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Community Reinforcement and Family Training: A Pilot Comparison of Group and Self-Directed Delivery

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Abstract

In a randomized clinical pilot study, 40 concerned significant others (CSOs) of treatment-refusing alcohol and drug users were randomized to either CRAFT (Community Reinforcement and Family Training) conducted in a group format (Group CRAFT) or a Self-Directed CRAFT condition. Although results indicated no significant between-group difference in engaging treatment-refusing substance users (referred to as identified patients or IPs) into treatment, the engagement rate in Group CRAFT was similar to rates previously reported with individual CRAFT. For the intent-to-treat analysis, 60% of Group CRAFT CSOs engaged their loved one into treatment, compared to 40% in Self-Directed CRAFT. Of CSOs in the Group condition who received at least one session of group therapy, 71% engaged their IP into treatment. CSOs in both conditions reported improvements in family cohesion and conflict at the three and six-month follow-up, replicating prior CRAFT findings.

Keywords

CRAFT; Treatment engagement; Substance use; Treatment outcome; Family members

1. Introduction

Family members of substance abusers often suffer numerous consequences such as violence, theft, verbal aggression, embarrassment, and low family cohesion (Orford, Krishnan, & Velleman, 2003; Orford, Rigby, Miller, Tod, Bennett, & Velleman, 1992). Concerned family members who want to help themselves and their loved one are often referred to Al-Anon/Nar-Anon or a Johnson Institute Intervention, the two approaches that have dominated family interventions in the field of addictions (Fernandez, Begley, & Marlatt, 2006). Programs such as these may provide support for family members, but have low rates of engaging unmotivated individuals who are abusing alcohol and drugs into treatment, a

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common goal for the family members of substance users (Meyers, Miller, Smith, & Tonigan, 2002; Miller, Meyers & Tonigan, 1999). While empirically supported treatment interventions for family members do exist, they are vastly underutilized in treatment settings (e.g., behavioral couples therapy; Fals-Stewart & Birchler, 2001). The overall purpose of this study was to find low-cost, evidence-based alternatives for concerned family members of treatment-refusing substance users.

1.1 Community Reinforcement and Family Training

The Community Reinforcement and Family Training (CRAFT) approach treats the concerned significant others (CSOs) of substance abusers to engage the treatment-refusing substance abusing loved one (referred to as the identified patient, IP) into treatment. Research studies consistently indicate that CRAFT is an effective approach for the family members of treatment-refusing alcohol and drug users (Roozen, de Waart, & van der Kroft, 2010). Studies evaluating the efficacy of the CRAFT approach have demonstrated success in engaging IPs into treatment, improving CSO functioning, and decreasing IP substance use. Overall, CSOs engage 55-86% of treatment-refusing substance users utilizing the CRAFT approach (Dutcher et al., 2009; Kirby, Marlowe, Festinger, Garvey, & LaMonaca, 1999; Meyers, Miller, Hill, & Tonigan, 1999; Meyers et al., 2002; Miller et al., 1999; Sisson & Azrin, 1986; Waldron, Kern-Jones, Turner, Peterson, & Ozechowski, 2007).

1.2 Group Therapy

Group therapy is the most common treatment for substance use disorders (SUDs) (National Institute on Drug Abuse, 2003), partly because of its convenience and low-cost. Studies comparing the efficacy of group therapy to individual therapy for the treatment of SUDs have found that both treatment modalities yield similar outcomes (e.g., Graham, Annis, Brett, & Venesoen, 1996; Marques & Formigoni, 2001; Miller & Taylor, 1980; Schmitz, Bordnick, Kearney, Fuller, & Breckenridge, 1997). It is plausible that group CRAFT may provide a low-cost and feasible alternative to individual treatment while maintaining positive outcomes for concerned family members and their loved one.

1.3 Bibliotherapy

Bibliotherapy, or self-directed therapy, is defined as a therapeutic intervention that is presented to clients in written format. Bibliotherapy approaches are designed so that clients can modify their behavior on their own, with the help of the written material. Self-directed CRAFT has been tested with the CSOs of problem gamblers and has resulted in reductions in gambling among IPs but has very modest treatment engagement rates (engagement rates ranged from 14-17%; Hodgins, Toneatto, Makarchuk, Skinner, & Vincent, 2007). Although Self-Directed CRAFT has not yet been evaluated with the CSOs of treatment-refusing substance users, bibliotherapy has often been used successfully with highly motivated self-referrals from the community (Apodaca & Miller, 2003), which generally describes CSOs who call for help.

1.4 The Present Study

The aim of this study was to examine the effectiveness of Group and Self-Directed CRAFT and to determine if these low-cost approaches yield similar effects to the individual CRAFT approach. Three hypotheses were tested: (1) Group CRAFT participants were expected to have higher IP engagement rates than Self-Directed CRAFT participants due to the increased therapist attention and support available to Group CRAFT CSOs; (2) Participants in both conditions were expected to report significant improvements in CSO and family functioning from baseline to follow-up; (3) A time-by-condition interaction was expected in

which the Group CRAFT participants reported greater increases in CSO and family functioning at follow-ups.

2. Method

2.1 Participants

This study was approved by the Institutional Review Board at the University of New Mexico. Participants were recruited between August 2006 and July 2007 via advertisements in newspapers and fliers located in emergency rooms, family practice clinics, coffee shops, restaurants, and grocery stores. Inclusion criteria for CSOs were: (1) concern about and having direct knowledge of alcohol or drug problems of an IP who was either a first-degree relative, intimate partner (married or unmarried, heterosexual or homosexual), or close friend; (2) residence within a 90-mile radius of the research site; (3) contact with the IP on at least 40% of the past 90 days, with no anticipated change in the next 90 days; (4) CSO and IP were at least 18 years of age; (5) evidence (from the CSO) that the IP met the Structured Clinical Interview for the Diagnostic Statistical Manual (DSM) Disorders-IV (SCID; First, Spitzer, Gibbon, & Williams, 1995) criteria for Substance Use Disorders for one or more of the following: alcohol, amphetamine, cannabis, cocaine, hallucinogen, opioid, PCP, sedative, hypnotic, or anxiolytic; (6) willingness to participate in the study; and (7) ability to provide informed consent. CSOs were excluded if: (1) they met SCID DSM-IV criteria for current Substance Dependence, Schizophrenia or any other Psychotic Disorder; (2) they demonstrated reading ability lower than the 8th grade level; (3) their IP had received substance abuse treatment (other than detoxification) in the prior three months, was court mandated to treatment, or was currently willing to accept treatment.

A total of 75 individuals completed an eligibility screening over the phone, yielding 46 eligible who were willing to schedule an intake interview (see Figure 1, [CONSORT CONsolidated Standards of Reporting Trials] diagram). Of the 46 eligible individuals, 40 completed the baseline screening and were enrolled in the study.

2.2 Measures

The baseline interview began with a review of the nature and conditions of the study and signing of the informed consent document. CSOs completed questionnaires regarding their own functioning and the family environment.

2.2.1 CSO and family functioning—CSOs reported on symptoms of depression, physical symptoms, state anxiety, anger expression, family cohesion and family conflict as measured by the Beck Depression Inventory (BDI-II; Beck, Steer, & Garbin, 1988), the Physical Symptoms Scale from the Health and Daily Living Form (Moos, Cronkite, Billings, & Finney, 1984), the State Trait Anxiety Inventory (Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983), the State Trait Anger Expression Inventory (STAXI-2; Spielberger, 1999), and the Family Environment Scale (FES; Moos & Moos, 1986). CSOs also completed the Center on Alcoholism, Substance Abuse and Addictions (CASAA) Drug Efficacy Scale, an unpublished 9-item measure (range 0-36) that was administered to assess CSO confidence in substance abuse treatment in general, as well as their confidence that the current project would help engage their loved one into treatment.

2.3 Randomization

Immediately following the baseline interview, 40 CSOs were assigned to Group CRAFT (n = 20) or Self-Directed CRAFT (n = 20) using a computerized urn randomization program to balance the two conditions on factors hypothesized to influence key outcome variables: (1) CSO relationship with the IP (spousal versus other); (2) prior CSO 12-step exposure; (3)

prior IP formal treatment for drug problems (less than four versus greater than four in lifetime); (4) CSO age (less than 50 versus greater than 50 years of age).

2.4 Intervention Conditions

All CSOs (regardless of intervention condition) were given the CRAFT self-help book, "*Get your loved one sober: Alternatives to nagging, pleading, and threatening*" (Meyers & Wolfe, 2004). The CRAFT self-help book, which is written at an eighth grade level, uses lay terms to instruct CSOs on how to implement the CRAFT model. It includes guidelines for responding contingently to IP behavior, improving positive communication skills while decreasing negative communication patterns, improving the CSOs' own well-being, and approaching the subject of treatment with their loved one.

2.4.1 Group CRAFT—The CRAFT Groups were closed and did not begin until there were at least four CSOs randomized to the group condition. Five independent groups (n = 4 CSOs per group) were each offered up to 12, one-hour sessions of Group CRAFT therapy. The two co-therapists (JKM and JLA) had a Masters degree in psychology, were experienced with the CRAFT approach and had been formally trained in CRAFT by Dr. Meyers, developer of the CRAFT approach. The co-therapists had weekly clinical supervision meetings with Dr. Meyers.

The group content was based on the CRAFT skills and techniques found in Smith and Meyers (2004) and the CRAFT self-help book (Meyers & Wolfe, 2004). CSOs in the Group condition received the CRAFT self-help book at the beginning of the first group session and the book was used as a guide for therapy sessions. Groups started with a check-in period, when CSOs could briefly discuss concerns they had about their loved one. Each week, new content or skills were introduced through didactic teaching followed by a group discussion and when relevant, a role-play.

As part of the Group CRAFT treatment, CSOs were told that they could have a substantial impact on their loved one's substance use and his/her decision to enter treatment. The 12 sessions focused on: (1) highlighting problems related to the IP's substance use; (2) exploring prior CSO reactions to the IP's substance use; (3) teaching CSOs contingency management to reinforce sober behavior, extinguish substance use, and avoid interfering with negative consequences of substance use; (4) increasing positive communication; (5) instructing CSOs on how they could increase their social support, reward their successes, and protect themselves from violence from the IP; and (6) teaching CSOs when and how to talk to their loved one about entering substance abuse treatment.

2.4.2 Self-Directed CRAFT—CSOs randomized to Self-Directed CRAFT received a copy of the CRAFT self-help book (Meyers & Wolfe, 2004) immediately following the baseline interview. CSOs were briefly informed about the efficacy of the CRAFT approach and were instructed to read the CRAFT book. They were informed that free treatment was available to IPs as part of the study and were given a contact number to call if their IP decided to enter treatment.

2.5 Follow-up

CSOs were asked to complete a three- and six-month follow-up interview. The follow-up interview timeframe for CSOs in the Group condition was based on the first group treatment session; the follow-up interview for CSOs in the Self-Directed condition was based on the date of the baseline interview (the point at which they received the self-help book). Undergraduate reseach assistants who were unaware of the participants' treatment

assignment conducted follow-up assessments. Participants were paid $30 for each follow-up interview.

2.6 Treatment for Identified Patients (IPs)

CSOs were given a 24-hour number to call when the IP was willing to enter treatment. As part of the current study, 12 sessions of free treatment were provided to all interested IPs. The window for referral for IP treatment was six months from the start of the CSO's treatment. IPs were scheduled for an intake interview usually within 48 hours of their call.

2.7 Statistical Analysis Plan

2.7.1 IP treatment engagement—IPs were considered to be engaged in treatment after they completed at least one treatment session either through the current study or any other substance abuse treatment program (as reported by the CSO). To determine the effect of CSO condition assignment on IP treatment engagement, a 2×2 (Group CRAFT, Self-Directed CRAFT × Engaged, Unengaged IPs) chi square analysis was utilized. All *d* statistic calculations were adjusted for small sample size.

2.7.2 CSO and family functioning—Separate repeated measures ANOVAs were conducted to assess the relative effectiveness of Group CRAFT and Self-Directed CRAFT on CSO and family functioning. For each analysis, treatment assignment was the between-subjects factor and the within-subjects factor had two levels: baseline and the follow-up period. The analyses were conducted separately for the three- and six-month follow-ups because of the small sample size. Bonferroni corrections were used to protect against inflated Type 1 error, as in previous CRAFT studies (Meyers et al., 2002; Waldron et al., 2007).

3. Results

3.1 Sample Characteristics

The sample was predominately female (85%), with a mean age of 51.13 (*SD*=11.65; range = 26-76 years). With regard to ethnicity, 65% of the participants were white, 30% were Hispanic, 2.5% were Native American and 2.5% reported mixed ethnic backgrounds. Half (50%) of the participants were employed full-time, 17.5% worked part-time, 25% were unemployed or retired, and the remaining 7.5% were either homemakers, full-time students, or disabled. Almost half (45%) of the participants were married, 35% were divorced, and 20% were never married. On average, the CSOs had 15.86 years of education (*SD*=3.04) and a median family income of $44,500. The two conditions did not significantly differ on demographic characteristics. CSOs reported that they had known the IPs, on average, for 27.85 years (*SD*=11.84). The CSOs had contact with the IPs on 73.18 (*SD*=27.77) of the prior 90 days at the baseline interview. The CSOs' relationship to the IP was: parent (62.5%), spouse (12.5%), sibling (7.5%), child (2.5%), friend (2.5%), girlfriend/boyfriend (7.5%), or other (5%).

3.2 CSO Participation

Group CRAFT CSOs waited an average of 28.15 (*SD*=14.27) days between their intake interview and the first group session. Three CSOs did not attend any of the 12-planned group sessions, possibly due to the time between the CSO intake interview and the start of treatment. The three CSOs who did not attend any group therapy sessions waited an average of 40.33 (*SD*=20.50) days compared to 26.00 (*SD*=16.59) days for CSOs who attended at least one treatment session. When examining all of the CSOs randomized to Group CRAFT (n=20), CSOs completed an average of 6.90 (*SD*=4.06) group treatment sessions or 57.5%

of sessions offered. Treated CSOs (n=17) completed an average of 8.12 (*SD*=3.02) or 68% of sessions offered.

The three-month follow-up interview was completed by 85% (n=17) of Group CRAFT and 90% (n=18) of Self-Directed CRAFT CSOs. The six-month follow-up was completed by 70% (n=14) of Group CRAFT CSOs and 85% (n=17) of Self-Directed CRAFT CSOs, with no significant differences in follow-up rates between the two conditions.

3.3 Treatment Engagement

The primary outcome was the number of IPs who engaged into treatment in each of the two conditions during the six-month window. For the intent-to-treat analysis, 60% (n=12) of the CSOs in the Group condition successfully engaged their loved one into treatment compared to 40% (n=8) of the CSOs in the Self-Directed condition. This difference was not statistically significant, χ^2 (1, n=40)=1.61, p=.20, d=.20. None of the three Group CRAFT CSOs who dropped out of treatment prior to attending any treatment sessions were successful at engaging their loved one into treatment. The engagement rate for the treated Group CRAFT CSOs was 71% (n=12). The difference between the treated Group (71%) and Self-Directed (40%) conditions approached significance, χ^2 (1, n=37)=3.53, p=.06, d=.30.

Post hoc statistical power analyses were conducted separately for the intent-to-treat and the reduced treated samples to evaluate the extent to which the current study was underpowered to detect significant differences between treatment conditions. Assuming a two-tailed Chi Square test and Type I error rate of .05 our obtained effect size (d = .20) with the intent-to-treat sample had roughly .24 power to reject a false null hypothesis. Because of the larger effect size obtained with the treated sample (d = .30) our estimated power to correctly reject a false null hypothesis was .48, indicating that the current study was significantly underpowered.

Of the 20 IPs who engaged in treatment during the six-month treatment window, 16 engaged in the free treatment that was available to all IPs as part of the current study, while four IPs entered treatment from other sources offered in the community. The mean number of days from the start of the CSO's treatment until IP treatment entry was 36.78 (SD = 24.64) for Group CRAFT CSOs and 23.33 (SD = 29.74) for Self-Directed CSOs. Group CRAFT CSOs attended an average of 5.56 (SD = 4.16) sessions before their IP engaged in treatment. One CSO in the group condition engaged her IP into treatment prior to beginning the CRAFT groups.

Post-hoc analyses were conducted to evaluate if CSOs of engaged IPs differed from CSOs of unengaged IPs at the baseline interview. A one-way ANOVA was utilized with IP engagement as the between subjects factor. The dependent variables were: CSO age, years known the IP, and amount of contact with the IP. Results indicate that CSOs of engaged IPs did not significantly differ from CSOs of unengaged IPs at the baseline interview. In addition, IP engagement rates did not significantly differ by the CSO's relationship to the IP χ^2 (2, n = 35) = 1.83, p = .401. Partners (spouse/girlfriend/boyfriend) had the highest engagement rates (5/8 or 62.5%) followed by parents (13/25 or 52%) and other family members/friends (2/7 or 28.57%).

3.4 CSO and Family Functioning

Descriptive statistics for measures of CSO and family functioning are presented in Table 1. Of note, there were no between-group differences on any of the measures of CSO or family functioning with the exception of CSO efficacy, which approached significance at the three-month follow-up F(1, 33) = 4.39, p = .044, η^2 = .117. Within-group comparisons are described below.

3.4.1 CSO functioning—CSO symptoms of depression, efficacy, physical symptoms, and anxiety did not decrease from the baseline to the three or six-month follow-up. There was no change in CSO anger from the baseline to the three-month follow-up. The reduction in CSO anger at the six-month follow-up approached significance $F(1, 29) = 5.69$, $p = .024$, $\eta^2 = .164$).

3.4.2 Family functioning—CSO report of family cohesion significantly improved from the baseline to the three-month follow-up $F(1, 33) = 7.76$, $p = .009$, $\eta^2 = .190$ and six-month follow-up $F(1, 29) = 8.67$, $p = .006$, $\eta^2 = .230$. Likewise, family conflict significantly improved from the baseline to the three-month follow-up $F(1, 33) = 5.89$, $p = .021$, $\eta^2 = .152$ and the six-month follow-up $F(1, 29) = 6.26$, $p = .018$, $\eta^2 = .177$.

4. Discussion

The primary objective of this study was to determine if the CRAFT intervention could be delivered in a more cost effective format, through either group therapy or a self-directed book, and still yield results similar to when CRAFT is delivered as individual therapy. Sixty percent of the CSOs assigned to the Group CRAFT condition engaged their loved one into treatment versus 40% in the Self-Directed conditions, with no statistically significant difference between the two conditions. CSOs who attended at least one group CRAFT session had a 71% engagement rate. Considering the sample size, the difference in engagement rates between Group and Self-Directed CRAFT exhibits a statistically significant trend (p = .06) and is likely to be judged clinically significant by practitioners (Miller & Manuel, 2008). Group CRAFT engagement rates are consistent with previous individual-therapy CRAFT studies, which yielded engagement rates between 55-86% (Dutcher et al., 2009; Kirby et al., 1999; Meyers et al., 1999; Meyers et al., 2002; Miller et al., 1999; Sisson & Azrin, 1986; Waldron et al., 2007). Thus, Group CRAFT may be a feasible alternative to individual-based CRAFT treatment. Although a group CRAFT format may promote the adoption of CRAFT in clinical settings, this approach still faces significant barriers to dissemination. These include lack of insurance provider coverage for family therapy, the divergence of CRAFT from 12-step models of CSO care, and the relative recency of empirical support for CRAFT.

This study highlighted the complexities involved in group therapy. Due to slow recruitment and the closed group format, CSOs waited approximately one month before they began group treatment, a potential reason that three CSOs randomized to this condition never attended a session. Concerned family members, like substance users, may become frustrated as they wait to begin treatment (Redko, Rapp, & Carlson, 2008). In CRAFT studies, efforts are made to capitalize on IPs motivation to enter treatment. For instance, IPs who are willing to enter treatment are usually scheduled for an intake interview within 48 hours. Although intake interviews were scheduled as soon as possible for CSOs, they delay between the assessment and treatment initiation may have been associated with a decrease in motivation for those CSOs in the group condition. Thus, the rapid access to treatment may be an important component for both CSOs and IPs. Nonetheless, an open group format may present its own clinical challenges as new members begin and leave the group throughout the course of treatment. Research with open groups also presents data-analytic complexities, such as group interdependence and the impact of fluctuating group memberships (Morgan-Lopez & Fals-Stewart, 2006).

The Self-Directed CRAFT engagement rate of 40% in the current study was higher than the engagement rates of comparison conditions in previous studies. In these studies, therapist-directed Al-Anon/Nar-Anon facilitation, Al-Anon based group therapy, and the Johnson Institute Intervention yielded IP engagement rates ranging from 17-30% (Kirby et al., 1999;

Meyers et al., 2002; Miller et al., 1999). The Self-Directed engagement rates are not surprising given that CSOs tend to be highly motivated. Reporting on the CSO's own functioning and problems related to the IP's substance use during the assessment, along with the rapid availability of IP treatment, may have empowered CSOs to modify their behaviors. It appears that the content of the CRAFT approach, rather than the format or quantity of time, drives IP engagement.

4.1 CSO and Family Functioning

In previous studies, CSOs reported improvements in psychological and relationship functioning as a result of treatment, regardless of treatment assignment (CRAFT, Al-Anon, Johnson Institute; Miller et al., 1999). These findings were not all replicated in the current study. The failure to find significant improvements in CSO psychological functioning in the current study was surprising and may be attributed to the treatment modalities offered and treatment utilization. The treatment effects of CRAFT may have been weakened due to the lack of one-on-one therapy. Furthermore, CSOs in the Group CRAFT condition attended fewer treatment sessions (58%) than CRAFT participants in previous studies (86-89% in Kirby et al., 1999; Meyers et al., 1999; Miller et al., 1999). Alternatively, the lack of significant results may be due to the small sample size that resulted in a lack of statistical power to detect small changes over time. Furthermore, we chose to use Bonferroni corrections to reduce the chance of a Type 1 error, which may have increased our chances of making a Type 2 error.

Group and Self-Directed CRAFT did not differ significantly on key dimensions of CSO or family functioning, with the exception of CSO efficacy at the three-month follow-up. Group CRAFT CSOs reported an increase in self-efficacy whereas Self-Directed CRAFT CSOs reported a decrease. The increased efficacy among Group CRAFT CSOs may be attributed to the slightly higher engagement rates in this condition. Furthermore, CSOs who did not yet engage their loved one into treatment may have had increased efficacy after observing other CSOs in the group engage their loved one into treatment (Foote & Manuel, 2009). Consistent with previous studies of CRAFT (Meyers et al., 2002; Miller et al., 1999), significant improvements from baseline to the follow-up periods were evident for both Group and Self-directed CSOs in family cohesion and conflict.

4.2 Limitations

Although the results of this study support the efficacy of potentially less costly alternatives to CRAFT, a few limitations must be noted. This study compared the efficacy of two CRAFT interventions and did not include a no-treatment control group, nor did it include individual CRAFT as a comparison. Thus, we cannot exclude the possibility that findings were due to the assessment battery or to the rapid availability of free treatment for IPs. Second, the use of a clinical supervisor for the CRAFT groups was the only method used to monitor treatment integrity. Although it would have been preferable to have objective coders rate treatment integrity and quality for the groups, this was beyond the scope of the present study. Finally, the current study had a small sample, and was underpowered to detect statistical significant differences between treatment conditions and over time.

4.3 Future Directions

The results of the current study indicate that Group CRAFT yielded engagement rates similar to individual CRAFT. These findings are promising and suggest future directions for research. Future studies should utilize a larger sample, thus facilitating the ability to detect reliable differences between conditions and assessment periods. Given that Group and Self-Directed CRAFT were not directly compared with individual therapy CRAFT or another control condition, future research should examine the efficacy of the three CRAFT

approaches in a single study. It would be advantageous to examine the efficacy of Group CRAFT via an open group format and to assess the viability and efficacy of Group CRAFT with larger groups. Future research with Self-Directed CRAFT should assess the extent to which CSOs read and understand the CRAFT self-help book.

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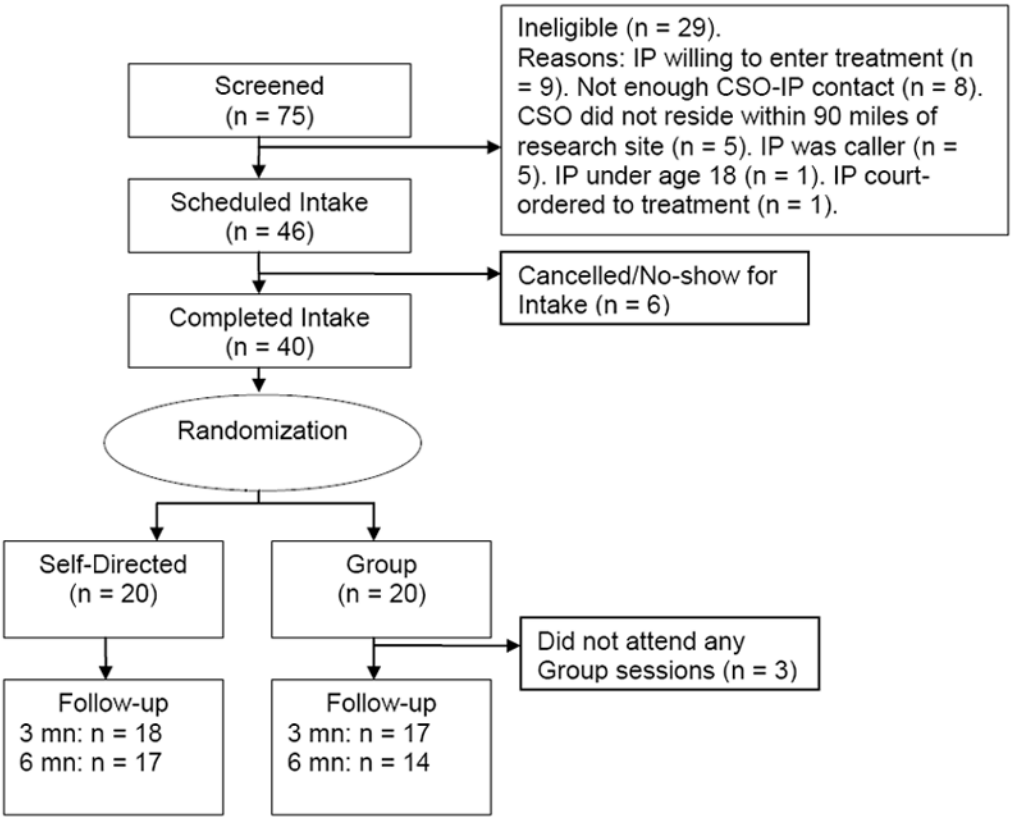

Figure 1.
CONSORT (CONsolidated Standards of Reporting Trials) Diagram

Table 1

CSO and Family Functioning at Intake and Follow-up Periods

Measures and time	N	Group Mean (SD)	Self-Directed Mean (SD)
Depression (BDI)			
Intake	40	10.40 (7.13)	13.96 (10.57)
3-month	35	7.53 (5.51)	10.78 (12.53)
6-month	31	8.86 (6.15)	8.88 (6.92)
Efficacy			
Intake	40	20.75 (6.94)	17.30 (6.78)
3-Month	35	21.35 (6.58)	14.78 (7.13)
6-month	31	19.21 (5.71)	13.47 (6.21)
Physical Symptoms			
Intake	40	3.85 (3.17)	5.80 (4.79)
3-month	34	3.65 (3.35)	5.24 (4.37)
6-month	31	3.29 (3.22)	5.12 (4.30)
Anxiety (STAI)			
Intake	40	35.16 (11.27)	38.95 (13.56)
3-month	35	34.59 (11.48)	41.51 (15.88)
6-month	31	34.71 (10.76)	35.12 (9.87)
Anger (STAXI)			
Intake	40	25.75 (7.10)	29.30 (15.72)
Three-month	35	26.65 (10.51)	28.94 (18.70)
6-month	31	23.71 (6.14)	23.94 (11.17)
Family Cohesion			
Intake	40	5.75 (2.36)	5.99 (2.29)
3-month	35	6.82 (2.48)*	7.17 (2.23)*
6-month	31	7.47 (2.40)*	7.41 (1.73)*
Family Conflict			
Intake	40	3.45 (1.93)	3.10 (2.45)
3-month	35	2.59 (2.00)*	2.50 (1.82)*
6-month	31	2.00 (1.75)*	2.24 (1.71)*

Note. BDI = Beck Depression Inventory; STAI = State Trait Anxiety Inventory; STAXI = State Trait Anger Expression Inventory. Higher scores indicate higher levels of distress on the BDI, Physical Symptoms, STAI, and STAXI.

* Indicates a significant difference in variable from baseline to 3 or 6-month follow-up period