upon two fundamental assumptions. First, family members, specifically spouses or other intimate partners, can reward abstinence. Second, reduction of relationship distress and conflict reduces a very significant set of powerful antecedents to substance use and relapse, thereby leading to improved substance use outcomes.

Primary BCT Treatment Components

BCT Methods Used to Address Substance Use. When delivering BCT to a married or cohabiting alcoholic or drug-abusing patient, a therapist treats the substance-abusing patient with his or her intimate partner and works to build support from within the dyadic system for abstinence. The therapist, with extensive input from the partners, develops and has the partners enter into a daily Recovery Contract (which is also referred to as a Sobriety Contract). As part of the contract, partners agree to engage in a daily Sobriety Trust Discussion, in which the substance-abusing partner states his or her intent not to drink or use drugs that day (in the tradition of one day at a time from Alcoholics Anonymous). In turn, the nonsubstance-abusing partner verbally expresses positive support for the patient's efforts to remain sober. For substance-abusing patients who are medically cleared and willing, daily ingestion of medications designed to support abstinence (e.g., naltrexone, disulfiram), witnessed and verbally reinforced by the nonsubstance-abusing partner, is often a component of and occurs during the daily Sobriety Trust discussion. The nonsubstance-abusing partner records the performance of the Sobriety Trust Discussion (and consumption of medication, if applicable) on a daily calendar provided by the therapist. As a condition of the Recovery Contract, both partners agree not to discuss past drinking or drug use or fears of future substance use when at home (i.e., between scheduled BCT sessions) during the course of couples treatment. This agreement is put in place to reduce the

likelihood of substance-related conflicts occurring outside the confines of the therapy sessions, which can trigger relapses. Partners are asked to reserve such discussions for the BCT therapy sessions, which can then be monitored and, if needed, mediated by the therapist. Many contracts also include specific provisions for partners' regular attendance at self-help meetings (e.g., Alcoholics Anonymous meetings, Al-Anon), which are also marked on the provided calendar during the course of treatment.

At the start of each BCT session, the therapist reviews the calendar to ascertain overall compliance with different components of the contract. The calendar provides an ongoing record of progress that is rewarded verbally by the therapist at each session; it also provides a visual (and temporal) record of problems with adherence that can be addressed each week. When possible, the partners perform behaviors that are aspects of their Recovery Contract (e.g., Sobriety Trust Discussion, consumption of abstinence-supporting medication) in each scheduled BCT session to highlight its importance and to allow the therapist to observe the behaviors of the partners, providing corrective feedback as needed.

It is also important to note that an explicit goal of BCT, at least as it is practiced in substance abuse treatment settings in the United States, is abstinence from alcohol and other drugs. For the most part, BCT as a treatment for alcoholism and drug abuse has its roots planted firmly in the U.S., where the fundamental philosophy of the treatment programs and the providers is almost invariably abstinence oriented. To be viewed as an acceptable intervention in the context of nearly any substance abuse treatment program operating in the U.S., BCT providers must work in concert with what is considered an acceptable standard of care and thus have abstinence as the desired treatment outcome.

However, abstinence as a treatment goal is a pragmatic one, not a necessary one. It would not, in fact, be antithetical for BCT to be provided in situations in which the goal was a reduction in, but not necessarily elimination of, substance use. For example, although addictions treatment professionals in the U.S. have, by and large, rejected the notion of drinking reduction as an acceptable goal or outcome, despite some evidence of efficacy (for reviews, see Heather, 1995; Kahler, 1995), controlled drinking interventions are less controversial in other parts of the world and have been used effectively in other countries (e.g., Dawe & Richmond, 1997). In addition, interest in and use of BCT has grown among providers in settings other than alcoholism and drug abuse treatment programs where substance-abusing patients and their partners are often treated, such as marital clinics, mental health programs, private practice (e.g., Fals-Stewart & Birchler, 2003). In these contexts, even in the U.S., adherence to abstinence as the only acceptable objective is not as rigidly held as it is in more traditional substance abuse treatment programs. As such, BCT is being applied in these settings in which partners are seeking only to reduce their drinking or drug use. In turn, BCT has been modified in certain respects to be consonant with the goal of reduced substance use (e.g., partners can enter into a "Drinking Reduction Contract" vs. a Recovery Contract). However, the outcomes of BCT when used as part of a substance use reduction program have not been empirically examined.

BCT Methods Used to Enhance Relationship Functioning. Through the use of standard couple-based behavioral assignments, BCT also seeks to increase positive feelings, shared activities, and constructive communication; these relationship factors are viewed as conducive to sobriety. *Catch Your Partner Doing Something Nice* has each of the partners notice and acknowledge one pleasing behavior performed by their mate each day. In the *Caring Day* assignment, each partner plans ahead to surprise their significant other with a day when they do some special things to show their caring. Planning and engaging in mutually agreed-upon *Shared Rewarding Activities* is important because many substance abusers' families have ceased engaging in shared pleasing activities; participating in such activities has been associated with positive recovery outcomes (Moos, Finney, & Cronkite, 1990). Each activity must involve both partners, either as a couple only or with their children or other adults—and can be performed at or away from home. Teaching *Communication Skills* (e.g., paraphrasing, empathizing, validating) can help the

substance-abusing patient and his or her partner better address stressors in their relationship and in their lives as they arise, which also is viewed as reducing the risk of relapses.

Couples-Based Relapse Prevention and Planning. Relapse prevention planning occurs in the final stages of BCT. At the end of weekly BCT sessions, the partners complete what is typically referred to as a *Continuing Recovery Plan*. This written plan provides an overview of the couples' and individuals partners' ongoing post-BCT activities to promote stable sobriety (e.g., continuation of a daily sobriety trust discussion, attending self-help support meetings) and contingency plans if relapses occur (e.g., recontacting the therapist, re-engaging in self-help support meetings, contacting a sponsor). Along with the specific contingencies outlined in the Continuing Recovery Contract, this activity communicates the message to both partners that a relapse can (and often does) occur and that such an event should not be interpreted as a failure of the substance-abusing partner, the couple, or the treatment. Preparing a plan to address relapse if it occurs enables the partners to believe that such a setback can be overcome quickly.

For many couples, an important aspect of the Continuing Recovery Contract is the negotiation of posttreatment duration of the agreed-to activities. The substance-abusing patient and his or her nonsubstance-abusing partner are often conflicted about the substance-abusing partner's desire to have a "normal life" that eventually does not involve the structured exercises and homework that are part of BCT versus fears of the nonsubstance-abusing partner about the stability of abstinence and gains in relationship quality without continued involvement with certain activities (e.g., self-help meeting attendance, Sobriety Trust Discussions). For example, among couples in which the substance-abusing partners are taking medication to assist with sobriety maintenance, such as Antabuse, one or both partners may express a desire to forgo eventually the continued daily Sobriety Trust Discussion with the observation of medication taking. For such couples, partners develop a mutually agreed-to long-term plan of gradual tapering of the activity until it is extinguished (e.g., for the first month, daily Sobriety Trust Discussion with observed medication-taking, as was done during active treatment; for the second month, the Sobriety Trust Discussion is performed three times per week with observed medication taking; for the third month, once per week Sobriety Trust Discussions are performed with observed medication taking, and so forth). Partners are encouraged to contact their BCT counselor if there are problems or concerns with any of the planned transitions. In our clinical experience, this gradual tapering approach works well because it implicitly recognizes both partners' points of view and allows each of the partners to become steadily accustomed to changes in behaviors over time after active BCT treatment has ended.

Session Structure and Treatment Duration. BCT sessions tend to be moderately-to-highly structured, with the therapist setting a specific agenda for the sessions from the outset of each meeting. A typical BCT session begins with an inquiry about any drinking or use of drugs that has occurred since the last session. Compliance with different aspects of the Recovery Contract that has been negotiated is also reviewed and any difficulties with compliance are discussed and addressed. The session then moves to a detailed review of homework assigned during the previous session and the partners' success in completing the assignments. The therapist then identifies any relationship or other types of problems that may have arisen during the last week that can be addressed in session, with the goal of resolving the problems or designing a plan for resolution. Therapists then introduce new material, such as instruction in and rehearsal of skills to be practiced at home during the week. Toward the end of the session, partners are given specific homework assignments to complete during the subsequent week.

During initial sessions, BCT therapists focus on decreasing negative feelings and interactions about past and possible future drinking or drug use and increasing positive behavioral exchanges between partners. Later sessions move to engage partners in communication skills training, problem-solving strategies, and negotiating behavior change agreements.

Traditionally, the substance-abusing patient and his or her partner are seen together in BCT, typically for 15–20 outpatient couple sessions over 5–6 months, although BCT has been reduced

to as few as six sessions (Fals-Stewart, Birchler, & O'Farrell, 2001). BCT can also be delivered as a stand-alone intervention or as an adjunct to standard individual substance-abuse counseling. Appropriate candidates for BCT are (a) couples in which partners are married or cohabiting for at least a year, (b) couples in which neither partner has a co-occurring psychiatric condition that may significantly interfere with engaging in BCT (e.g., schizophrenia, psychosis), and (c) dyads in which only one member of the couple has a current problem with alcoholism or drug abuse.

Research Findings on BCT for Alcoholism

Effects on Drinking and Relationship Adjustment

Investigations dating back nearly 30 years have compared drinking and relationship outcomes for alcoholic patients and their partners treated with BCT to various forms of therapy that only involve the individual patient (e.g., individual counseling sessions, group therapy). In most of these investigations, the treatment conditions were equally intensive (i.e., participants in the BCT condition and the comparison treatment conditions received the same number of therapy sessions over the same time period). Outcomes were measured at 6 months posttreatment in earlier studies and at quarterly intervals for 18–24 months after treatment in more recent investigations. Despite variations in assessment, differences in certain aspects of the BCT treatment methods, or use of varying types of individual-based treatments used for comparison purposes (i.e., manualized 12-step facilitation treatments, manualized cognitive behavioral treatments, "treatment-as-usual" as provided within the alcoholism treatment facilities where the investigations were conducted), the results of the investigations have been fairly consistent, revealing a pattern of less-frequent drinking, fewer alcohol-related problems, happier relationships, and lower risk of marital separation for alcoholic patients who receive BCT than for patients who receive only individual-based treatment (Azrin, Sisson, Meyers, & Godley, 1982; Bowers & Al-Rehda, 1990; Hedberg & Campbell, 1974; McCrady, Stout, Noel, Abrams, & Nelson, 1991).

Effects on Secondary Outcome Domains

Much of the BCT research with alcoholism has focused on substance use and relationship outcomes. This is understandable, given that BCT for substance abuse is designed primarily to have a direct effect on these areas of functioning. However, it is plausible that, if effective, reductions in drinking and improvements in the relationship could have far broader effects on other, albeit important, secondary outcomes. In the last decade, BCT investigators have turned their attention to other outcomes of public health significance. In particular, emphasis has been placed on examining intimate partner violence (IPV), cost outcomes (i.e., cost-benefit and cost-effectiveness), and the emotional and behavioral adjustment of children living in homes with substance-abusing parents who participate in BCT. These are referred to as secondary outcome domains not to, in any way, minimize their importance, but rather to signify that these outcomes were not the primary targets of the BCT intervention.

IPV. The effect of BCT on the occurrence of IPV has been the focus of several recent BCT investigations. The results of multiple studies suggest that IPV is a highly prevalent problem among alcoholic patients and their partners; estimates suggest roughly two-thirds of the married or cohabiting men entering treatment for alcoholism, or their partners, report at least one episode of male-to-female physical aggression in the year prior to program entry (e.g., O'Farrell, Fals-Stewart, Murphy, & Murphy, 2003). In addition, the likelihood of male-to-female aggression by alcoholic men in treatment is roughly eight times higher on days when drinking occurs than on days when there is no drinking (Fals-Stewart, 2003).

In a recent study, O'Farrell and colleagues (2004) replicated, with a larger, more varied, intent-to-treat sample, initial study findings of dramatically reduced male partner physical

violence associated with abstinence after BCT (O'Farrell, Van Hutton, & Murphy, 1999). This investigation examined partner violence before and after BCT for 303 married or cohabiting male alcoholic patients, and used a demographically matched nonalcoholic comparison sample. In the year before BCT, 60% of alcoholic patients had been violent toward their female partners, five times the comparison sample rate of 12%. In the year after BCT, violence decreased significantly to 24% of the alcoholic sample but remained higher than the comparison group. Among remitted alcoholics after BCT, violence prevalence of 12% was identical to the comparison sample and less than half the rate among relapsed patients (30%). Results for the second year after BCT yielded similar findings to those found for the first year outcomes. Thus, partner violence decreased after BCT, and clinically significant violence reductions occurred for patients who ceased drinking after BCT. Attending more scheduled BCT sessions and using BCT-targeted behaviors more during and after treatment were related to less drinking and less violence after BCT, suggesting that skills couples learn in BCT may promote both sobriety and violence reductions.

Cost Outcomes. As fiscal constraints continue to limit funding for substance abuse treatment, control of costs has become an increasingly important concern. As pressure for cost containment intensifies, clinicians, administrators and investigators are more frequently asked not only to answer the question, "Does this treatment work?" but also "What does it cost and is it really worth it?" (e.g., McGuire, 1989). Thus, several authors have maintained that researchers must conduct cost outcome analyses as part of any comprehensive evaluation of clinical interventions, which includes an examination of cost-benefit and cost-effectiveness (e.g., Yates, 1994). *Cost-benefit analysis* compares the resources used to deliver a given service to the benefits of the intervention, with both costs and benefits expressed in the same units (e.g., dollars). *Cost-effectiveness analysis* compares different interventions on the cost per unit of clinical effect (e.g., cost of a day of abstinence from drugs and alcohol during the year after substance abuse treatment completion).

O'Farrell and colleagues (1996b) presented cost outcomes comparing equally intensive, manualized treatments: (a) BCT plus individual counseling, (b) interactional couples therapy plus individual counseling, and (c) individual counseling only. The cost-benefit analysis of BCT plus individual alcoholism counseling showed: (a) average costs per case for alcohol-related hospital treatments and jail stays decreased from about $7,800 in the year before to about $1,100 in the 2 years after BCT with cost savings averaging about $6,700 per case; and (b) a benefit-to-cost ratio of $8.64 in cost savings for every dollar spent to deliver BCT. None of the positive cost-benefit results observed for BCT were true for subjects given interactional couples therapy plus individual alcoholism counseling for which posttreatment utilization costs increased. Interactional therapy had fewer days abstinent during treatment than BCT, and interactional cases that failed to stay sober during treatment incurred substantial hospital and jail costs during follow-up. Thus, adding BCT to individual alcoholism counseling produced a positive cost-benefit while the addition of interactional couples therapy did not. Individual counseling alone had a significantly more positive benefit-to-cost ratio than BCT plus individual counseling because the cost of delivering individual counseling was about half the cost of delivering BCT plus individual counseling. Cost-effectiveness analyses indicated that BCT plus individual counseling was less cost-effective than individual counseling only and modestly more cost-effective than interactional therapy in producing abstinence from drinking. When marital adjustment outcomes were considered, the three treatments were equally cost-effective except during the active treatment phase when BCT was more cost-effective than interactional couples therapy.

O'Farrell and colleagues (1996a) presented cost outcomes for the second study in which manualized BCT with added couples relapse prevention (RP) sessions was compared with manualized BCT alone. Costs of treatment delivery and health and legal service utilization were measured for the 12 months before and 12 months after BCT. Cost-benefit analysis results for both standard BCT and for the longer and more costly form of BCT with additional RP sessions

showed decreases in health care and legal costs after as compared to before treatment with average cost savings per case of $5,053 for BCT-only and $3,365 for BCT-plus-RP. The benefit-to-cost ratios show $5.97 for BCT-only and $1.89 for BCT-plus-RP in cost savings for every dollar spent to deliver the respective treatment. Although adding RP to BCT led to less drinking and better relationship adjustment, it did not lead to greater cost savings in health and legal service utilization or a more favorable benefit-to-cost ratio than BCT-only. Adding RP to BCT nearly doubled the cost of delivering the basic BCT program. Cost-effectiveness analyses indicated that BCT only was more cost-effective than BCT plus RP in producing abstinence from drinking, but the two treatments were equally cost-effective when marital adjustment outcomes were considered. Since BCT only was less effective clinically than BCT plus RP in producing abstinent days, it was the lower cost of BCT only that produced its greater cost-effectiveness in relation to abstinence.

Children's Emotional and Behavioral Adjustment. During much of the last century, an extensive literature has evolved examining the functioning of children of alcoholics, who are collectively referred to as COAs (for a review, see Windle & Searles, 1990). In general, these investigations have concluded COAs are more likely to have psychosocial problems than do children of nonsubstance-dependent parents. For example, COAs experience increased somatic complaints, internalizing (e.g., anxiety and depression) and externalizing behavior problems (e.g., conduct disorder, alcohol use), lower academic achievement, and lower verbal ability (e.g., Moos & Billings, 1982; Sher, 1991). Despite the emotional and behavioral problems observed among COAs, surveys of patients entering substance abuse treatment who also have custodial children suggest that these parents are very reluctant to allow their children to engage in any type of mental health treatment (Fals-Stewart, Kelley, Fincham, & Golden, 2002). Thus, the most readily available approach to improve the psychosocial functioning of these children may be by successfully treating their parents, with the hope of positive outcomes observed in couples therapy for substance abuse (e.g., reduced substance use, improved communication, reduced conflict) leading to improvements in the children.

Kelley and Fals-Stewart (2002) completed two studies that involved a parallel replication of the same study design with alcoholic and with drug-dependent male patients. In this investigation, 64 married or cohabiting men with a primary drug dependence diagnosis and 71 married or cohabiting men with a primary alcohol dependence diagnosis were randomly assigned to one of three manualized treatments: (a) a 32-session BCT condition, which consisted of 12 BCT plus 20 cognitive-behavioral coping skills sessions designed to treat substance abuse, drawn from *Cognitive-Behavioral Coping Skills Therapy Manual: A Clinical Research Guide for Therapists Treating Individuals with Alcohol Abuse and Dependence* (Project MATCH Research Group, 1994); (b) a 32-session Individual-Based Treatment (IBT) condition, in which the male patient received the same 20 cognitive-behavioral coping skills sessions that were delivered to the male participants in the BCT condition, plus an additional 12 coping skills sessions drawn from Monit, Abrams, Binkoff, Kadden, and Cooney (1989); or (c) a 32-session couples-based Psychoeducational Attention Control Treatment (PACT), in which male partner received the same 20 cognitive-behavioral coping skills sessions that were delivered to male partners in the BCT condition, plus 12 additional lectures delivered to couples that covered topics such as the effects of drugs on the body, etiology of substance abuse, and so forth. The PACT intervention is often used in BCT trials to control for the potential therapeutic effects of counselor contact with and attention provided to the partners (vs. active therapeutic interventions used with partners as part of BCT).

Results in the year after treatment revealed that BCT produced a greater reduction of substance use frequency for men in these couples and more gains in relationship adjustment than did IBT or PACT. Most importantly, BCT also improved psychosocial functioning of the couples' children more than the individual-based treatment or the attention control treatment did. Children of fathers in all three treatments showed evidence of reductions in both internalizing symptoms (e.g., anxiety, depression) and externalizing behaviors (aggression, acting out) in the

year after treatment, but children of fathers who participated in BCT improved more in these domains than did children in the other treatments. Thus, for children of both alcohol- and drug-abusing fathers, BCT improved children's emotional and behavioral functioning more than did individual-based or couple psychoeducation. Of these three treatments, only BCT showed reduction in the number of children with clinically significant psychosocial impairment.

Research on BCT With Drug Abuse

Effects on Drug Use and Relationship Adjustment

Although investigations examining the effects of BCT for alcoholism have been ongoing since the 1970s, research on the effects of BCT for married or cohabiting patients who abuse drugs other than alcohol has only recently been completed. The first randomized study of BCT with drug-abusing clients compared BCT plus individual-based cognitive behavioral treatment to an equally intensive individual-based cognitive-behavioral treatment only for married or cohabiting male patients entering outpatient treatment (Fals-Stewart, Birchler, & O'Farrell, 1996). Clinical outcomes in the year after treatment favored the group that received BCT, both in terms of substance use and relationship functioning. More specifically, compared to patients who received the individual-based treatment only, those who received BCT had fewer days of drug use, fewer drug-related arrests and hospitalizations, and a longer time to relapse after treatment completion. Couples who received BCT also reported more positive relationship adjustment and fewer days separated due to relationship discord than couples whose partners received individual-based treatment only.

In a second randomized study of BCT with drug-abusing patients (Fals-Stewart, O'Farrell, & Birchler, 2001), 30 married or cohabiting male patients receiving methadone maintenance treatment were randomly assigned to either a manualized cognitive-behavioral individual treatment only (Carroll, 1998) or to an equally intensive manualized BCT plus cognitive-behavioral individual treatment. Results during the 6 months of treatment favored the group that received BCT on both drug use and relationship outcomes. BCT compared to cognitive-behavioral individual treatment had significantly fewer drug urine screens that were positive for opiates, fewer drug urine screens that were positive for any of the nine drugs tested, and more positive relationship adjustment.

Fals-Stewart and O'Farrell (in press) studied behavioral family counseling and naltrexone for male opioid-dependent patients. Men ($N = 124$) entering outpatient treatment for opioid dependence who were living with a family member (66% spouses, 25% parents, 9% siblings) took part in the study. These patients were randomly assigned to one of two equally intensive 24-week manualized treatments: (a) a 56-session Behavioral Family Counseling (BFC) plus individual treatment (patients had both individual and family sessions and took naltrexone daily in the presence of a family member) or (b) a 56-session cognitive-behavioral Individual-Based Treatment only (IBT; patients were prescribed naltrexone and were asked in counseling sessions about their compliance but there was no family involvement or compliance contract). BFC patients, compared with their IBT counterparts, ingested more doses of naltrexone, attended more scheduled treatment sessions, remained continuously abstinent longer, and had significantly more days abstinent from opioids and other illicit drugs during treatment and during the year after treatment. Compared to those who received IBT, BFC patients also had significantly fewer drug-related, legal, and family problems at 1-year follow-up.

In the first investigation to examine BCT with female drug-abusing patients (Winters, Fals-Stewart, O'Farrell, Birchler, & Kelley, 2002), 75 married or cohabiting women with a primary drug abuse diagnosis (52% cocaine, 28% opioid, 8% cannabis, and 12% 'other') were randomly assigned to one of two equally intensive manualized treatments: (a) BCT plus individual-based treatment (a cognitive-behavioral coping skills program) or (b) a cognitive-behavioral coping

skills individual-based treatment alone (Carroll, 1998). During the 1-year posttreatment follow-up period, compared to participants who received individual-based treatment, female patients who received BCT had significantly (a) fewer days of substance use, (b) longer periods of continuous abstinence, and (c) higher levels of relationship satisfaction.

Effects on Secondary Outcome Domains

IPV. As with alcoholic couples, IPV is also a highly prevalent problem among couples in which partners abuse other drugs. For example, Fals-Stewart, Golden, and Schumacher (in press) found nearly 60% of men entering treatment for drug abuse report at least one episode of male-to-female physical aggression in the previous year. Given the prevalence of partner aggression among couples with a drug-abusing partner, investigators are now turning to exploring and evaluating intervention methods to reduce IPV in this population. Fals-Stewart, Kashdan, O'Farrell, and Birchler (2002) examined changes in IPV among married or cohabiting drug-abusing patients and their partners. Using data from a previously described investigation (Fals-Stewart, Birchler, & O'Farrell, 1996, reviewed above), this study examined partner violence among 80 married or cohabiting drug-abusing men who were randomly assigned to receive either BCT or an equally intensive individual-based treatment. Although roughly half of the couples in each condition reported male-to-female physical aggression during the year before treatment, the number reporting violence in the year after treatment was significantly lower for BCT (17%) than for individual treatment (42%). Exploratory mediation analyses indicated BCT reduced violence better than individual treatment because BCT reduced drug use, drinking, and relationship problems to a greater extent than individual treatment.

Cost Outcomes. Cost-benefit analyses of participants in this study also favor BCT over cognitive-behavioral individual treatment for substance abuse (Fals-Stewart, O'Farrell, & Birchler, 1997). Social costs in the year before treatment for drug abuse-related health care, criminal justice system use for drug-related crimes, and income from illegal sources and public assistance averaged about $11,000 per case for clients in both treatment groups. In the year after treatment, for the group that received BCT, social costs decreased significantly, to about $4,900 per case, with an average cost savings of about $6,600 per client. Similarly, results of cost-effectiveness analyses also favored the BCT group. BCT produced significantly greater clinical improvements (e.g., fewer days of substance use) per dollar spent to deliver BCT than did individual treatment.

Children's Emotional and Behavioral Adjustment. Although research on children of drug-abusing parents is far less evolved than the COA literature, available research also suggests that children of parents who abuse illicit drugs, who are often referred to as Children of Substance Abusers, or COSAs, display significant emotional and behavioral problems (for a review, see Johnson & Leff, 1999). Preliminary studies indicate the psychosocial functioning of COSAs may, in fact, be significantly worse than that of demographically matched COAs (e.g., Fals-Stewart, Kelley, Cooke, & Golden, 2004). As noted earlier, COSAs whose parents receive BCT demonstrate greater improvement in functioning than children whose parents receive individual treatment or a psychoeducational control treatment (Kelley & Fals-Stewart, 2002). In a separate study exploring the effects of BCT on COSAs, Fals-Stewart and Kelley (2003) found that the positive effects of BCT were significantly greater for preadolescent children (ages 6–12 years) than for adolescent children (ages 13–16 years). These findings suggest parental adjustment may play a comparatively significant role in the lives of young children and thus the positive effects of BCT on the parents lead to children's improvements. In contrast, for older children who have been raised in these homes, other factors may come into play, such as more chronic exposure to parental conflict and increased influence of peers, which may serve to reduce the positive effects of parents' improved functioning.

HIV Risk Behaviors. In a recently completed investigation, Fals-Stewart and colleagues (2003) found that roughly 40% of married or cohabiting drug-abusing men engaged in some

behavior that placed them at high risk for HIV exposure (e.g., risky needle practices, unprotected sexual intercourse with a partner other than their spouse). Unfortunately, in this study, more than 70% of the wives of these men were unaware of their husbands' high-risk behaviors *and* were also having unprotected sexual intercourse with their husbands. Thus, these wives were placed at unknowing high secondary risk exposure for HIV by their husbands. Thus, HIV risk behavior is a significant problem for both partners in these couples.

In a preliminary study, Hoebbel and Fals-Stewart (2003) found that participation in manualized BCT significantly reduced the proportion of male partners ($N = 270$) who engaged in high risk behaviors during the year after treatment compared to an equally intensive individual-based manualized 12-step facilitation treatment (Crits-Christoph et al., 1997) or a couples-based psychoeducational attention control condition. More specifically, although roughly 40% of the male partners in each of the conditions reported engaging in one or more high-risk behaviors during the year before entering treatment, significant differences between the groups emerged during the year after treatment. Among male partners who received BCT with their wives, 19% reported they had engaged in one or more high-risk behaviors during the year after treatment, compared to 33% of the male partners in both the individual counseling condition and 34% of the male partners in the attention control treatment. Mediation analyses indicated that differential improvements in dyadic adjustment and reductions in substance use (both favoring BCT over individual-based treatment and the attention control) partially explained these posttreatment group differences.

Future Directions

As is evident from the large and growing empirical literature on BCT for substance abuse, this programmatic line of research has evolved rapidly over the last 3 decades. BCT investigators have concentrated mostly on exploring the effects of BCT on primary targeted outcome domains; namely, substance use and relationship adjustment. In most BCT investigations, these are the fundamental outcomes of interest. However, driven by emerging public health concerns (e.g., HIV risk behaviors, IPV, child welfare), investigators more recently have turned to exploring other important secondary outcome domains and, as we have reviewed, found positive effects of BCT in these areas as well.

Yet, as we enter the new millennium, much work remains. Important gaps in the BCT research, some of which have been recognized for many years while others have only recently been identified, are only now ready to be addressed. In particular, investigations in the following four areas seem most pressing: (a) dissemination of BCT to community-based treatment programs, (b) exploration of the effects of BCT with substance-abusing populations not well-represented in the BCT empirical literature, such as dual drug-abusing couples (i.e., dyads in which both partners have current drug and/or alcohol problems) and couples in which only female partners abuse alcohol or other drugs, (c) examination of mechanisms of action underlying the effects of BCT, and (d) addition of other intervention components to standard BCT specifically targeted to enhance important secondary outcomes, particularly decreases in IPV, reductions in HIV risk behaviors, and improvements in children's psychosocial adjustment.

Dissemination. Although BCT has strong research support for its efficacy, BCT is not yet widely used in community-based alcoholism and drug abuse treatment settings. Fals-Stewart and Birchler (2001) conducted a national survey of 398 randomly selected U.S. substance abuse treatment programs that treated adults to determine the proportion of settings that use different family- and couples-based therapies. Based on responses from program administrators, 27% of the facilities provided some type of service that included couples, which was mostly confined to assessment. Less than 5% of the agencies used behaviorally oriented couples therapy and none used BCT specifically.

In this survey, program administrators were also queried about significant barriers to adoption of BCT; two primary concerns were raised. BCT was viewed as too costly to deliver, requiring too many sessions in its standard form. In addition, most BCT studies used master's-level therapists as treatment providers, but most community-based treatment programs employ counselors with less formal education or clinical training. Thus, the concern was that counselors who typically work in substance abuse treatment programs, most of whom have undergraduate degrees or less and have little formal clinical training, could not deliver BCT as effectively as master's-level therapists.

Two recently completed studies addressed each of these concerns. First, Fals-Stewart, O'Farrell, and Birchler (2001) evaluated the effectiveness of a briefer version of BCT. Couples (N = 80) were randomly assigned for a 12-week period to either (a) Brief BCT (12 sessions—6 couples sessions alternating with 6 individual sessions), (b) Standard BCT (24 sessions—12 BCT sessions alternating with 12 individual counseling sessions), (c) Individual-Based Treatment (IBT; 12 individual sessions), or (d) Psychoeducational Attention Control Treatment (PACT; 12 sessions—6 individual sessions alternating with 6 educational sessions for the couple). Group comparisons indicated Brief BCT and Standard BCT were significantly more effective than IBT or PACT in terms of male partners' percentage of days abstinent and other outcome indicators during the year after treatment. Furthermore, Brief BCT and standard BCT produced equivalent posttreatment outcomes. A second parallel study with male drug abuse patients produced similar findings as with the alcohol patients (Fals-Stewart, Birchler, & O'Farrell, 2001).

Fals-Stewart and Birchler (2002) examined the differential effect of BCT based on counselors' educational background, comparing outcomes of couples randomly assigned to be treated by either bachelor's- and master's-level counselors in delivering BCT. Results for 48 alcoholic men and their female partners showed that, in comparison to master's-level counselors, bachelor's-level counselors were equivalent in terms of adherence ratings to a BCT treatment manual, but were rated lower in terms of quality of treatment delivery. However, couples who received BCT from the bachelor's- and master's-level counselors reported equivalent (a) levels of satisfaction with treatment, (b) relationship happiness during treatment, and (c) levels of relationship adjustment and the alcoholic patients' percentage of days abstinent at posttreatment, 3-, 6-, 9-, and 12-month follow-up.

The findings of these investigations suggest the primary identified barriers to BCT implementation in community-based settings (i.e., concerns about whether counselors with limited educational backgrounds and that BCT required too many sessions) either were not found when tested (i.e., no differential effectiveness of BCT based on counselors' educational background) or could be effectively overcome (i.e., use of an abbreviated version of BCT). Taken together, the results of these studies suggest BCT could potentially be delivered effectively in the context of community-based substance abuse treatment programs.

However, the effects of BCT described in the extant literature have been evaluated in the context of *efficacy trials* and had the usual characteristics of such studies, including delivery of treatments following a detailed, highly structured manual, close supervision of therapists' adherence (via audiotaped or videotaped therapy sessions), and provision of services in tightly controlled research settings. Given the established efficacy of BCT under such conditions, researchers need to move to the next stage of investigation and design and conduct *effectiveness trials* to examine the degree to which BCT continues to produce the effects observed in the efficacy trials under conditions more routinely observed in "real world" settings (e.g., community-based treatment programs), in which there is far less control or supervision of the intervention.

BCT for Dual Substance Abusing Couples and Couples in Which Only the Female Partner Abuses Drugs or Alcohol. In nearly all of the published BCT studies, an exclusion criterion for participation is couples in which both partners currently have a diagnosis of an alcohol or other substance use disorder. An implicit assumption of BCT as a treatment for substance abuse is that there is support within the dyadic and family systems for abstinence, particularly from the

nonsubstance-abusing partner. However, among couples in which both partners abuse drugs or alcohol, the dyadic system is almost always not supportive of abstinence.

The problem faced by BCT investigators is that a significant proportion of married or cohabiting patients who enter substance abuse treatment are involved in intimate relationships with individuals who also have current problems with drugs or alcohol. This appears to be particularly true of women seeking treatment for substance abuse. For instance, in the Winters and colleagues (2002) study examining the effects of BCT on drug-abusing women and their nonsubstance-abusing male partners, nearly 70% of married or cohabiting substance-abusing women entering treatment at the recruitment site were excluded from the investigation because their male partners met criteria for a substance use disorder.

Although clinical outcome data have not been published on these couples, our clinical experience with partners in these couples suggests they have fairly poor outcomes. If one of the partners receives individual treatment and successfully reduces or eliminates their substance use, the relationships often dissolve. In most instances, however, the treatment-seeking partners fail to stop drinking or using drugs and the relationships survive. Standard BCT with these couples has also been largely ineffective because there exists little support for abstinence within the dyadic system.

Among these couples, the family system is strongly interrelated with the substance use behavior, with many of these partners forming drinking or drug use partnerships. In fact, partners in these couples often describe substance use as a central shared recreational activity (despite its negative consequences). Unless the dyad separates (which, in our experience, is infrequent), intervention efforts are needed to address the family and the substance use together. A variant BCT may be a strong candidate as an approach to address these issues among such couples. However, because the implicit BCT assumption that there is support for abstinence within the dyad is often violated in these couples, some modification to the standard BCT approach is clearly necessary.

Because it is assumed that the principal barrier to effective couple-based treatment with dual substance-abusing couples is an absence of motivation to change in one or both partners, it is likely that an intervention designed specifically to address lack of motivation to change would be a particularly appropriate prelude to BCT with these couples. Motivational interviewing (MI), developed by Miller and Rollnick (2002) and modified for use with at-risk couples by Cordova and colleagues (Cordova, Warren, & Gee, 2001; Gee, Scott, Castellani, & Cordova, 2002), is an empirically validated clinical approach designed to actively facilitate people's intrinsic motivation to change. Miller and Rollnick (2002) define motivational interviewing as "a client-centered, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence" (p. 25). Ambivalence about both substance use and the relationship is likely in dual substance-abusing couples because such couples are particularly likely to experience both benefits and costs associated with continued usage and contemplating change. For example, one benefit of continued substance use is often the role it plays as a central facet of intimate relating. The potential loss of that source of connection between partners may diminish both partners' motivation to change despite a variety of substance abuse-related problems they may be experiencing. Motivational interviewing can be used to actively facilitate partners' willingness to change by working with partners to develop discrepancies between what they are doing now (e.g., substance abuse) and what each partner cares most deeply about when contemplating his or her future (e.g., their own, their partners', and their children's health). Rather than confronting the partners' ambivalence to change, MI can be used to help partners discover that their own most cherished values are incompatible with the choices they are currently making. Further, motivational interviewing can be used to help partners discover their own ability as individuals and as a partnership to actively pursue successful change, particularly in the context of a proven treatment like BCT that can help them come together as effective teammates on the path to shared recovery.

A number of well-controlled studies have demonstrated the efficacy of motivational interviewing interventions with alcohol-abusing individuals (see Burke, Arkowitz, & Dunn, 2002, for a review). What makes motivational interviewing particularly compelling as a possible

adaptation for BCT with dual substance-abusing couples is the substantial evidence that motivational interviewing works well as a prelude to other treatments, even treatments with very different theories of change. In addition, Cordova and colleagues (Cordova et al., 2001; Gee et al., 2002) have demonstrated that motivational interviewing can be easily adapted to couples work resulting in measurable and sustained improvements in relationship functioning. In sum, a couples-based motivational interviewing approach can be added as a prelude to BCT for dual substance-abusing couples to effectively ready them to work collaboratively together as partners during subsequent behavioral couples therapy.

It is also important to emphasize that far more research is needed to examine the effects of BCT with couples in which only the female partner abuses alcohol and drugs. As described earlier, the single BCT investigation with drug-abusing women and their nonsubstance-abusing partners yielded very positive results, in terms of reduced substance use and improved dyadic adjustment (Winters et al., 2002). However, studies with married or cohabiting alcoholic women and their nonsubstance-abusing male partners have not, as of yet, been completed. Moreover, some authors have suggested that couple-based treatment may not be effective with alcoholic women. In their influential review of family therapies for alcoholism, Edwards and Steinglass (1995) reported that studies finding family treatment superior to controls in reducing treatment had a substantially smaller proportion of women participants (average of 6% of subjects) than those investigations that have found no differences in drinking outcomes between a family treatment versus a control treatment (average of 30% female participants). These authors concluded that studies "with a preponderance of male alcoholics, marital or family therapy may be more likely to yield positive results; family therapy for female alcoholics may lose its edge over individual treatment" (p. 502).

Mechanisms of Action. Although the results of multiple randomized clinical trials indicate that BCT works, no studies to date have empirically established *how* it works. More precisely, the mechanisms of action that produce the observed outcomes have not been empirically tested. As described earlier, the general theoretical rationale for the effects of BCT on substance abuse has been that certain dyadic interactions serve as inadvertent reinforcement for continued substance use or relapse and that relationship distress in general is a trigger for substance use. In turn, the BCT intervention package that has evolved from this rationale involves (a) teaching and promoting methods to reinforce sobriety from within the dyad (e.g., engaging in the Recovery Contract), (b) improving communication skills to address problems and conflict appropriately when it arises, and (c) encouraging participation in relationship enhancement exercises (e.g., shared rewarding activities) to increase dyadic adjustment.

However, it is not clear if participation in any or all of these aspects of the BCT intervention results in the improvements observed. For example, although most BCT studies have found that participation in BCT results in improvements in relationship adjustment and reductions in substance use, none have conducted a formal test of mediation to determine if changes in relationship adjustment (i.e., either during treatment or after treatment completion) partially or fully mediate the relationship between type of treatment received (e.g., BCT, individual counseling, an attention control) and substance use outcomes. Indeed, it is important to highlight that most studies have generally failed to find strong relationships between theoretical mechanisms of action of different interventions and subsequent outcomes, both in general psychotherapy (e.g., Orlinski, Grawe, & Parks, 1994; Stiles & Shapiro, 1994), and in substance abuse treatment (e.g., Longabaugh & Wirtz, 2001). Thus, it is important for future studies to test formally the theoretical mechanisms thought to underlie the observed BCT effects.

Additions to Standard BCT Targeted to Enhance Secondary Outcomes. Although participation in BCT appears to have a positive impact on important secondary outcomes, the next phase of research needs to examine if these effects can be enhanced if the BCT intervention were modified to specifically target these outcome domains (in addition to substance use and relationship satisfaction). Some preliminary research is now under way to examine the effect of

adding such circumscribed interventions to the standard BCT intervention package to determine if such outcomes can be further improved.

For example, Fals-Stewart, Fincham, Vendetti, and Kelley (2003) recently completed a study exploring the impact of adding parent skills training to BCT to ascertain the effect on school-aged children living with participating parents. In this study, 72 couples in which the male partners abused drugs and who were raising a school-aged child were randomly assigned to one of four conditions: (a) a 24-session manualized BCT condition, consisting of 12-sessions of BCT plus 12 sessions of 12-step group drug counseling (Daley, Mercer, & Carpenter, 1998); (b) a 24-session manualized Parent Skills plus BCT (PSBCT) condition, consisting of 6 sessions of BCT, 6 sessions of parent skills training, and 12 sessions of 12-step group drug counseling; (c) a manualized 24-session Parent Skills Training (PS) condition, consisting of 12 sessions of parent skills training and 12 sessions of group drug counseling; or (d) a manualized 24-session group drug counseling condition for the male partner only. Parents and children were assessed at baseline, posttreatment, and quarterly thereafter for 12 months. Substance use frequency, dyadic adjustment, and children's emotional and behavioral adjustment were measured at each assessment point. Although participants who received BCT and PSBCT had equivalent substance use frequency and relationship outcomes during the posttreatment follow-up period, with participants having superior outcomes in these areas to those who received PS or IBT, children whose parents received PSBCT had higher levels of psychosocial functioning (i.e., reductions in internalizing and externalizing symptoms) during and after treatment completion than children whose parents were assigned to BCT, PS, or IBT.

These findings suggest that the positive effects of standard BCT on children's emotional and behavioral adjustment can be enhanced with the addition of parent skills training. In addition, the results of the study have implications for similarly designed investigations designed to explore the effects of adding other components to standard BCT to enhance secondary outcomes of interest. Pilot studies are also under way to determine if components added to BCT designed to reduce HIV risk behaviors and IPV will also enhance the effects of standard BCT on these secondary outcomes.

Conclusion

From the initial small-scale pilot studies conducted in the early 1970s to the large, well-funded randomized clinical trials that are ongoing, research on BCT for substance abuse has come a very long way. What the next 30 years of BCT research holds is not completely unclear; many of the future directions for BCT research described in this review were only identified during the last several years as the findings of new and ongoing studies were reported and illuminated new avenues to explore. Thus, based on the findings from current BCT investigations and results from studies in other disciplines, as well as changing public health priorities, the direction of BCT can and, if recent history is any indication, will likely change somewhat from what has been outlined here. However, the overarching objectives of this programmatic line of research will remain the same as they have been for the last quarter century. First, from a research perspective, BCT investigators will continue to modify, refine, and re-evaluate the intervention to make what is already a very effective intervention even more so. Second, from a clinical vantage point, a fundamental goal continues to be to add this well-established treatment technology to the standard armamentarium of substance abuse treatment providers to, in turn, make BCT more available to drug- and alcohol-abusing couples who are likely to benefit from it.

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