

Engaging the Unmotivated in Treatment for Alcohol Problems: A Comparison of Three Strategies for Intervention Through Family Members

William R. Miller, Robert J. Meyers, and J. Scott Tonigan
University of New Mexico

In a randomized clinical trial, 130 concerned significant others (CSOs) were offered 1 of 3 different counseling approaches: (a) an Al-Anon facilitation therapy designed to encourage involvement in the 12-step program, (b) a Johnson Institute intervention to prepare for a confrontational family meeting, or (c) a community reinforcement and family training (CRAFT) approach teaching behavior change skills to use at home. All were manual-guided, with 12 hr of contact. Follow-up interviews continued for 12 months, with 94% completed. The CRAFT approach was more effective in engaging initially unmotivated problem drinkers in treatment (64%) as compared with the more commonly practiced Al-Anon (13%) and Johnson interventions (30%). Two previously reported aspects of the Johnson intervention were replicated: that most CSOs decide not to go through with the family confrontation (70% in this study) and that among those who do, most (75%) succeed in getting the drinker into treatment. All 3 approaches were associated with similar improvement in CSO functioning and relationship quality. Overall treatment engagement rates were higher for CSOs who were parents than for spouses. On average, treatment engagement occurred after 4 to 6 sessions.

A common clinical problem is posed by calls for help from concerned significant others (CSOs) seeking ways to deal with loved ones who are unmotivated to change alcohol problems. Such contacts represent an opportunity for engaging relatively unmotivated problem drinkers in treatment, and such CSOs themselves suffer substantial distress, danger, and adverse consequences (Collins, Leonard, & Searles, 1990; Velleman et al., 1993). Conventional practice includes several approaches for helping CSOs, but clinical research in this area has been sparse, and the outcomes of these interventions are virtually unknown.

At least three distinct CSO counseling approaches have been advocated. They evolved from rather disparate understandings of the nature of motivation and alcohol problems and in some cases lead to seemingly inconsistent recommendations (e.g., intervene vs. detach). An Al-Anon-based approach (Al-Anon Family Groups, 1984, 1990; Alcoholics Anonymous [AA], 1976) advocates loving detachment, acceptance of the CSO's helplessness to control the alcoholic, and group support for the CSO. Little is known about the nature and determinants of outcomes for CSOs (and their loved ones) who are referred to Al-Anon, the most widely used source of support for CSOs. A second approach prepares CSOs for a meeting in which they confront the drinker with the adverse effects of his or her drinking and urge treatment. A familiar U.S. manifestation of this approach is an intervention advocated by Vernon Johnson (1986). Unilateral family therapy

(UFT) is a third approach, in which the CSO is taught coping skills and strategies to use at home to alter the loved one's drinking and motivation for change (cf. Orford, 1994). This is exemplified by the community reinforcement (Sisson & Azrin, 1986, 1993) and unilateral family approaches (Thomas, Adams, Yoshioka, & Ager, 1990; Thomas & Ager, 1993; Thomas & Yoshioka, 1989), wherein the CSO learns skills to extinguish drinking behavior, reinforce nondrinking behaviors, improve communication, reduce conflict, and prepare for treatment initiation.

Although alcohol treatment outcome studies have been published for more than half a century, little evaluation research has been devoted to the problem of helping CSOs (Liepman, Nirenberg, & Begin, 1989). To be sure, there is a large literature on family therapy involving CSOs in treatment as adjunctive supporters, once the drinker is engaged (O'Farrell, 1993). Much less studied is the topic of unilateral intervention through CSOs when the problem drinker is unmotivated for change. Most available studies have been characterized by small sample sizes, limited outcome measures, and methodological problems.

Studies of Al-Anon

Al-Anon was not designed to engage individuals with alcoholism in treatment but to provide support for their loved ones. In fact, Al-Anon members are encouraged to detach and not try to control the alcoholic individual's drinking, advice that would not be expected to increase engagement of the drinker. Its focus is more on the well-being of family members. In this sense, Al-Anon functions as a "no-treatment" control condition for treatment engagement strategies. Nevertheless, referral to Al-Anon is common when relatives call for help regarding drinking problems of a family member.

Dittrich and Trapold (1984) studied benefits in 23 wives of untreated alcoholic husbands randomly assigned to receive imme-

William R. Miller, Robert J. Meyers, and J. Scott Tonigan, Center on Alcoholism, Substance Abuse, and Addictions, University of New Mexico.

This research was supported in part by Grant R01-AA09774 from the National Institute on Alcohol Abuse and Alcoholism.

Correspondence concerning this article should be addressed to Robert J. Meyers, Center on Alcoholism, Substance Abuse, and Addictions, University of New Mexico, 2350 Alamo Southeast, Albuquerque, New Mexico 87131. Electronic mail may be sent to bmeyers@unm.edu.

ciate or delayed group therapy with an Al-Anon focus. After 8 weeks, wives in the treated group reported greater improvement in anxiety, depression, and self-concept and a larger reduction in enabling behavior. Controls later given the same treatment showed comparable gains at 12 months. The outcomes for their husbands were not reported.

In other studies, Al-Anon referral has been used as a control condition against which to test strategies for engaging unmotivated drinkers in treatment. Both Sisson and Azrin (1986) and Barber and Gilbertson (1996) found that referral of concerned relatives to Al-Anon resulted in no behavior change or treatment engagement among the drinkers about whom they were concerned. Thus, the expected outcome from Al-Anon engagement appears to be improvement in functioning for the family member who attends Al-Anon but no change in the drinker.

Studies of the Johnson Intervention

The confrontive Johnson intervention approach, although widely acclaimed as highly effective in engaging and retaining clients in treatment (e.g., Loneck, Garrett, & Banks, 1996a, 1996b), has been subjected to relatively little evaluation. Logan (1983) reported results from 60 families, all of which had completed a social network intervention with an alcoholic individual. Of the 60 alcoholic individuals, 54 (90%) entered and 45 (75%) completed residential treatment. At follow-up of 6 months or more, 26 (43%) were reported to be sober (70% of 37 participants interviewed).

Liepman et al. (1989) reported another uncontrolled assessment of family confrontation training guided by Johnson Institute materials, including in their report those families who did not go through with an intervention. Of 24 social networks trained, only 7 (29%) carried out the confrontation. Six of these 7 alcoholic participants entered detoxification or rehabilitation (86%) compared with 17% of those not confronted; the confronted alcoholic participants also maintained longer abstinence (11 vs. 3 months) on average. No measures of CSO functioning were reported. Although the groups were similar on several prestudy variables, one cannot infer a causal link between the intervention and outcomes because of self-selection factors.

From a retrospective review of 331 case records in a private for-profit treatment center, Loneck et al. (1996a) studied the probability of entering treatment on the basis of the nature of the referral. Clients referred following a therapist-supervised Johnson intervention were significantly more likely to enter (but not more likely to complete) treatment than those in other referral categories (self-referred, coerced, intervention without family training, or family training for an intervention without a therapist present). Actual percentages of treatment entry were not reported for the five groups, although the overall rate of entry was 65% for all groups combined. Again, nonrandom selection precludes causal inferences from this design.

A consistent finding reported across these uncontrolled studies is a higher rate of treatment entry when families complete a Johnson intervention. Such self-selection, however, is subject to a variety of confounding factors, and only a minority of those who initially seek consultation go through with the family confrontation. Evaluation to date has focused on the rate of treatment engagement, and little is known about the longer term impact of

Johnson interventions on the CSOs who participate, on the problem drinkers, and on their relationships.

Studies of Family Training in Behavioral Coping Skills

Sisson and Azrin (1986) randomly assigned 12 CSOs to receive either skills-focused community reinforcement training (CRT) or a disease model/Al-Anon approach (both administered by the same behavior therapists). In the CRT condition, 6 of 7 identified patients entered treatment after a mean of 58.2 days and an average of 7.2 sessions, having already reduced their mean alcohol consumption by more than half. In the comparison group, none entered treatment or evidenced improvement. The fact that the Al-Anon condition was delivered by therapists who were inexperienced and unenthusiastic with the approach renders this an unfair comparison. Azrin, Sisson, Meyers, and Godley (1982), for example, found strikingly better outcomes with CRT relative to traditional (disease model) therapy when both were delivered by behavior therapists, whereas no such differences were observed in Project MATCH (Project MATCH Research Group, 1997), wherein cognitive-behavioral and 12-step approaches were each delivered by therapists trained, experienced in, and committed to their approach.

Other investigators have advocated unilateral family therapy (UFT) with CSOs of unmotivated substance abusers (Szapocznik, Kurtines, Foote, Perez-Vidal, & Hervis, 1983; Thomas et al., 1990; Thomas & Santa, 1982). Thomas, Santa, Bronson, and Oyserman (1987) assigned 25 spouses of alcoholic individuals to receive either immediate or delayed treatment and followed 10 other untreated nonrandom comparison participants (apparently treatment dropouts). From 13 (of 15) treated cases with usable data at the 4- to 6-month follow-up, 8 drinkers (62%) had entered treatment and/or reduced drinking by at least 53%, whereas none of the 6 (of 10) comparison participants at follow-up had done so. In a subsequent trial, 55 spouses were randomized to immediate or delayed UFT. UFT was again associated with improved CSO coping and reduced drinking (Thomas & Ager, 1993). Szapocznik et al., in a randomized design with 37 Hispanic families of drug-abusing adolescents, compared brief strategic therapy delivered to all family members or primarily to the drug abuser (although all were involved in assessment and initial counseling). At follow-ups to 12 months, comparable changes were observed for the two groups in family interactions/structure and in symptomatology of the identified patient. An Australian group developed an approach to teach CSOs to apply successive "pressures to change" (PTCs). PTC procedures overlap substantially with CRT, including motivational feedback, changing social reinforcement patterns with regard to drinking, scheduling incompatible activities, and behavior contracting (Barber & Gilbertson, 1997). A noteworthy difference from CRT is that confrontation based on a Johnson model was used as the highest level of PTC. A pilot evaluation was conducted with 23 clients randomized to three groups: individual PTC, group PTC, or a waiting-list control (Barber & Crisp, 1995). For 10 of 16 clients given PTC, drinkers either "made appointments" to discuss treatment ($n = 7$) or stopped ($n = 1$) or reduced their drinking ($n = 2$), whereas no one on the waiting list showed such change at 3 months. Measures of CSO functioning were consistent with differential improvement in the PTC conditions, but the sample size was sufficient to detect only very large effects.

In a subsequent small trial (Barber & Gilbertson, 1996), 48 CSOs who were in "constant contact" with heavy drinkers were randomized to one of the three conditions from the pilot study or were referred to Al-Anon. In each of the PTC conditions, 4 drinkers kept appointments to discuss treatment and were referred. Eight more (6 in individual PTC) stopped or reduced their drinking. Once again, none of the drinkers whose CSOs were on the waiting list or were referred to Al-Anon made any of these changes during 11 to 17 weeks of follow-up. Therapeutic benefits to CSOs were observed only when PTC was delivered as individual treatment rather than as group treatment (Barber & Gilbertson, 1996). CSOs assigned to Al-Anon also benefited in terms of personal functioning, even though their loved ones did not change. A recent study found support for a self-help form of PTC relative to an untreated control condition (Barber & Gilbertson, 1997).

The long-term objective of the present study was to develop effective methods for counseling CSOs that will improve outcomes both for them and for the drinkers about whom they are concerned. Toward this objective, three different strategies were compared in a randomized trial with CSOs as clients: (a) an Al-Anon-oriented counseling approach, (b) the Johnson Institute intervention, and (c) community reinforcement and family training (CRAFT). The overall project compared rates of successful treatment engagement as well as the relative short- and long-term impact of these three strategies on a range of outcomes, including (a) general function of the CSO; (b) the drinker's alcohol use and related problems; (c) relationship happiness and family environment; (d) health care utilization by the drinker and the CSO; and (e) seeking of further help for alcohol problems, including utilization of Al-Anon and AA. All drinkers prepared for treatment through CSO interventions were offered participation in an embedded clinical trial (Study 2), in which they were randomized to one of two treatments: the community reinforcement approach (Azrin et al., 1982; Meyers & Smith, 1995) or a 12-step facilitation treatment (Nowinski, Baker, & Carroll, 1992). This first report of outcomes from the 5-year Study 1 focuses on rates of treatment engagement and on outcomes for CSOs.

Method

The Study Sample

CSOs participating in this trial were seeking advice or help with regard to the problem drinking of someone who lived with them. Referrals were accepted from various sources, but most came in response to announcements through local news media. We had considered accepting only spouses as participants, but decided that a broader range of CSOs was preferable because (a) nonspouse CSOs also seek help, (b) little is known about the generalizability of spouse intervention approaches to other types of relationships, and (c) it is reasonable to expect that nonspouse CSOs can benefit from interventions (Szapocznik et al., 1983; Szapocznik, Kurtines, Foote, Perez-Vidal, & Hervis, 1986).

To participate in the study, CSOs met all of the following criteria: (a) living with a problem drinker who was either a close relative (parent, child, grandchild, or sibling) or a spouse or unmarried intimate partner; (b) residing within a 60-mile radius of the research site; (c) in contact with the drinker on at least 40% of the past 90 days, with no planned change (e.g., separation) in the next 90 days; (d) at least 18 years of age (both the CSO and the drinker); (e) willing to participate in the research; (f) describing the drinker in a manner consistent with *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed., rev.; *DSM-III-R*; American Psychiatric Association, 1987) diagnostic criteria for alcohol abuse or dependence; and (g) evidence that the drinker refused to seek treatment and had not received any treatment (other than detoxification) for alcohol or drug problems in the prior 3 months. In addition, any of the following excluded a CSO from the study: (a) the CSO also met *DSM-III-R* criteria for a substance use disorder; (b) unremitted psychosis or other severe psychiatric condition in the CSO or the drinker that could impair ability to participate; (c) the CSO intended to receive more than 6 hr of additional treatment during the next 3 months; (d) evidence that the drinker had an illicit drug problem more severe than the alcohol problem (e.g., alcohol abuse but cocaine dependence); (e) any evidence of crack cocaine or intravenous drug abuse; (f) the drinker had received a Johnson Institute intervention within the prior 3 years; (g) the CSO had insufficient reading ability to comprehend the self-assessment packet (approximately sixth-grade reading level); or (h) evidence that the drinker had engaged in domestic violence, or had committed criminal assault during the prior 2 years, or had a history of severe violence (involving a weapon or resulting in hospitalization). Only 7 of these 15 criteria resulted in exclusions at screening. The criterion of at least 40% contact days between the CSO and the drinker was predicated on our analyses of the Project MATCH Research Group (1997) pretreatment data, which indicated that the accuracy of CSO estimates of drinking falls off substantially below this level of contact. Because we relied solely on CSO estimates of drinking for those who did not enter Study 2, we deemed this important for credibility of Study 1 outcome data.

Screening

Referrals were interviewed first through a telephone quick-screen for eligibility. CSOs found ineligible were referred to appropriate community resources. CSOs passing the quick-screen were scheduled for intake as soon as possible. The intake began with an explanation of the study, a review of the elements of informed consent, and the signing of the consent statement. The interviewer then ascertained eligibility through diagnostic information on alcohol, other drugs, and psychosis using the Structured Clinical Interview for *DSM-III-R* (Spitzer, Williams, Gibbon, & First, 1990), which was administered first to the CSO for him- or herself and then again to the CSO to obtain information regarding the drinker.

Fifty cases were excluded for the following reasons: CSO had insufficient contact with the drinker ($n = 17$), drinker had a history of violence ($n = 11$), drinker had not refused treatment ($n = 10$), CSO was unwilling to participate ($n = 4$), CSO was alcohol dependent ($n = 3$), drinker had severe psychiatric disorder ($n = 3$), and drinker did not clearly meet diagnostic criteria for alcohol abuse or dependence ($n = 2$).

Screening

Assessment

Once eligibility was determined, more detailed assessment was completed. Information from the CSO provided the only data that would be available for problem drinkers who did not enter treatment. We therefore obtained data from CSOs regarding all three domains of anticipated impact: CSO status, drinker status, and relationship status. Of central interest was the percentage of participants engaged in treatment, but other important domains were also assessed at intake and follow-up interviews. The intake assessment battery included the following measures.

CSO status. The functioning of CSOs themselves could be affected in several domains, beyond those pertaining to the relationship with the drinker. Beneficial impact of interventions might be observed in emotional status, psychosocial adjustment, physical health, and CSO alcohol and drug use. CSOs completed these measures: the Beck Depression Inventory (BDI; Beck, Steer, & Garbin, 1988); the State-Trait Anxiety Inventory (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983) and the State-Trait Anger Expression Inventory (STAXI; Spielberger, 1988); a self-esteem scale (Heatherton & Polivy, 1991); a physical symptoms scale (R. F. Moos, Cronkite, Billings, & Finney, 1987); and the Spouse Enabling Inventory

and Spouse Sobriety Influence Inventory, which describe CSO coping strategies (Thomas, Yoshioka, & Ager, 1994). The Form 90–Alcohol Intake, a structured assessment interview developed for Project MATCH (Miller, 1996; Tonigan, Miller, & Brown, 1997), was used to determine the quantity and frequency of drinking and other drug use, employment, and health care use. Form 90 is a hybrid of two previously used approaches for alcohol outcome assessment: the timeline follow-back (Sobell & Sobell, 1992) and grid profiling (Miller & Marlatt, 1984). Finally, lifetime and past 3-month incidence of alcohol-related problems and dependence were assessed using the Drinker Inventory of Consequences (DrInC; Miller, Tonigan, & Longabaugh, 1995) and the Alcohol Dependence Scale (ADS; Skinner & Horn, 1984). The DrInC is a measure of negative life consequences (apart from dependence signs), which includes concerns more likely to be experienced by women.

Drinker status. Research indicates that collaterals give information about drinkers' alcohol consumption that is reasonably correlated with drinkers' self-reports (e.g., Tonigan et al., 1997). This appears to be particularly true for CSOs who live with the drinker. We found that the convergence of collateral and self-report data in Project MATCH differed substantially depending on whether collaterals did not ($r = -.20$) or did ($r = .84$) live with and have frequent contact (>40% of days) with the drinker. The Form 90–Alcohol Collateral (Miller, 1996), which was used for obtaining collateral assessment, yielded data on drinking and other drug use, employment, treatment, and health care utilization. The DrInC and ADS were also completed by the CSO, who reported known lifetime and recent (3 months) consequences and dependence symptoms for the drinker.

Relationship status. Because we proposed to study CSOs who have a variety of relationships to problem drinkers, we administered instruments adaptable to a range of dyads. The Family Environment Scale (FES; R. H. Moos & Moos, 1986) was used to assess the quality of family interactions. The Dyadic Adjustment Scale (Spanier, 1976) assessed the quality of spousal relationships and was administered only to marital and cohabiting dyads. The more general Relationship Happiness Scale (Azrin, Naster, & Jones, 1973; Sisson & Azrin, 1986) rates relationship satisfaction in 10 areas using Likert scales. Finally, the Conflict Tactics Scale (Straus, 1979), a structured interview, was used to assess the occurrence of various methods of conflict resolution (including violence) in the CSO–drinker relationship.

Randomization

After intake assessment, CSOs were assigned at random to one of three intervention groups. To ensure a balanced distribution of critical pretreatment characteristics across groups, we used urn randomization (Stout, Wirtz, Carbonari, & DelBoca, 1994). Variables entered into the urn for CSOs were (a) gender, (b) ethnicity, (c) education, (d) age, (e) type of relationship to drinker, (f) lifetime DrInC score, and (g) number of lifetime Al-Anon meetings attended.

Intervention Groups

Al-Anon facilitation. The first intervention paralleled the 12-step facilitation modality developed and tested in Project MATCH (Nowinski et al., 1992) and was designed to engage the CSO in the program and processes of Al-Anon. The underlying philosophy was that the CSO is powerless to control the drinker and must detach, focusing instead on the acceptance program of Al-Anon and on strengthening his or her own mental health. This might be expected to impact the drinker indirectly (e.g., by reducing CSO enabling behavior), but it must be noted that changing the drinker is explicitly disavowed as a goal in Al-Anon. The intervention helped the CSO to become acquainted with basic concepts and readings of Al-Anon (Al-Anon Family Groups, 1973, 1984, 1990; copies of which were provided to CSOs) and to complete its initial steps. The treatment lasted up to 12 sessions of 60 min each, including 8 core sessions intended

to be delivered to all CSOs. The counselor set the length of treatment within these limits, with flexibility to add 2 additional crisis sessions if needed, which directly paralleled the Project MATCH protocol. A therapist manual was developed by Joseph Nowinski, who tailored his Project MATCH manual, standardized treatment content, and trained and supervised the therapists.

Johnson Institute intervention. Vernon Johnson and the Johnson Institute have promoted a special form of family intervention designed to instigate treatment. In this widely used approach, family members are prepared to confront the problem drinker with what they have experienced and observed about the drinking and related problems. In a caring and supportive manner, the drinker is encouraged to enter treatment, and sanctions may be applied for failing to do so. Procedures for conducting this intervention have been well specified (Johnson, 1986; Johnson Institute, no date) and were explicitly followed in delivering this condition. This treatment was provided by professional staff from the Albuquerque Area National Council on Alcoholism and Drug Dependence, who were trained at the Johnson Institute and had regularly practiced this approach. Supervision was provided by A. Lane Leckman, a psychiatrist highly experienced in the approach. This protocol consisted of six sessions of approximately 2 hr each: four preparatory sessions with CSOs, the intervention session with the drinker and CSOs, and a postintervention evaluation session.

CRAFT. The third group replicated and extended the approach tested by Sisson and Azrin (1986), originally developed in the 1980s by Robert J. Meyers, who supervised this treatment condition. The CSO was told that he or she could have a substantial impact on the drinker's alcohol use and decision to enter treatment and was taught skills for doing so. Other adaptive skills were taught to improve the life quality of the CSO. Obviously, modifications were made in the procedures over 2 decades. Specific components retained and modified from the original treatment included the following.

1. Awareness training, which involved raising awareness of negative consequences and of potential benefits of treatment, was modified. The original treatment took a much more confrontational approach that focused on negative consequences to the CSO, whereas CRAFT emphasizes positive benefits to be gained and incorporates the clinical style of motivational interviewing (Miller & Rollnick, 1991).

2. Contingency management training to reinforce nondrinking, extinguish drinking behavior, and avoid interfering with negative consequences of drinking was modified. Imposing negative consequences (punishment) for drinking, emphasized in the original approach, was deemphasized in favor of extinction combined with reinforcement for nondrinking.

3. Communication skill training was retained, including role-play, to increase positive relationship patterns through unilateral counseling.

4. Competing activities were planned as before in order to interfere and compete with drinking. Strategies to interfere with drinking and potential drinking were also practiced.

5. Outside activities procedures were also retained in order to increase the CSO's own reinforcing activities outside the relationship.

6. Handling dangerous situations was given greater emphasis and was moved to the first session of CSO counseling.

7. "Suggesting counseling" procedures were retained, which prepared the CSO to initiate treatment when the drinker appeared ready (see Meyers, Dominguez, & Smith, 1996; Meyers & Smith, 1997). Original procedures placed more emphasis on negative consequences and shame, whereas current CRAFT procedures emphasize positive expectations and reinforcement. Greater care was given to choosing an appropriate time to raise the topic of counseling, rather than waiting for negative consequences to occur.

Procedures originally designed to instigate and maintain disulfiram medication were not used. All treatment was provided through individual counseling, whereas some of the Sisson and Azrin (1986) treatment was done in group format. Finally, a functional analysis procedure was added

to identify triggers for drinking and potential reinforcers for alternative nondrinking behaviors.

Therapists

As noted above, Sisson and Azrin (1986) crossed therapists with conditions, so that both behavioral and traditional (disease and 12-step) conditions were offered by behaviorally oriented therapists. Such therapists would likely have biased expectancies regarding the relative efficacy of the two approaches, and therapist expectancies can be a powerful determinant of outcome (e.g., Leake & King, 1977). To avoid this, we nested therapists within treatment protocols that reflected their own orientation and expertise. Nesting of therapists also mirrors clinical practice, wherein therapists offer the approach(es) with which they are most comfortable and proficient. All treatments were manual-guided and designed to consist of 12 hr of therapist contact.

The Al-Anon facilitation therapy, which was adapted from Project MATCH (Project MATCH Research Group, 1997; Nowinski et al., 1992), was delivered by four counselors with an average of 14 years of experience in 12-step treatment of substance use disorders. Three held master's degrees, and one held a bachelor's degree and had 22 years of 12-step treatment experience. Johnson Institute interventions were delivered by a master's-level counselor with 27 years of alcohol treatment experience and by a licensed independent social worker with 17 years of alcohol treatment experience. CRAFT was provided by five therapists who had had fewer years of experience and who were guided by a manual prepared by Robert J. Meyers. Four CRAFT therapists held master's degrees (with 0 to 3 years of prior alcohol treatment experience), and one had a bachelor's degree and 6 years of alcohol treatment experience. After initial training and supervision with clients not included in the trial, therapists in each condition were certified by the supervisor and continued in weekly supervision meetings to monitor and maintain quality of treatments. All three treatment conditions were videotaped, with randomly selected tapes monitored by the treatment supervisor for each condition to ensure ongoing adherence to protocols. Although session tapes were not systematically coded for analysis, monitoring supervisors had authority to remove a therapist from seeing trial clients if adherence fell below acceptable levels. However, it was never necessary for this step to be taken with therapists in this study.

Treatment for Identified Patients (IPs)

All CSOs were given a 24-hr access number to call when the drinker was willing to consider treatment. When a phone call was received, an initial appointment was scheduled, usually within 1 to 2 days. At this appointment, a clinical staff member described to the drinker (a) the rapid availability of free treatment through the trial and of alternative treatment programs in the community, (b) study procedures, and (c) the conditions of informed consent. No additional exclusion criteria were used at this point; all drinkers referred within 6 months of the CSO's first session were eligible. Drinkers who declined to enter the Study 2 trial or who called after the 6-month eligibility window were referred to other treatment options in the community.

Follow-Up

Follow-up assessments were completed with the CSO (and, when treatment had been initiated, concomitantly with the drinker) at intervals of 3, 6, 9, and 12 months after CSO randomization. At these points, drinking variables were assessed in a manner to yield a continuous daily timeline throughout the 12-month period. Regardless of the drinker's status, CSOs continued to be assessed for 1 year at regular 3-month intervals from their own entry into the trial. Follow-up interviews were conducted by independent research staff who were unaware of group assignment or details of clinical procedures in the trial.

Results

Study Sample

A total of 130 CSOs, of whom 118 (91%) were women, were recruited into the study and were assigned to the Al-Anon facilitation ($n = 45$), Johnson Institute intervention ($n = 40$), or CRAFT ($n = 45$) conditions. Once individuals had entered the trial, they were retained for all analyses (intent to treat), so that this report represents the entire randomized sample.

CSOs were primarily Hispanic (39%) and White non-Hispanic (53%), with 8 Native Americans (6%), 1 African American, and 1 client indicating "other" ethnic origin. They ranged in age from 21 to 81 years, with a mean of 47 years, and reported an average of 14 years of education. For total annual family income, 17% fell below \$15,000 and 53% fell below \$30,000, with only 10% above \$60,000. Their relationship to the loved one about whom they were concerned was that of a spouse (59%), parent (30%), boyfriend or girlfriend (8%), child (1.5%), or grandparent (1.5%); on average the relationship had been of 22 years' duration (range = 1 to 57 years). Over half (58%) had previously sought help through Al-Anon. Most CSOs (73%) were currently married and living with a spouse and were employed full-time (51%) or part-time (17%).

To determine whether the treatment groups were equivalent at baseline, we compared them using one-way analyses of variance (ANOVAs) for 16 pretreatment variables, including continuous indexes of employment, length of marriage, physical symptoms, religious attendance, depression, anger, and use of medical and psychological care. We also conducted six chi-square analyses to compare groups on gender, ethnicity, marital status, type of relationship to the problem drinker, employment status, and prior Al-Anon participation. None of the 22 analyses reflected a significant difference among groups, even with alpha level unprotected at $p < .05$. Neither did the three groups differ significantly with regard to CSOs' estimates of the drinker's alcohol use (frequency or intensity) and negative consequences of drinking or scores on three scales of motivation for change (Miller & Tonigan, 1996). It appears, therefore, that random assignment procedures yielded pretreatment groups that were similar on a broad range of attributes.

CSO Participation

CSOs who sought help regarding a loved one showed a high rate of attendance at their own treatment sessions. Of 12 planned 1-hr sessions, CSOs completed an average of 11.4 (95%) in the Al-Anon facilitation condition and 10.7 (89%) in CRAFT. Of 6 planned 2-hr sessions in the Johnson Institute intervention condition, CSOs on average attended 3.18 sessions, or 6.2 of 12 hr (53%). A chi-square analysis of these percentages reflected a highly significant difference, $\chi^2(2, N = 130) = 18.71, p < .001$. The reason for the lower completion rate in the Johnson Institute intervention group is that a majority of CSOs (70%) decided not to go through with the family confrontation (Session 5), closely replicating a prior report (Liepman et al., 1989). We found no significant difference among the three groups in a one-way ANOVA of the number of days between initial recruitment and completion of the first treatment session ($M = 11.5$ days).

We observed differences among groups on two postrandomization measures. Consistent with the goals of treatment, CSOs in

Al-Anon facilitation therapy were more likely (75%) to have attended Al-Anon during the 90 days after randomization as compared with those in the CRAFT (18%) or Johnson Institute intervention (18%) condition, $\chi^2(2, N = 109) = 45.14, p < .001$. Those in the Al-Anon facilitation condition also reported receiving more therapy sessions outside the project ($M = 4.81, SD = 6.56$) during 90 days compared with those in the Johnson Institute intervention ($M = 2.03, SD = 4.68$) and CRAFT ($M = 2.62, SD = 4.72$) conditions, $F(2, 124) = 3.09, p < .05$, with unprotected alpha level.

Follow-up completion rates were excellent in all three conditions. In the Al-Anon facilitation condition, 98% (44/45) of the follow-up interviews were completed at 3 and 6 months and 93% (42/45) were completed at 9 and 12 months. In the CRAFT condition, all 45 participants completed interviews at 3, 6, and 9 months, as did 44 (98%) at 12 months. Of 40 CSOs in the Johnson Institute intervention condition, 39 were interviewed at 3 and 6 months (98%), 38 (95%) at 9 months, and 36 (90%) at 12 months. Of the 130 randomized CSOs, 94% participated in all four follow-up interviews.

Treatment Engagement

The primary outcome measure here was the percentage of drinkers who were successfully engaged in treatment during the first 6 months following CSO intake (although engagement was tracked for a full 12 months). Such treatment could be received by the drinker through Study 2 (free treatment available through this project) or from other sources. Overall, 44 drinkers (34%) were engaged in Study 2 treatment during the 6-month window of eligibility following randomization of the CSO. (*Engaged* is defined here as completing at least the initial 4-hr assessment and one treatment session.) Table 1 reports the dependent variable of central interest in this study: the percentage of unmotivated problem drinkers who were successfully engaged in treatment within each condition. The difference was significant, $\chi^2(2, N = 130) = 29.84, p < .0001$, with a substantially higher engagement rate in the CRAFT condition compared with the other two conditions.

As shown in Table 1, 3 other clients (all in the Johnson Institute intervention condition) were engaged (at least for two sessions) in treatment other than that provided through Study 2 (1 inpatient, 2 outpatients) during the 6-month window, raising the engagement rate for the Johnson Institute intervention condition to 30%. Combining these 3 clients with Study 2 participants, we found that the

difference in overall 6-month engagement rates among the three intervention approaches remained significant, $\chi^2(2, N = 130) = 27.33, p < .0001$. During Months 7–12, 5 additional clients entered treatment (1 inpatient, 4 outpatients), and again engagement rates for the full year remained significantly different, $\chi^2(2, N = 130) = 23.78, p < .0001$.

Recognizing that treatment engagement of the drinker is not an explicit goal in Al-Anon, we conducted a more conservative post hoc chi-square test contrasting only the Johnson Institute intervention and CRAFT conditions, which are specifically designed to achieve treatment engagement. Again, the difference was significant for Study 2, $\chi^2(1, N = 85) = 15.66, p < .001$, and for overall 6-month, $\chi^2(1, N = 85) = 10.29, p < .001$, and 12-month engagement rates, $\chi^2(1, N = 85) = 8.65, p < .003$. Even with a large sample, treatment engagement did not differ significantly between the Al-Anon facilitation (control) and Johnson Institute intervention approaches for Study 2, $\chi^2(1, N = 85) = 1.23, p < .27$, or for overall 6-month, $\chi^2(1, N = 85) = 3.56, p < .06$, and 12-month periods, $\chi^2(2, N = 85) = 3.29, p < .07$.

Of the 12 families that completed the Johnson Institute intervention, the drinker entered treatment in nine cases (75%), all within 6 months, whereas when the family in this condition opted not to complete the intervention, only 3 of 28 drinkers (11%) entered treatment within 6 months and 5 (18%) within 12 months. Across conditions, 74% of all drinkers who would enter treatment during the 12 months of the study were already engaged by the end of CSO treatment (3 months) and 90% were engaged by 6 months. The median length of stay for drinkers who entered treatment was 10.5 sessions.

The median number of days between the CSO's first Study 1 session and the drinker's first Study 2 treatment session was 47. For cases in which the drinker entered Study 2 treatment, the mean number of CSO sessions completed prior to the date of treatment entry was similar for the CRAFT ($M = 4.7, SD = 3.66, Mdn = 4$), the Al-Anon facilitation ($M = 5.7, SD = 4.14, Mdn = 6$), and the Johnson Institute intervention ($M = 4.7, SD = 2.03, Mdn = 6$) conditions.

To further ensure that the observed effect was attributable to intervention differences, we conducted a logistic regression with treatment engagement (yes vs. no) as the dependent measure. Statistical and clinical considerations led to the selection of three covariates. The CSO's report of the drinker's alcohol use at intake (percentage of days abstinent) was chosen to control for pretreatment severity of alcohol problems. The number of additional

Table 1
Treatment Engagement Rates With Three Methods for Counseling Concerned Significant Others

Variable	Al-Anon facilitation	Johnson Institute intervention	CRAFT
No. randomized	45	40	45
No. engaged in Study 2	6	9	29
% engaged in Study 2	13	23	64
No. engaged in other treatment by 6 months	0	3	0
% engaged within 6 months	13	30	64
No. engaged in other treatment at 9–12 months	3	2	1
% engaged within 12 months	20	35	67

Note. CRAFT = community reinforcement and family training.

therapy sessions received by CSOs during the intervention period (Months 1–3) was entered to control for effects that might be exerted by additional treatment. Finally, we entered the type of relationship between CSO and drinker (spouse, parent, or other) as a covariate. A total of 120 clients had complete data for this logistic regression (8% missing). Intervention condition remained a significant predictor of drinker engagement when entered after these three covariates, Wald $\chi^2(2, N = 120) = 17.27, p < .0002$. Of the three covariates entered into the model, only CSO relationship status predicted IP engagement. This finding was consistent across 6-month, Wald $\chi^2(1, N = 120) = 7.04, p < .008$, and 12-month analyses, Wald $\chi^2(1, N = 120) = 7.91, p < .005$. Collapsing across treatment conditions, we found that pairwise contrasts indicated that parents were significantly more likely to engage problem drinkers (51% at 6 months and 56% at 12 months) than were spouses (32% at 6 months and 34% at 12 months).

CSO Improvement

Although engaging the drinker in treatment was a major focus of this trial, the interventions were also intended to benefit the CSOs themselves. We used a repeated measures multivariate analysis of covariance to test for group differences and to examine how such differences may have varied across time. Five dependent measures (see Table 2) were specified to represent CSO and relationship functioning at 3- and 6-month follow-ups: depression (BDI score), anger (STAXI), family cohesion and conflict (from the FES), and relationship happiness (rated on a Likert scale, per Azrin et al., 1973). The model had one between-subjects factor representing CSO intervention group (three levels) and one within-subject time factor with three

levels (intake and 3- and 6-month dependent measures). One covariate was included in each of the five analyses: the total number of therapy sessions received by the CSO from sources other than the research program during the 6-month period.

No CSO Group \times Time interactions were significant. Large time effects were observed on all five measures, reflecting overall reductions in depression, $F(2, 196) = 14.49, p < .001$; anger (STAXI state, $F[2, 222] = 10.65, p < .002$; STAXI trait, $F[2, 214] = 8.48, p < .002$); and family conflict, $F(2, 206) = 10.28, p < .001$, with significant improvement in family cohesion, $F(2, 204) = 10.59, p < .001$, and relationship happiness, $F(2, 198) = 9.00, p < .001$. No main effects of CSO intervention groups were observed, indicating that CSO improvement was similar in all three conditions.

To determine whether CSO improvement was contingent on success in engaging the drinker in treatment, we entered treatment engagement (yes vs. no) as a covariate, which was collapsed across the three conditions. In no case was a moderating effect observed, indicating that CSO improvement occurred whether or not the drinker ultimately entered treatment. We further performed analyses of covariance for the outcome variables, comparing CSOs whose drinkers did versus did not enter treatment, with baseline drinking as the covariate. Again, no significant effects were found (all $ps > .05$), indicating that CSOs showed similar benefit whether or not they succeeded in engaging the drinker in treatment.

Therapist Differences

Therapists often differ substantially in their success rates in treating substance use disorders (for reviews, see Najavits &

Table 2
Concerned Significant Other Functioning Before, During, and 3 Months After Study Intervention

Measure and time	Al-Anon facilitation		Johnson Institute intervention		CRAFT		Time effect
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
Beck Depression Inventory							Time***
Intake	10.7	6.8	10.8	8.3	10.6	9.1	
3 months	7.8	8.5	8.2	7.2	7.9	8.1	
6 months	7.5	7.5	7.0	6.6	7.0	6.9	
State anger (STAXI)							Time**
Intake	12.7	4.6	12.4	4.2	13.0	6.3	
3 months	11.1	3.4	11.0	2.3	11.3	2.7	
6 months	11.2	2.8	10.5	0.9	10.9	3.2	
Family cohesion (FES)							Time***
Intake	5.3	2.9	4.4	2.2	5.6	2.6	
3 months	5.8	2.7	5.2	3.0	6.2	2.8	
6 months	5.7	2.9	5.9	2.6	6.8	2.3	
Family conflict (FES)							Time***
Intake	3.5	2.5	3.6	2.0	3.4	2.5	
3 months	3.2	2.3	2.8	1.9	2.7	2.4	
6 months	2.8	2.4	2.9	2.3	2.5	2.1	
Relationship Happiness Scale							Time***
Intake	5.6	2.3	4.8	2.0	4.9	2.8	
3 months	5.6	2.7	5.5	2.6	5.9	2.8	
6 months	6.3	2.8	5.9	2.6	6.4	2.7	

Note. CRAFT = community reinforcement and family training; STAXI = State-Trait Anger Expression Inventory; FES = Family Environment Scale.

** $p < .002$. *** $p < .001$.

Weiss, 1994, and Project MATCH Research Group, 1998). A simple index in the present study is the percentage of each therapist's cases in which the drinker was successfully engaged in treatment (see Table 3). Across the 11 therapists in the study, this figure ranged from 16% to 100%. A noteworthy finding here is that the lowest engagement rate for any CRAFT therapist (50%) surpassed the highest engagement rate for therapists in the other two conditions.

Therapists with smaller caseloads may yield unrepresentative rates, however, and greater reliability of measurement would be expected for therapists who treated at least 10 cases (Project MATCH Research Group, 1998). Two therapists in each condition met this criterion. The engagement rates of the two therapists did not differ significantly within the Al-Anon facilitation (16% and 17%) and Johnson Institute intervention (33% and 36%) conditions. Within the CRAFT condition, however, engagement rates differed for the two therapists who treated 10 or more cases (50% vs. 91%), $\chi^2(1, N = 25) = 5.23, p < .02$, Fisher's exact test (two-tailed) $p < .042$.

Discussion

Our findings support with reasonable confidence the conclusion that the CRAFT approach—teaching CSOs skills to modify contingencies for drinking behavior—is substantially more effective than the two more commonly practiced approaches in engaging initially unmotivated problem drinkers in treatment. In another study, we reported a 74% rate of successful engagement for unmotivated illicit drug users when their CSOs are taught CRAFT procedures (Meyers, Miller, Hill, & Tonigan, in press; cf. 70% in Garrett et al., 1997). As in the present trial, we also observed in the drug abuse CRAFT study a significant but larger advantage for parents (relative to partners) in engaging unmotivated illicit drug-abusing loved ones in treatment (Meyers et al., in press).

An important next step, given the efficacy of CRAFT, is to understand the causal mechanisms involved. Why do the CRAFT procedures yield such a higher rate of engagement? We suggest two possible reasons, beyond the teaching of specific behavior management skills. First is the direct message that family members *can* do something to instigate change. The empowerment assump-

tion underlying CRAFT (teaching CSOs that they can make a difference in the loved one's drinking and treatment engagement) is generally opposite to central Al-Anon messages of powerlessness and detachment (cf. Orford, 1994). Within Al-Anon, in fact, the CSO would commonly be encouraged *not* to try to control or influence drinking. It is informative but not surprising, therefore, that the CRAFT intervention yielded almost a fivefold higher rate of treatment engagement within the first 6 months compared with the Al-Anon facilitation treatment. This is not at all to imply that Al-Anon is unhelpful to CSOs themselves. In fact, significant improvements in CSO functioning were observed in all three conditions. Barber and Gilbertson (1996) similarly reported improved CSO functioning in an Al-Anon condition that failed to engage drinkers in treatment. It is further important to note that the Al-Anon facilitation therapy tested in the present trial cannot be equated with simple referral to Al-Anon. Rather, it consisted of a highly structured, 12-session, therapist-directed individual treatment that focused on engaging the client in the fellowship and program of Al-Anon.

What is more surprising, perhaps, is the magnitude of difference in engagement rates between CRAFT and the Johnson Institute intervention. The Johnson Institute intervention approach was designed specifically for the purpose of accomplishing treatment engagement with less motivated individuals and has been widely practiced toward this end. CSOs randomly assigned to CRAFT were more than twice as likely to be successful in engaging their loved one in treatment within 6 months. The reason for this appears to be straightforward and is familiar to practitioners who have used the Johnson Institute intervention approach: A substantial majority of CSOs decide not to go through with the confrontational family meeting. In an uncontrolled trial, Liepman et al. (1989) found that only 29% of those entering training for a Johnson Institute intervention actually completed the family meeting, a figure closely corroborated in the present trial (30%). The unacceptability to family members of confrontive approaches has also been noted by Barber and Gilbertson (1996). We further replicated the finding that when families do complete a Johnson Institute intervention confrontation, most of their loved ones enter treatment (75% in the present study; 86% in the Liepman et al., 1989, study; and 90% in the Loneck et al., 1996a, study). It may be tempting to perceive families that do not go through with a Johnson Institute intervention as being insufficiently motivated and to attribute failure to this factor. Yet offering a different (CRAFT) approach more than doubled the rate of treatment engagement. It appears to be important, then, to offer CSOs a flexible array of strategies from which they can choose, rather than directing efforts toward a family confrontation that most will find unacceptable.

Our findings also replicate reports from prior randomized trials of skill-training approaches in counseling CSOs. Our CRAFT 6-month engagement rate of 64% mirrors that reported for drinkers (62%) by Thomas et al. (1987), although it is not as optimistic as the 86% report from the small sample of Sisson and Azrin (1986). The latter group reported treatment engagement after an average of 58 days and 7.2 sessions of community reinforcement training, similar to our own finding of 47 days and 4.7 CRAFT sessions. None of these trials, however, have documented that clients actually learned and practiced the new skills that were taught—an important future step in understanding the mechanisms of change.

Table 3
Treatment Entry Rates for Therapists' Cases Within Each of the Three Counseling Approaches

Al-Anon facilitation			Johnson Institute intervention			CRAFT		
Entered	n	%	Entered	n	%	Entered	n	%
Therapists with >10 cases								
4	25	16	10	28	36	7	14	50
2	12	17	4	12	33	10	11	91
Therapists with <10 cases								
2	5	40				5	9	56
1	3	33				4	7	57
						4	4	100

Note. CRAFT = community reinforcement and family training.

The present study introduced several methodological improvements over prior research on interventions with CSOs. A large sample was studied, enhancing power to detect reliable differences. We took care, through screening, to establish that drinkers met diagnostic criteria for alcohol abuse or dependence and were initially unmotivated to seek treatment. Three disparate approaches to counseling CSOs were compared with each other for the first time in a randomized trial. Urn randomization was successful in balancing pretreatment characteristics for the three groups. Each treatment was delivered by therapists who were committed to, trained in, and experienced with their approach. All three treatments were manual-guided and were designed to be sufficiently consistent with routine practice so as to enhance clinical generalizability. Therapists were predominantly master's-level counselors, consistent with current provider patterns. Outcome measures included treatment engagement, CSO functioning, and relationship variables, as well as drinker outcomes (to be detailed in a subsequent report of the Study 2 randomized trial). Treatment was made readily available for drinkers engaged by their CSOs during the study. Follow-up retention was high (94% at 12 months), and assessment interviews were conducted by independent research staff who were not informed of group assignment.

Nevertheless, no single trial can be conclusive. We designed this study seeking to enhance both internal and external validity. Our findings are consistent with those reported from prior controlled and uncontrolled evaluations. Our data indicate that although the three approaches tested are similar in their impact on CSOs, teaching behavior change strategies to families (CRAFT) is substantially more effective in engaging unmotivated problem drinkers in treatment. These findings are of clinical significance because it remains common practice (at least in the United States) in counseling those who call for help with a substance-abusing loved one either to prescribe a Johnson Institute intervention or to recommend participation in Al-Anon. Our findings indicate that these two approaches are comparatively ineffective in initiating treatment, which is often the primary concern of relatives who call for help.

Finally, this study indicates that successful unilateral intervention is possible not only through spouses but through other family members as well. Parents in particular were quite successful in engaging an adult child in treatment. Our requirement of at least 40% contact days between CSO and drinker leaves open the question of whether CSOs who are in less frequent contact would have similar success. Our findings do clearly show that in initiating treatment, one need not wait for problem drinkers to find their own intrinsic motivation for change. With effective and empowering therapeutic intervention through the family, a majority can be engaged in treatment despite little or no initial inclination to seek help. These methods may be applicable to engagement for treatment of other life problems as well.

References

- Al-Anon Family Groups. (1973). *One day at a time*. New York: Author.
- Al-Anon Family Groups. (1984). *Al-Anon faces alcoholism*. New York: Author.
- Al-Anon Family Groups. (1990). *In all our affairs: Making crises work for you*. New York: Author.
- Alcoholics Anonymous. (1976). *Alcoholics Anonymous: The story of how many thousands of men and women have recovered from alcoholism* (3rd ed.). New York: Alcoholics Anonymous World Services.
- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., rev.). Washington, DC: Author.
- Azrin, N. H., Naster, B. J., & Jones, R. (1973). Reciprocity counseling: A rapid learning-based procedure for marital counseling. *Behaviour Research and Therapy*, 11, 365–382.
- Azrin, N. H., Sisson, R. W., Meyers, R., & Godley, M. (1982). Alcoholism treatment by disulfiram and community reinforcement therapy. *Journal of Behavior Therapy and Experimental Psychiatry*, 13, 105–112.
- Barber, J. G., & Crisp, B. R. (1995). The "pressures to change" approach to working with the partners of heavy drinkers. *Addiction*, 90, 269–276.
- Barber, J. G., & Gilbertson, R. (1996). An experimental study of brief unilateral intervention for the partners of heavy drinkers. *Research on Social Work Practice*, 6, 325–336.
- Barber, J. G., & Gilbertson, R. (1997). Unilateral interventions for women living with heavy drinkers. *Social Work*, 42, 69–78.
- Beck, A. T., Steer, R. A., & Garbin, M. G. (1988). Psychometric properties of the Beck Depression Inventory: Twenty-five years of evaluation. *Clinical Psychology Review*, 8, 77–100.
- Collins, R. L., Leonard, K., & Searles, J. (Eds.). (1990). *Alcohol and the family*. New York: Guilford Press.
- Dittrich, J. E., & Trapold, M. A. (1984). A treatment program for the wives of alcoholics: An evaluation. *Bulletin of the Society of Psychologists in Addictive Behaviors*, 3, 91–102.
- Garrett, J., Landau-Stanton, J., Stanton, M. D., Stellato-Kabat, J., & Stellato-Kabat, D. (1997). ARISE: A method for engaging reluctant alcohol- and drug-dependent individuals in treatment. *Journal of Substance Abuse Treatment*, 14, 235–248.
- Heatherton, T. F., & Polivy, J. (1991). Development and validation of a scale for measuring state self-esteem. *Journal of Personality and Social Psychology*, 60, 895–910.
- Johnson, V. E. (1986). *Intervention: How to help those who don't want help*. Minneapolis, MN: Johnson Institute.
- Johnson Institute. (No date). *Intervention: How to help those who don't want help*. Minneapolis, MN: Author.
- Leake, G. J., & King, A. S. (1977). Effect of counselor expectations on alcoholic recovery. *Alcohol Health and Research World*, 11(3), 16–22.
- Liepmann, M. R., Nirenberg, T. D., & Begin, A. M. (1989). Evaluation of a program designed to help family and significant others to motivate resistant alcoholics into recovery. *American Journal of Drug and Alcohol Abuse*, 15, 209–221.
- Logan, D. G. (1983). Getting alcoholics to treatment by social network intervention. *Hospital and Community Psychiatry*, 34, 360–361.
- Loneck, B., Garrett, J. A., & Banks, S. M. (1996a). A comparison of the Johnson intervention with four other methods of referral to outpatient treatment. *American Journal of Drug and Alcohol Abuse*, 22, 233–246.
- Loneck, B., Garrett, J. A., & Banks, S. M. (1996b). The Johnson intervention and relapse during outpatient treatment. *American Journal of Drug and Alcohol Abuse*, 22, 363–375.
- Meyers, R. J., Dominguez, T., & Smith, J. E. (1996). Community reinforcement training with concerned others. In V. B. Hasselt & M. Hersen (Eds.), *Sourcebook of psychological treatment manuals for adult disorders* (pp. 257–294). New York: Plenum Press.
- Meyers, R. J., Miller, W. R., Hill, D. E., & Tonigan, J. S. (in press). Community reinforcement and family training (CRAFT): Engaging unmotivated drug users in treatment. *Journal of Substance Abuse*.
- Meyers, R. J., & Smith, J. E. (1995). *Clinical guide to alcohol treatment: The community reinforcement approach*. New York: Guilford Press.
- Meyers, R. J., & Smith, J. E. (1997). Getting off the fence: Procedures to engage treatment resistant drinkers. *Journal of Substance Abuse Treatment*, 14, 467–472.
- Miller, W. R. (1996). *Manual for Form 90: A structured assessment*

- interview for drinking and related behaviors (Vol. 5). Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.
- Miller, W. R., & Marlatt, G. A. (1984). *Manual for the Comprehensive Drinker Profile*. Odessa, FL: Psychological Assessment Resources.
- Miller, W. R., & Rollnick, S. (1991). *Motivational interviewing: Preparing people to change addictive behavior*. New York: Guilford Press.
- Miller, W. R., & Tonigan, J. S. (1996). Assessing drinkers' motivation for change: The Stages of Change Readiness and Treatment Eagerness Scale (SOCRATES). *Psychology of Addictive Behaviors*, 10, 81–89.
- Miller, W. R., Tonigan, J. S., & Longabaugh, R. (1995). *The Drinker Inventory of Consequences (DrInC): An instrument for assessing adverse consequences of alcohol abuse. Test manual* (Vol. 4). Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.
- Moos, R. F., Cronkite, R. C., Billings, A. G., & Finney, J. W. (1987). *Health and Daily Living Form manual*. Palo Alto, CA: Veterans Affairs Medical Center, Social Ecology Laboratory.
- Moos, R. H., & Moos, B. S. (1986). *Family Environment Scale manual* (2nd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Najavits, L. M., & Weiss, R. D. (1994). Variations in therapist effectiveness in the treatment of patients with substance use disorders: An empirical review. *Addiction*, 89, 679–688.
- Nowinski, J., Baker, S., & Carroll, K. (1992). *12-step facilitation therapist manual: A clinical research guide for therapists treating individuals with alcohol abuse and dependence* (Vol. 1). Rockville, MD: National Institute on Alcohol Abuse and Alcoholism.
- O'Farrell, T. J. (Ed.). (1993). *Treating alcohol problems: Marital and family interventions*. New York: Guilford Press.
- Orford, J. (1994). Empowering family and friends: A new approach to the secondary prevention of addiction. *Drug and Alcohol Review*, 13, 417–429.
- Project MATCH Research Group. (1997). Matching alcoholism treatments to client heterogeneity: Project MATCH posttreatment drinking outcomes. *Journal of Studies on Alcohol*, 58, 7–29.
- Project MATCH Research Group. (1998). Therapist effects in three treatments for alcohol problems. *Psychotherapy Research*, 8, 455–474.
- Sisson, R. W., & Azrin, N. H. (1986). Family-member involvement to initiate and promote treatment of problem drinkers. *Behavior Therapy and Experimental Psychiatry*, 17, 15–21.
- Sisson, R. W., & Azrin, N. H. (1993). Community reinforcement training for families: A method to get alcoholics into treatment. In T. J. O'Farrell (Ed.), *Treating alcohol problems: Marital and family interventions* (pp. 242–258). New York: Guilford Press.
- Skinner, H. A., & Horn, J. L. (1984). *Alcohol Dependence Scale (ADS) users guide*. Toronto, Ontario, Canada: Addiction Research Foundation.
- Sobell, L. C., & Sobell, M. B. (1992). Timeline follow-back: A technique for assessing self-reported alcohol consumption. In R. Z. Litten & J. P. Allen (Eds.), *Measuring alcohol consumption: Psychosocial and biochemical methods* (pp. 41–72). Totowa, NJ: Humana Press.
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Sex and Marital Therapy*, 38, 15–28.
- Spielberger, C. D. (1988). *State-Trait Anger Expression Inventory: Professional manual*. Odessa, FL: Psychological Assessment Resources.
- Spielberger, C. D., Gorsuch, R. L., Lushene, R., Vagg, P., & Jacobs, G. A. (1983). *Manual for the State-Trait Anxiety Inventory (STAI Form Y)*. Palo Alto, CA: Consulting Psychologists Press.
- Spitzer, R. L., Williams, J. B. W., Gibbon, M., & First, M. B. (1990). *Structured Clinical Interview for DSM-III-R (SCID-II, Version 1.0)*. Washington, DC: American Psychiatric Association.
- Stout, R. L., Wirtz, P. W., Carbonari, J. P., & DelBoca, F. K. (1994). Ensuring balanced distribution of prognostic factors in treatment outcome research. *Journal of Studies on Alcohol*, 55(Suppl. No. 12), 70–75.
- Straus, M. A. (1979). Measuring intrafamily conflict and violence: The Conflict Tactics Scales. *Journal of Marriage and the Family*, 41, 75–86.
- Szapocznik, J., Kurtines, W. M., Foote, F., Perez-Vidal, A., & Hervis, O. (1983). Conjoint versus one-person family therapy: Some evidence for the effectiveness of conducting family therapy through one person. *Journal of Consulting and Clinical Psychology*, 51, 889–899.
- Szapocznik, J., Kurtines, W. M., Foote, F., Perez-Vidal, A., & Hervis, O. (1986). Conjoint versus one-person family therapy: Further evidence for the effectiveness of conducting family therapy through one person with drug-abusing adolescents. *Journal of Consulting and Clinical Psychology*, 54, 395–397.
- Thomas, E. J., Adams, K. B., Yoshioka, M. R., & Ager, R. D. (1990). Unilateral relationship enhancement in the treatment of spouses of uncooperative alcohol abusers. *American Journal of Family Therapy*, 18, 334–344.
- Thomas, E. J., & Ager, R. D. (1993). Unilateral family therapy with the spouses of uncooperative alcohol abusers. In T. J. O'Farrell (Ed.), *Treating alcohol problems: Marital and family interventions* (pp. 3–33). New York: Guilford Press.
- Thomas, E. J., & Santa, C. A. (1982). Unilateral family therapy for alcohol abuse: A working conception. *American Journal of Family Therapy*, 10, 49–58.
- Thomas, E. J., Santa, C., Bronson, D., & Oyserman, D. (1987). Unilateral family therapy with spouses of alcoholics. *Journal of Social Service Research*, 10, 145–163.
- Thomas, E. J., & Yoshioka, M. R. (1989). Spouse interventive confrontations in unilateral family therapy for alcohol abuse. *Social Casework: The Journal of Contemporary Social Work*, 70, 340–347.
- Thomas, E. J., Yoshioka, M. R., & Ager, R. D. (1994). Spouse Enabling Inventory. In J. Fischer & K. Corcoran (Eds.), *Measures for clinical practice: A sourcebook. Vol. 1: Couples, families and children* (2nd ed.). New York: Free Press.
- Tonigan, J. S., Miller, W. R., & Brown, J. M. (1997). The reliability of Form 90: An instrument for assessing alcohol treatment outcome. *Journal of Studies on Alcohol*, 58, 358–364.
- Velleman, R., Bennett, G., Miller, T., Orford, J., Rigby, K., & Tod, A. (1993). The families of problem drug users: A study of 50 close relatives. *Addiction*, 88, 1281–1289.

Received February 18, 1998

Accepted February 15, 1999 ■