BRIEF REPORTS

AUGMENTING CONTINUING EDUCATION WITH PSYCHOLOGICALLY FOCUSED GROUP CONSULTATION: EFFECTS ON ADOPTION OF GROUP DRUG COUNSELING

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This study examines whether adding psychologically focused group consultation to a standard 1-day continuing-education workshop on Group Drug Counseling (GDC), a group therapy with evidence of effectiveness in the treatment of substance abuse problems, improves GDC adoption. Counselors who had taken a 1-day workshop were randomly assigned to an 8-week course of group consultation that met for 1.5 hr per session (n = 16) or to no additional contact (n =14). The group consultation used Relapse Prevention and Acceptance and Commitment Therapy principles to help participants overcome psychological barriers to the adoption of GDC. Results showed that the 1-day workshop resulted in attempts by trainees to implement the new therapy, but that the consultation condition maintained significantly higher levels of adoption and 2- and 4-month followups. Additionally, those in the group consultation condition reported a higher sense of personal accomplishment at the 4-month followup. These findings suggest that empirically supported psychotherapy models can be used to decrease clinicians' psychological barriers to adoption of evidence-based psychotherapy methods.

Keywords: dissemination, drug dependence, training, alcohol dependence, group counseling, acceptance, Acceptance and Commitment Therapy, Relapse Prevention

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Advances in clinical science have produced a number of evidence-based treatments for substance abuse (Miller, Zweben, & Johnson, 2005), but only limited adoption has occurred (Institute of Medicine, 1998; Miller, Sorenson, Selzer, & Brigham, 2006). Researchers have outlined three

steps to the diffusion of new technologies: (a) developing the new technology, (b) disseminating the technology/creating adoption, and (c) implementing the technology adequately (Gotham, 2004). The development of new psychotherapy approaches (Step 1) encompasses an enormous literature. The literature on the creation of therapeutic skills through training and supervision (Step 3) is smaller but still substantial (e.g., Ellis, Ladany, Krengel, & Schult, 1996). In contrast, much less attention has been paid to how to foster adoption by professionals in the field.

Traditional continuing education materials or workshops can produce learning but are generally ineffective in producing adoption (Bloom, 2005). In addictions treatment, a recent review found that training workshops generally increase post-training skill but not skills maintenance (Walters et al., 2005). Follow-up consultation is known to help maintain and develop skill following training (e.g., Rounsaville, O'Malley, Foley, & Weissman, 2000), but its effect on adoption per se is not yet known.

The present study examined that issue in the context of psychologically focused group consultation. There is evidence that the largest barriers to adoption are the psychological barriers of the practitioner, such as discomfort in trying new things, or fears of the judgments of others (e.g., Addis, Wade, & Hatgis, 1999). These barriers interfere with counselor willingness to try out new technologies, a behavior known to relate to long-term adoption (Rogers, 2003).

There is preliminary evidence that targeting counselors' own psychological barriers with approaches originally developed for use as psychotherapies can be broadly useful. A recent study (Varra, 2006) applied Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999), in a form (called Acceptance and Commitment Training) appropriate for clinician training to a group of drug and alcohol counselors about to go through a continuing-education workshop on empirically supported methods for addiction, and found that it led to increased adoption of the methods trained. Another study found less burnout in addiction counselors receiving ACT for the psychological barriers encountered in the delivery of treatment (Hayes et al., 2004).

The present study brings these two ideas together by examining the impact of psychologically focused group consultation on adoption of an evidence-based practice following a continuing-education workshop. There are a variety of definitions of evidence-based treatment and a variety of groups are involved in creating lists of such treatments. In this study we mean the term only in the limited sense of "as guided by the best available evidence." The particular treatment selected was a group-therapy approach called Group Drug Counseling (GDC; Daley, Mercer, & Carpenter, 1998). We selected GDC as the adoption target because group therapy is the most common format for drug and alcohol treatment and GDC has among the most research evidence of any group-therapy approach for addiction. So far as the authors are aware, no study has yet examined methods to increase the adoption of any evidence-based group-therapy approaches.

After a 1-day continuing-education workshop on GDC, an 8-week-long consultation group was conducted based on ACT and Relapse Prevention (Marlatt & Gordon, 1985), viewing adoption as a psychologically challenging event that required acceptance of discomfort and behavioral persistence.

Method

Participants

The 30 participants (70% women, 30% men, *M* age = 53 years, *SD* = 13.8, range 28–82) were 24 licensed or certified addictions counselors, eight marriage and family therapists, and two clinical social workers. Participants self-identified as African-American (*n* = 1), American Indian (*n* = 2), and Caucasian (*n* = 27). They reported an average of 27.6 hr per week (*SD* = 15.8) in addiction-counseling–related duties in private, for-profit (*n* = 15), private, nonprofit (*n* = 11), and government settings (*n* = 4). They reported running an average of 4.3 groups (*SD* = 6.6) per week focused on addictions with about 40% (*SD* = 31.2) of their total therapy time conducting group therapy. Only three participants had familiarity with the group-therapy manual used in training.

Procedure

Recruitment. Potential study participants (*n* = 309) were randomly selected from lists of licensed or certified alcohol and drug abuse counselors, marriage and family therapists, and clinical social workers in Nevada. Those who were currently providing addiction-treatment services

in a group format were invited via postal mail to participate.

Reimbursement. Participants were assessed on site immediately pre- and postworkshop and via mail at 2- and 4-month follow ups. All participants received credit for 6 continuing education hours; as well as $15 and $25 discount coupons for future training workshops upon the receipt of the 2- and 4-month followup assessment packages, respectively. Those receiving consultation were given a $5 gift certificate to a department store for each of the first four sessions attended and a $10 certificate for each of the last four sessions.

Study Conditions

Participants were consented and randomized on the day of the workshop, with the use of a fully random computer-generated procedure, to one of two conditions. In both, participants first attended a 1-day, 6-hr training workshop on how to implement Group Drug Counseling (GDC; Daley et al., 1998). GDC is a largely psychoeducational group-therapy approach conducted over 24 sessions that has empirical support from one well-designed, medium-sized randomized controlled trial and evidence of impact in ethnically diverse samples (Crits-Christoph et al., 1999). The workshop was given by Dr. Dennis Daley, a nationally known GDC trainer and included didactics, question-and-answer periods, and role plays. Participants in the control condition ($n = 14$) had no additional contact with study staff beyond assessments, as might occur in the traditional format of continuing education workshops.

Participants in the consultation condition ($n = 16$), were assigned to eight 1.5-hr weekly consultation groups focused on overcoming psychological barriers to the implementation of GDC, particularly the structured sessions in the first half of GDC that differ markedly from traditional group-therapy methods. From a Relapse Prevention model (Marlatt & Gordon, 1985), counselors were encouraged to focus on barriers to initiation and maintenance rather than thinking of adoption as an all-or-none issue. From an Acceptance and Commitment Therapy model (Hayes et al., 1999), participants were encouraged to accept mindfully uncomfortable thoughts and feelings evoked by trying new things, and to focus on psychological flexibility and behavioral persistence (Hayes et al., 2004). For example, participants were en-

couraged to establish goals for use of the GDC protocol over the following week and were assisted in adapting the protocol to their own treatment settings and therapeutic styles.

The consultation group was co-led by a psychologist with expertise in addictions and ACT and a counselor colicensed as a marriage and family therapist and addictions counselor. Consultation leaders were not experts in GDC as such—their training in GDC consisted of attending the day-long training and reading/discussing the treatment manual.

Measures

Pretraining instruments. A demographic questionnaire and a test of GDC knowledge was administered pretraining.

Posttraining satisfaction instrument. GDC training satisfaction was assessed posttraining by the Treatment Acceptability Rating Scale (TARS; Davis, Rawan, & Copponi, 1989) which has shown test–retest reliability ($r = .83$) and internal consistency ($\alpha = 0.99$) in previous research (Milne, Keegan, Westerman, & Dudley, 2000) and adequate internal consistency ($\alpha = 75$) in this study.

Primary outcomes: Adoption measures. An adoption questionnaire was administered at the two followups. The primary outcome measure was the self-reported adoption score, which was derived by summing five Likert-style items created to measure use of the GDC manual, handouts, and sessions (Chronbach's alpha in this study = 0.92; test–retest between the two followups $r = .89$). Two single-item adoption measures were also used: the *sessions used* score consisted of the number of different GDC sessions and the *handouts used* score consisted of the number of different GDC handouts participants reported using during the past month.

Secondary outcomes: Burnout. Because previous research had shown reductions in burnout using ACT with counselors (Hayes et al., 2004) the Maslach Burnout Inventory (MBI; Maslach, Jackson, & Leiter, 1996) was used as a secondary outcome to assess whether there was a broader psychological impact of group consultation beyond adoption per se. The factor structure, reliability, and validity of the MBI have received strong support across many types of employment, including behavioral health professions (e.g., Bakker, Demerouti, & Schaufeli, 2002). The

MBI generates two scores: overall burnout (combining emotional exhaustion and depersonalization subscales), and personal accomplishment, which assesses feelings of competence and successful achievement. In this study, internal consistency was good for the overall burnout scale ($\alpha = .84$) and adequate for the personal accomplishment scale ($\alpha = .71$).

Results

Of the 16 participants assigned to the consultation condition, 13 attended at least one session, 7 attended all eight sessions, and 12 attended more than half of the consultation sessions. On average, participants attended 5.5 (69%) of the sessions. There were no significant predifferences between groups on any of the demographic variables examined except that those in the consultation condition reported higher use of cognitive-behavioral therapy techniques (32% of total time counseling) than those in the control condition (16.5%), $t(27) = 2.45$, $p = .021$. Alpha was not adjusted by the number of comparisons, and given that over 20 demographic and preassessment variables were tested, this single difference is about what would be expected assuming random variation.

Of the 30 therapists who attended the initial training, 7% did not complete the 2-month and 20% did not complete the 4-month follow up. Missing data were handled with the use of a last-data-point-carried-forward (LDCF) procedure. All analyses were conducted at the .05 level, and only significant effects are reported below. Between-group comparisons on the primary outcome measures were one-tailed, because directional predictions had been made. Means and standard deviations of primary and secondary outcome variables are listed in Table 1. All significant comparisons are reported below, but nonsignificant comparisons are not.

Pretreatment comparison. T tests indicated no significant differences between conditions on any of the pretreatment measures.

Satisfaction with GDC training. Postworkshop (before group consultation began) participants rated the GDC workshop to be beneficial (average item scores were between a rating of *quite a lot* and *a great deal*), but these did not predict adoption at any time point.

Primary outcome: Adoption. This analysis used a two (group) by two (2- and 4-month followup) repeated-measures ANOVA. Significantly higher levels of adoption were found for the consultation condition on all measures: self-reported adoption, $F(1,25) = 15.01$, $p = .0005$, sessions used, $F(1,25) = 3.18$, $p = .044$, and handouts used, $F(1,25) = 4.8$, $p = .019$. A sig-

TABLE 1. Outcomes on Measures of Adoption and Burnout

	Assessment point	Training only (*n* = 13)		Training plus consultation (*n* = 14)		Between-group *d*
		M	*SD*	*M*	*SD*	
Number of GDC sessions used in the last month	Two-month followup	4	4.7	5.6	4.2	0.36
	Four-month followup	1.9	2.5	4.9	4.1	0.88
Number of GDC handouts used in the last month	Two-month followup	2.5	3.8	4.9	4.3	0.59
	Four-month followup	1.4	2.1	4.0	3.8	0.85
Self-reported adoption	Two-month followup	11.2	6.0	21.6	8.1	1.46
	Four-month followup	10.2	5.6	19.4	7.0	1.45
	Pre	20.36	13.47	17.5	7.17	−0.27
	Post	19.0	12.33	14.94	7.41	−0.4
Burnout (depersonalization plus exhaustion)	Two-month followup	21.07	11.26	15.25	8.29	−0.59
	Four-month followup	17.0	9.35	12.44	7.75	−0.53
	Pre- to 2-month difference	0.71	7.45	−2.25	7.92	−0.38
	Pre to 4-month difference	−3.36	9.80	−5.06	8.32	−0.19
Personal accomplishment	Pre	43.07	4.68	39.69	4.67	−0.72
	Post	43.57	4.57	41.0	5.66	−0.5
	Two-month followup	41.5	4.36	41.31	6.37	0.03
	Four-month followup	41.21	4.53	42.94	4.14	0.4
	Pre- to 2-month difference	−1.86	3.82	3.25	4.12	1.29
	Pre- to 4-month difference	−1.57	4.68	1.63	5.32	0.63

nificant effect for time was also found on self-reported adoption, $F(1,25) = 4.29$, $p = .049$, indicating that use of the GDC protocol dropped off for both groups between the two followups, but not differentially between conditions. Follow-up pairwise t tests showed significant differences at the 2-month followup on self-reported adoption, $t(25) = 3.73$, $p < .001$ and at the 4-month follow up on self-reported adoption, $t(25) = 3.72$, $p < .01$, sessions used, $t(25) = 2.31$, $p < .05$, and handouts used, $t(25) = 2.18$, $p < .05$. The between-condition effect sizes for adoption measures were large (Cohen, 1988) with d values at the 4-month followup ranging from .85 to 1.45 (see Table 1).

Secondary outcome: Burnout. This analysis used a two (group) by four (assessment point) repeated-measures ANOVA, on the two subscales of the MBI. A significant condition-by-time interaction was found on personal accomplishment, $F(3,84) = 4.90$, $p = .003$. A contrast comparing personal accomplishment scores at the first two measurement occasions (before the consultation group began) as compared to the followups showed a significant interaction effect, with greater improvement in personal accomplishment in the consultation than the control group $F(1,28) = 11.83$, $p = .002$ (between-condition Cohen's $d = .40$ at the 4-month followup). It should be noted that, although not significant, consultation participants began the study with a lower sense of personal accomplishment (prescore $d = -.72$; see Table 1).

Discussion

This study provides preliminary evidence that adding a psychologically oriented ongoing consultation group to a typical 1-day workshop increased self-reported rates of adoption of an evidence-based group therapy. At a 4-month follow up, nearly 35% of the variance in self-reported adoption ($d = 1.45$) was explained by participation in the group consultation condition.

Burnout was included as a measure because previous research had shown that ACT decreased burnout in substance abuse counselors (Hayes et al., 2004). Because it was not an overt focus in this study, the greater increase in personal accomplishment of those in the consultation condition provides some limited support to the idea that the effects of the consultation were not generic.

This small initial study was not otherwise de-signed to determine the mechanisms through which a psychologically focused consultation intervention might increase adoption. Contact alone, social support, normalization, problem-solving about how to overcome barriers, feedback, goal-setting, general motivational factors, modeling the use of group processes in the consultation team, and other similar processes could be responsible for the effects seen. In this small study even such variables as number of sessions attended cannot fairly be examined. In order to determine the mechanism of action, future studies will need to be larger, include additional process and outcome measures, and use well-crafted control conditions designed to tease out functional variables. This preliminary study suggests that such research could be worthwhile.

A particular methodological weakness of this study is the exclusive use of self-report outcome measures. As with clients' self-report (cf. Schwarz, 1999), therapist self-report may not accurately reflect actual behavior. We attempted to reduce this concern by including reports of very specific behaviors (use of specific GDC sessions) as well as more global items, and positive outcomes were found in each, but it is not possible to rule out demand-based interpretations of the present study.

This study did not assess whether competence in GDC was achieved, whether it was delivered competently at the worksite, or whether any of this led to better clinical outcomes. Training workshops can increase perceived competence without increasing actual competence (Miller & Mount, 2001), and competence or adherence do not necessarily predict actual use and impact (e.g., Levin et al., 1999). Thus, although adoption is the largely unexamined "Step 2" of dissemination, very comprehensive studies will be needed to link it to skill and clinical impact.

Additional weaknesses are worth noting. We did not measure the adherence of trainers, and the counselor sample lacked ethnic diversity, possibly limiting the generalizability of these results. At the 4-month follow up five participants were missing from the experimental condition and one from the control conditions, which may have affected means at the 4-month follow up. There was not significant attrition at the 2-month follow-up, however, and between-group differences in self-reported adoption were equally strong at the two follow-up periods ($d = 1.46$ versus 1.45, respectively; see Table 1). Data were

lacking regarding the cost of the intervention as compared to its impact on practice. In order for dissemination programs to be scaled up to a larger sample, cost-effectiveness data are essential. One cost was the incentives provided (i.e., gift certificates) for attendance and completion of study assessments, and it is unknown how important these were to study outcomes. All of these factors should be considerations in future studies.

Taken as a whole, these various concerns and limitations emphasize the complexity of the task of studying the dissemination of new treatments. Enormous resources have been put into the development of evidence-based treatments, but making use of them involves the behavior of therapists and administrators, not just clients. The present study comports with others (e.g., Hayes at al., 2004; Varra, 2006) that suggest that our existing empirically supported models and methods of psychological and behavioral change can be successfully applied to clinicians themselves to assist them in doing their jobs and changing practice for the better. The universally adopted requirement for continuing education among professionals is an empty ritual unless this training makes a practical difference in the practice behavior of professionals. Based on the results of this and other studies, we recommend that agencies wanting to develop the skills of their staff consider ongoing, as opposed to one-time, educational interventions aimed at barriers to implementation, development of new skills, and other aspects of implementing a new therapeutic format. Overcoming therapists' psychological barriers to adoption through empirically supported psychological approaches may provide a new way to leverage continuing education into greater dissemination and adoption of empirically supported treatment technologies.

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