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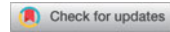
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Group Therapy for Substance Use Disorders: A Survey of Clinician Practices

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ABSTRACT

Substance use disorder (SUD) treatment is typically delivered in group format, but clinical research focuses on individual therapy. This exploratory study narrows this gap through a survey of 566 SUD group clinicians in the United States, concerning most commonly used group practices, attitudes about evidence-based treatments (EBTs), and beliefs about addiction. Clinicians reported high use of open groups, moderately high utilization of EBT practices, and moderate use of questionable practices. Clinicians' attitudes about EBTs and beliefs about addiction were correlated with the use of certain EBTs and questionable practices. Strategies for implementation of EBTs in group settings are discussed.

KEYWORDS

Substance use disorder treatment; group therapy; evidence-based practice; treatment-as-usual; evidence-based treatment implementation

In spite of considerable research advances in the past 15 years, evidence-based treatments (EBTs) for substance use disorders (SUDs) often are not used in treatment settings or lag years behind in their uptake (Carroll & Rounsaville, 2007; Glasner-Edwards & Rawson, 2010; Manuel, Hagedorn, & Finney, 2011; Miller, Sorensen, Selzer, & Brigham, 2006). Several reasons have been identified for this research-practice gap, including organizational barriers (Carroll et al., 2011; Carroll & Rounsaville, 2007), the complexity of comprehensive SUD services (Lash, Timko, Curran, McKay, & Burden, 2011), the difficulty of balancing treatment fidelity with individualized care (Aarons, Miller, Green, Perrott, & Bradway, 2012; Lundgren, Amodeo, Cohen, Chassler, & Horowitz, 2011), and pessimistic beliefs or ambivalent attitudes among clinicians about EBTs (Knudsen, Ducharme, & Roman, 2007; Manuel et al., 2011).

One underappreciated dimension of this research-practice gap—likely cutting across each of the aforementioned obstacles—is a mismatch in treatment modality: Whereas clinical trial and EBT implementation research has focused nearly exclusively on interventions for individual clients, a large majority of real-world SUD treatment is in group format. According to previous surveys, group therapy is offered by over 90% of SUD treatment facilities (Crits-Christoph, Johnson, Connolly Gibbons, & Gallop, 2013; Weiss, Jaffee, de Menil, & Cogley, 2004), and

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for many facilities it is the overwhelming focus (Fletcher, 2013). Group therapy may include psychoeducational presentations, recovery skills training, interpersonal process groups, “check in” groups, motivational groups, and specialty topic groups (Connors, DiClemente, Velasquez, & Donovan, 2013; Weiss et al., 2004). In addition to financial considerations, the dominance of group therapy is reflective of the massive infrastructure of mutual support groups (e.g., Alcoholics Anonymous) and the historically dominant “Minnesota Model” of SUD treatment (characterized by group-based didactic education and milieu support based on a disease model of addiction and 12-step principles; see Fletcher, 2013, pp. 70–71; McElrath, 1997). Although data are limited, group therapy can also be justified on evidentiary grounds; according to a meta-analysis of 24 studies, group therapy is generally equally effective as individual therapy for SUD treatment (Weiss et al., 2004; see also Sobell & Sobell, 2011).

In spite of the clinical predominance and effectiveness of group therapy, research efforts have focused primarily on individual therapy for SUDs—as noted in several reviews of SUD group therapy (Connors et al., 2013; Sobell & Sobell, 2011; Weiss et al., 2004). Nearly all EBTs for SUDs originated as individual interventions, and most major treatment research studies have been limited to individual-based EBTs (e.g., COMBINE and Project MATCH studies; see Anton et al., 2006; Donovan et al., 1994). (For notable exceptions, see Crits-Christoph et al., 1999; Najavits, 2002; it also should be noted that group-based cognitive-behavioral therapy, CBT, has strong experimental support for adolescent SUD treatment; Hogue, Henderson, Ozechowski, & Robbins, 2014; Kaminer & Slesnick, 2005.) In addition, effectiveness trials have focused primarily on individual therapy, as reflected by the 19 psychosocial intervention trials in the National Institute on Drug Abuse’s National Drug Abuse Treatment Clinical Trials Network (as of June 2016): 14 individual therapies, one family therapy, one combined individual–group therapy, and three group therapies (the latter being limited to gender-specific specialty groups for sexual risk reduction and comorbid PTSD/SUD; Calsyn et al., 2009; Hien et al., 2009; Tross et al., 2008). In addition to limited experimental research on group SUD treatments, there is a general lack of information about how to integrate EBTs into groups, with implementation and dissemination efforts focusing primarily on individual interventions (Connors et al., 2013). This focus reflects the individualized nature of most medical treatment (in which the clinical trials research paradigm originated) and difficulty in ensuring control in conditions with interdependent group members (see Baldwin, Murray, & Shadish, 2005; Donovan et al., 1994; Morgan-Lopez & Fals-Stewart, 2008; Weiss et al., 2004), but it is clearly a mismatch for the SUD treatment ecology.

This treatment modality mismatch has practical consequences, given that skills required for quality group facilitation (e.g., building group cohesion, managing conflict, and redirecting monopolizing clients) generally require specialized training and are not obviously transferable from individual therapy skills (American Group Psychotherapy Association, 2007; Center for Substance Abuse Treatment, 2005; Sobell & Sobell, 2011; Wagner & Ingersoll, 2012; Wenzel, Liese, Beck, & Friedman-Wheeler, 2012; Yalom & Leszcz, 2005). Group facilitation is complicated further for

open groups—in which clients initiate and terminate from treatment on an open-enrolling basis, thereby prohibiting sessions from substantively building on each other conceptually—that appear to be very common in SUD treatment facilities (Daley, Baker, Donovan, Hodgkins, & Perl, 2011; Morgan-Lopez & Fals-Stewart, 2008). Unfortunately, open groups are rarely examined, because of methodological difficulties with controlling for equivalent group comparisons and in analyzing data (Morgan-Lopez & Fals-Stewart, 2008; Weiss et al., 2004).

This treatment modality mismatch may reflect a difficulty for researchers—to adapt the clinical adage—to “meet clinicians where they are at.” A preliminary step in bridging this gap is to explore treatment-as-usual for group therapy, in order to dovetail future implementation efforts with existing practices and infrastructures (Baer et al., 2007; Santa Ana et al., 2008). SUD treatment researchers have in recent years documented treatment-as-usual in SUD specialty clinics, especially in comparison with EBTs (Ball et al., 2007; Carroll et al., 2009, 2011; Donovan et al., 2013; e.g., Eliason, Arndt, & Schut, 2005; Gifford et al., 2012; Peirce et al., 2006; Petry et al., 2005; Winhusen et al., 2008). These studies have generally shown that EBTs have modestly superior outcomes to treatment-as-usual. However, these studies have either been limited to individual therapy or have not distinguished between individual and group therapies. Thus, clinical researchers may still struggle with understanding where real-world treatment settings “are at,” and as a result may be compromised in influencing the adoption and sustainable use of EBTs in treatment settings for which group therapy is the norm.

Although the literature documenting treatment-as-usual is small and has not focused on group practices, a tentative composite picture of treatment-as-usual in relationship to EBTs can be gleaned from this literature: Clinicians generally report high and eclectic use of certain EBTs, especially motivational interviewing (MI) and CBT (Eliason et al., 2005; Gifford et al., 2012), though these reports generally overestimate adherence in comparison to observer fidelity measurement based on audiotaped sessions (Santa Ana et al., 2008). In addition, certain questionable or less-effective practices are frequently reported and/or observed, such as didactic group education, unstructured group therapy, excessive informal chatting, and assertions of therapeutic authority (Bamatter et al., 2010; Eliason et al., 2005; Gifford et al., 2012; Martino, Ball, Nich, Frankforter, & Carroll, 2009; Santa Ana et al., 2008).

In this exploratory study, we aim to extend this line of research on treatment-as-usual into group therapy in particular, through a survey of clinician group practices. This survey, which relies on clinicians' self-reported responses, was designed to assess specific, concrete practices in an attempt to better approximate what clinicians do in group therapy. Specifically, this study explores the following questions: (a) How frequently do clinicians report using groups, and what do they indicate as the most common structural aspects of group sessions? (b) What specific practices do clinicians report adopting most frequently in group therapy? (c) What clinician and organizational factors, if any, are associated with greater or lesser reported use of these practices? Given the limited research on group therapy practices for SUDs, this study is intended to be an initial exploration in an effort to assist researchers

and clinicians to more collaboratively work with each other in terms of predominant modes of treatment delivery in real-world clinics.

Methods

Design

This study is based on an online survey of SUD clinicians within the United States focusing on their most commonly reported group therapy practices. As a one-time survey, the study uses a cross-sectional design. After full review, this study was designated as exempt from oversight by the University of Michigan Health Sciences and Behavioral Sciences Institutional Review Board.

Participants

Participants were recruited from among the membership of NAADAC, the Association for Addiction Professionals (formerly called the National Association of Alcoholism and Drug Abuse Counselors). With approximately 8,000 members, NAADAC is reportedly the largest U.S. organization for addiction-focused health care professionals (NAADAC, n.d.). Study participation was limited to licensed/certified clinicians who have facilitated group therapy for SUDs within the past 2 years in the United States; students and physicians were excluded to ensure that reported experiences were from clinicians fully trained to provide psychosocial therapies. Of those eligible, 701 participants initiated the online survey, with 566 participants (80.7%) completing the survey.

Characteristics of the 566 survey completers are summarized in [Table 1](#). The sample is diverse in gender (67% women), age (range of 23–82 years; $M = 52$), and personal recovery status (43% in recovery), as well as in characteristics of respondents' primary work setting. The sample is more homogeneous in terms of race/ethnicity (84% non-Latino/Hispanic Whites), profession (82% addiction counselors/therapists vs. other categories of clinicians such as social workers), and highest degree (64% Master's); moreover, 80% of respondents worked primarily in private organizations (41% nonprofit; 39% for-profit). These demographics are comparable with recent studies surveying NAADAC members (see [Davis & Rosenberg, 2013](#); [Rosenberg & Davis, 2014](#); [Steenbergh, Runyan, Daugherty, & Winger, 2012](#)), with the organization's published membership statistics (NAADAC, 2011), and with U.S. workforce surveys (see [Libretto, Weil, Nemes, Linder, & Johansson, 2004](#); [Mulvey, Hubbard, & Hayashi, 2003](#); [Rieckmann, Farentinos, Tillotson, Kocarnik, & McCarty, 2011](#)).

Materials

The online survey consisted of three measures, in addition to demographic items and questions about respondents' primary work setting. The primary measure

Table 1. Participant characteristics.

Characteristic	<i>n</i>	%
Gender		
Men	185	32.7
Women	379	67.0
Other	2	0.4
Age		
21–29	25	4.4
30–39	70	12.4
40–49	119	21.0
50–59	183	32.3
60–69	137	24.2
≥70	32	5.7
Race/ethnicity		
White (non-Hispanic/Latino)	475	83.9
Black	38	6.7
Latino/Hispanic	15	2.7
American Indian/Alaska Native	14	2.5
Multiracial/Other	24	4.2
Highest degree		
High school	22	3.9
Associate's	30	5.3
Bachelor's	97	17.1
Master's	363	64.1
Doctorate	42	7.4
Other	12	2.1
Personal recovery status		
Has not been in recovery	302	53.4
Has been in recovery	242	42.8
Preferred not to answer	22	3.9
Profession		
Addiction counselor/therapist	462	81.6
Social worker	47	8.3
Marriage and family therapist	20	3.5
Psychologist	14	2.5
Other	23	4.1
Years treating substance use disorders (SUDs)		
0–9	181	32.0
10–19	161	28.4
20–29	150	26.5
≥30	74	13.1
Primary work role		
Direct services	386	68.2
Supervision and/or administration	111	19.6
Assessment	37	6.5
Case management and/or referral	32	5.7
Work setting (of primary clinic)		
Outpatient SUD clinic	167	30.0
Private practice	99	17.5
Inpatient/residential SUD clinic	97	17.1
Outpatient mental health agency	83	14.7
Intensive outpatient/day hospital (SUD)	52	9.2
Other	68	12.0
Operational structure (of primary clinic)		
Private non-profit	234	41.3
Private for-profit	221	39.1
City/county government	39	6.9
State government	36	6.4
Federal government	26	4.6
Other	10	1.8
Medication options for opioid use disorder (at primary clinic)		
Yes	140	24.7
No	426	75.3
Harm reduction options (at primary clinic)		
Yes	136	24.0
No	430	76.0

Note. Respondents were allowed to indicate only one response per item, and percentages may not always sum to 100% due to rounding. For primary work role, direct services do not include assessment or case management; research and/or evaluation was provided as an option, but no respondents endorsed it. For harm reduction options, an affirmative response indicated that formally advertised, long-term harm-reduction (non-abstinence) options were available at the respondent's primary clinic (medication-assisted treatment was not sufficient to count as harm reduction).

was an adaptation of the Clinical Practices Survey for Substance Use Disorders (CPS-SUD), originally designed by Gifford et al. (2012) to inquire about specific therapeutic practices in SUD treatment specialty clinics from U.S. Veterans Affairs and community clinicians. These practices were itemized from fidelity monitoring measures for six EBTs for SUDs: MI, CBT, 12-step facilitation (TSF), community reinforcement approach (CRA), contingency management, and structured family and couples therapy (with 13 items shared between two EBTs); items were rated on a 1–5 Likert-type scale in terms of the proportion of respondents' clients for which the practice was used in a typical month. Importantly, survey items were not explicitly associated with their respective EBTs; decoupling component practices from EBTs allowed for more specific reports of what clinicians do in therapy, with recognition that clinicians may use some but not all components of EBTs, perhaps independently of deliberate EBT adoption. Each of the EBT scales had good to excellent internal consistency reliability ($\alpha = .68-.91$). The CPS-SUD also inquired about the use of questionable practices and the length of therapy sessions, and included two items to check for an acquiescent response. Questionable practices were operationalized as those practices that were proscribed by the U.S.-based National Quality Forum on the basis of expert consensus of the scientific literature (see Power, Nishimi, & Kizer, 2005).

We adapted the CPS-SUD to assess group practices in particular. First, we adapted questions to indicate with what proportion of total group sessions (rather than proportion of individual clients) clinicians have engaged in each practice during a typical month (1 = none/almost none; 2 = some; 3 = half; 4 = most; 5 = almost all/all). Second, we omitted items that pertained to individual client management generally (e.g., providing incentives for abstinence, discharging for relapse) or family involvement in therapy. With these omissions, three items about questionable practices were retained: didactic group education ("provide group education on alcohol and/or drug use in a lecture or teaching format"), confrontation as a principle approach ("use a confrontational style for the majority of a session"), and unstructured group therapy ("facilitate free form discussion groups or groups without a structure"). Finally, we later added an item about the percent of group sessions that were open groups (limited to the final 123 survey completers).

Two additional measures were included for the purpose of exploring correlations between clinician factors and the use of group therapy practices. First, the 18-item Evidence-Based Practice Attitude Scale (EBPAS) assessed clinicians' attitudes about using evidence-based practices (EBPs; Aarons, 2004). Responses were rated on a 1–5 Likert-type scale ranging from 1 (*not at all*) to 5 (*to a very great extent*) and were scored according to four subscales: (a) intuitive appeal of EBPs, (b) likelihood of EBP adoption given external requirements to do so, (c) openness to new practices and treatments, and (d) perceived divergence between usual care and scientifically derived treatment protocols. Subscales have been shown to have generally high internal consistency reliability, construct validity, and convergent validity (Aarons, 2004). Second, the Short Understanding of Substance Abuse Scale (SUSS) assessed

clinicians' beliefs about addiction etiology (Humphreys, Greenbaum, Noke, & Finney, 1996). Responses were rated on a 1–5 Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*) and were scored according to three subscales characterizing broad etiological models of addiction: Disease (emphasizing physiological factors), Psychosocial (emphasizing social and environmental factors), and Eclectic (reflecting an eclectic approach to treatment). The three factor structure of the SUSS has been validated through confirmatory factor analysis and it has been shown to have fair internal consistency reliability for all three subscales (Humphreys et al., 1996).

Procedure

Email solicitations for survey respondents were sent from NAADAC to its members every 1–2 weeks from April 7 to May 28, 2014. These email messages included a brief description of the study rationale and survey content, eligibility requirements, and a hyperlink to an online survey administered through Qualtrics. As an incentive, survey completers had the option to enter a drawing for one of twenty \$50 gift cards. Prior to taking the survey, participants were required to review an informed consent document and indicate their consent anonymously. Participant responses were anonymous and securely stored on the Qualtrics platform and converted to a secure data file for analysis.

Analysis

Statistical analyses were computed using STATA software (version 12). Descriptive statistics were generated for a number of variables pertaining to clinician practices, including the percent of clients to receive various treatment modalities, the structure of group therapy sessions facilitated (length of sessions and percent of open groups), clinicians' attitudes about evidence-based practice (EBPAS subscales), clinicians' beliefs about addiction (SUSS subscales), and clinicians' group therapy practices (CPS-SUD items). Group therapy practice composite scores were calculated in terms of means from all items associated with each of the four EBTs (MI, CBT, TSF, and CRA). Correlations among the four EBT composite scores and the three questionable practices were conducted. Exploratory inferential analyses (Spearman correlations and independent-samples two-tailed *t*-tests) were then conducted, to explore whether selected demographic variables (personal recovery status; years treating SUDs), organizational factors (operational structure [for-profit vs. nonprofit]; addiction medication availability; harm reduction availability), and clinician attitudes/beliefs (EBPAS and SUSS subscales) were associated with greater or lesser use of group therapy practices (four EBT mean scores and three questionable practice items). Given the number of total comparisons ($n = 84$), a Bonferroni correction was applied to the alpha value ($p < .05$) to reduce the likelihood of Type 1 error; the corrected alpha level for statistical significance of each statistical test was set at $p < .0006$.

Table 2. Structure of group therapy sessions facilitated.

Variable	%
Length of facilitated group sessions	
30 min	1.2
45–50 min	11.1
60 min	23.7
75 min	6.9
90 min	30.9
120 min	18.2
>120 min	22.4
Percent of facilitated groups that are open-enrolling ($n = 123$) ^a	
0%	9.8
1–50%	10.6
51–99%	10.6
100%	69.1

Note: For length of facilitated group sessions, respondents were asked to select any of the options that indicate the approximate length of any group therapy sessions personally facilitated in a typical month.

^aThis item was added later in the survey administration and thus was limited to the last 123 participants who completed the survey.

Results

Reliability and validity

Consistent with Gifford et al.'s (2012) study, all four EBT scales in the CPS-SUD had good to excellent internal consistency reliability (α values: MI = .85; CBT = 0.90; CRA = .90; TSF = 0.85). In addition, for a CPS-SUD item checking an acquiescent response set, the mean rating was extremely low, as expected (“remain silent throughout the entire session”; $M = 1.19$; $SD = 0.55$).

Treatment modalities and group therapy structure

In terms of treatment modalities used, clinician respondents indicated that most of their clients ($M = 3.94$; $SD = 1.26$) received group therapy in a typical month, whereas more than half received individual therapy ($M = 3.33$; $SD = 1.45$); family therapy was infrequently received ($M = 1.78$; $SD = 1.08$). The reported length of group therapy sessions varied, with the most frequent durations being 90 min (31%), 60 min (24%), over 120 min (22%), and 120 min (18%; see Table 2). A large majority of groups were open groups; 69% of clinicians reported that all of their facilitated groups were open groups, with 10% reporting that none were open groups (based on the 123 participants who were asked this question; see Table 2).

Use of EBT practice components and questionable practices

Table 3 indicates the prevalence of each EBT practice component, as reported by clinicians. Based on mean scores for EBTs, practice components from MI were most frequently utilized ($M = 4.14$; $SD = 0.67$), followed by CBT ($M = 3.79$; $SD = 0.82$), CRA ($M = 3.59$; $SD = 0.82$), and TSF ($M = 3.11$; $SD = 0.83$). Individual practice components for each EBT varied, as shown in Table 3.

Table 3. Reported use of evidence-based treatment components.

Evidence-based treatment practice components	<i>M</i>	<i>SD</i>
Motivational interviewing	4.14	0.67
Ask open-ended questions with the purpose of getting group members to talk more	4.50	0.78
Try to understand group members' perspectives	4.49	0.83
Encourage individual group members by saying something positive or complimentary about their strengths or efforts	4.31	0.88
Emphasize that group members are in control of their recovery	4.25	1.01
Convey your positive perception of each group member as a person, regardless of whether you agree with their behaviors	4.21	1.04
Make comments conveying sympathy, compassion or understanding	4.20	1.01
Attempt to enhance motivation and commitment to change	4.16	1.04
Listen and then repeat or rephrase what group members had said	3.95	1.12
Treat group members as partners, including allowing their perspectives to help guide treatment	3.73	1.23
Suggest a different meaning for a group member's experience, placing it in a new light	3.61	1.19
Cognitive behavioral therapy	3.79	0.82
Make comments conveying sympathy, compassion or understanding	4.20	1.01
Examine thoughts and emotions that lead to use	4.03	1.03
Help group members identify and prepare for possible triggers or situations that might lead to use	4.01	1.08
Encourage group members to anticipate future high risk situations and to formulate appropriate ways to manage these situations	3.91	1.15
Help group members notice and change thoughts that lead to drinking/drug use	3.87	1.11
Assist group members in defining specific treatment goals in a variety of life areas	3.84	1.18
Discuss high risk situations group members encountered in the past and explore specific actions they took to avoid or cope with the situation	3.79	1.15
Ask group members to do one or more specific tasks between sessions	3.67	1.18
Discuss, teach, show, or rehearse how to cope with difficult situations without using alcohol other drugs	3.64	1.22
Discuss that one use (a "slip") does not have to become a full relapse	3.42	1.35
Review group members' reactions to previously assigned tasks, including problems they may have encountered in carrying out these tasks	3.33	1.25
Community reinforcement approach	3.59	0.82
Encourage group members to develop substance-free recreational activities	4.16	1.03
Examine thoughts and emotions that lead to use	4.03	1.03
Help group members identify and prepare for possible triggers or situations that might lead to use	4.01	1.08
Encourage group members to anticipate future high risk situations and to formulate appropriate ways to manage these situations	3.91	1.15
Assist group members in defining specific treatment goals in a variety of life areas	3.84	1.18
Discuss high risk situations group members encountered in the past and explore specific actions they took to avoid or cope with the situation	3.79	1.15
Examine the negative consequences of using (short-term or long-term)	3.78	1.16
Discuss, teach, show, or rehearse how to cope with difficult situations without using alcohol other drugs	3.64	1.22
Identify and provide training for specific skills group members lacked	3.52	1.22
Assess how happy group members were in different areas of life	3.30	1.24
Examine the positive consequences of using (short-term or long-term)	3.00	1.43
Help group members develop a plan to try out a period of abstinence as an experiment	2.90	1.42
Support group members' use of prescribed medications for their substance use	2.87	1.50
Twelve-step facilitation	3.11	0.83
Encourage and assess group members' involvement with self-help groups	3.70	1.24
Discuss that group members' addiction is a disease	3.67	1.32
Ask group members to do one or more specific tasks between sessions	3.67	1.18
Review group members' reactions to previously assigned tasks, including problems they may have encountered in carrying out these tasks	3.33	1.25
Explore group members' denial of their addiction	3.13	1.29
Discuss the 12 steps to recovery	3.06	1.32
Discuss group members' resistance to participating in a 12-step recovery program	2.86	1.28
Help group members accept his/her identity as an addict	2.84	1.39
Promote group members' relationships with God or their Higher Power	2.84	1.36
Describe your own life experiences or beliefs with the intent of providing suggestions for problem-solving or emotional support	2.00	1.00

Note: For each item, respondents were asked, "In a typical month, for how many of your total substance use disorder group sessions do you personally ...?" Responses were rated on a 1–5 Likert-type scale ranging from 1 (*none or almost none*) to 5 (*almost all or all*). Statistics are provided for individual items as well as means for each evidence-based treatment.

Table 4. Correlations among evidence-based treatment mean scores and questionable practice items.

Variable	1	2	3	4	5	6	7
1. MI	—						
2. CBT	.74	—					
3. CRA	.69	.95	—				
4. TSF	.53	.70	.67	—			
5. <i>Education</i>	.31	.47	.48	.45	—		
6. <i>Confrontation</i>	.18	.35	.33	.42	.21	—	
7. <i>Unstructured</i>	.17	.17	.19	.20	.16	.19	—

Note: Spearman correlations among mean scores for evidence-based treatment scales (MI = motivational interviewing; CBT = cognitive behavioral therapy; CRA = community reinforcement approach; TSF = twelve-step facilitation) and (italicized) questionable practice items (Education = didactic group education; Confrontation = confrontation as a principle approach; Unstructured = unstructured group therapy). All correlations are statistically significant ($p \leq .0001$).

In terms of questionable practices, more than half of respondents' clients received group education about alcohol and/or drug use in a lecture or teaching format ($M = 3.10$; $SD = 1.30$), with less frequent use of unstructured discussion groups ($M = 2.35$; $SD = 1.20$) and confrontational style for the majority of the session ($M = 1.79$; $SD = 1.06$), based on clinician reports.

Table 4 shows Spearman correlations among each of the four EBT mean scores and the three questionable practice items. Each correlation was positive and statistically significant ($p \leq .0001$). Correlations were relatively high among EBT mean scores (.53–.95), with relatively low correlations between EBT mean scores and questionable practice items (.17–.48); correlations among questionable practices were relatively low (.16–.21).

Clinician and organizational factors

Based on exploratory analyses of clinician and organizational differences in use of EBT practices (based on treatment clusters) and questionable practices, relatively few statistically significant differences were found, with no differences for clinician demographics or organizational factors. Concerning clinician attitudes and beliefs, the following statistically significant correlations were found. First, clinicians' belief in a disease model of addiction was positively correlated with TSF practices ($r_s = .42$), a predominant use of a confrontational style ($r_s = .28$), and didactic groups in a teaching or lecture format ($r_s = .16$; $p \leq .0001$). Conversely, clinicians' belief in an eclectic model of addiction was negatively correlated with CBT practices ($r_s = -.22$), TSF practices ($r_s = -.35$), CRA practices ($r_s = -.20$), a predominant use of a confrontational style ($r_s = -.31$), and didactic groups in a teaching or lecture format ($r_s = -.19$; $p < .0001$). (No significant correlations were found for belief in a psychosocial model of addiction.) Second, MI, CBT, and CRA practices (but not TSF or questionable practices) were positively correlated with clinicians' scores on the EBPAS Appeal ($r_s = .29$; $r_s = .19$; $r_s = .17$) and Openness subscales ($r_s = .27$; $r_s = .27$; $r_s = .27$; $p \leq .0001$). (No significant correlations were found for the Requirements or Divergence EBPAS scales.)

Discussion

For this study, we explored SUD group therapy practices as reported by a sample of 566 U.S. clinicians. Because little has been previously published regarding SUD group therapy, this study sheds important light on treatment-as-usual for SUD treatment. In particular, this study (a) confirms the widespread use of open groups within SUD specialty clinics, (b) suggests that SUD clinicians report relatively high use of EBT practice components, (c) and indicates that clinicians' attitudes about EBTs and beliefs about addiction correlate with reported use of certain EBTs and questionable practices. Based on these results, we provide here some interpretive comments and recommendations towards reducing the gap between research and practice.

First, the widespread use of group therapy for SUD treatment reported in this study suggests that EBT implementation may be more successful if group therapy—and open groups in particular—are viewed as normative. In particular, the prevalence of open groups—with 69% of a subset of respondents facilitating only open groups—suggests that research and implementation strategies that begin with this reality are necessary. This conclusion is consistent with a survey of 67 community treatment programs concerning which modality of TSF they would be most likely to implement; only 1.6% said they would implement an individual therapy model, in comparison to 59.4% for a combined group-individual model and 39.1% for a group model; in addition, 95% expressed that an open group format was preferable (Daley et al., 2011). We recommend a greater proportion of group clinical trials (particularly for open groups); however, there are logistical and statistical difficulties for such (see Baldwin et al., 2005; Donovan et al., 1994; Morgan-Lopez & Fals-Stewart, 2008). A more feasible short-term approach may be for researchers to partner with clinicians in adapting existing research-based protocols into a format that can be readily and flexibly used in open groups. One idea in this regard is for the creation and dissemination of research-based single-session modules that can be flexibly incorporated by clinicians into open groups of various duration and in multiple settings (see, e.g., Wenzel et al., 2012).

Second, clinicians generally reported a high use of practices associated with EBTs, consistent with previous studies on SUD treatment-as-usual (Eliason et al., 2005; Gifford et al., 2012; Santa Ana et al., 2008). Conversely, clinicians reported low use of a predominant confrontational style in groups—consistent with reports that the rise of MI has coincided with decreased use of confrontational approaches in SUD community settings (e.g., Carr, 2013). Although these self-reported results do not indicate anything about the quality and fidelity of treatment, they suggest at least a theoretical openness to using EBT practice components among most SUD treatment facilities and/or clinicians.

Third, the use of treatment components from EBTs was positively correlated with clinicians' attitudes of EBTs being intuitively appealing as well as clinicians being open to new practices and treatments. However, this result was not found in relation to clinicians' reported likelihood of using EBTs if required by their organization or external forces. An implication of these results is the importance of hiring clinicians

who are open to new treatments or for whom EBTs are intuitively appealing, as well as in efforts to educate and persuade reluctant clinicians about the importance of using EBTs (see Allen & Armstrong, 2014; Palinkas et al., 2013).

Fourth, clinicians' beliefs about addiction correlated with the use of EBTs and questionable practices. Clinicians' endorsement of a disease model of addiction was positively correlated with TSF practices, the predominant use of a confrontational style, and didactic educational groups. This configuration of practices is understandable, in light of 12-step principles, confrontation, and didactic education being infused in historically dominant treatment models in the U.S., such as the Minnesota Model, social model programs, and therapeutic communities (Borkman, Kaskutas, & Owen, 2007). We recommend for clinical organizations to make specific efforts to reduce questionable practices alongside implementation of TSF among disease-model clinicians (see Gifford et al., 2012). Conversely, clinicians' endorsement of an eclectic model of addiction was negatively correlated with the aforementioned configuration of practices, while also being negatively correlated with CBT and CRA practices. This finding is consistent with the eclecticism category indicating a lack of endorsement with both disease and psychosocial models.

Finally, clinicians reported widespread use of group education about alcohol and/or drug use in a lecture or teaching format. In a review of 381 clinical trials for alcohol use disorder treatment, didactic educational groups (typically using lectures and films to provide information about addiction) were the least effective of 48 treatment methods (below confrontational approaches), with 34 of 39 published studies showing no beneficial effects (Miller & Wilbourne, 2002; cf. Miller, Forcehimes, Zweben, & McLellan, 2011, p. 315). However, in our study, the use of group education was moderately correlated with EBT practices, suggesting that clinicians commonly use group education in combination with EBTs. A limitation of our study is that we did not assess whether clinicians are using didactic education as a supplementary rather than primary approach, nor did we assess the type and quality of such, which may vary widely. We therefore recommend for future research on the extent, type, quality, and effectiveness of group educational approaches.

Several limitations should be considered in the interpretation of this study. First, a self-reported survey is limited in its accuracy about what clinicians actually do. Because clinicians were asked about specific treatment components, some problems of self-report may be mitigated; moreover, even if reports are inflated overall, this survey can nonetheless show the relative frequency of clinician practices. Nonetheless, clinician reports may have limited accuracy, and clearly observation of clinicians in group settings is needed and recommended. Second, this study does not provide information about treatment quality, the integration of multiple treatment approaches (including individual therapies not explored in this study, such as contingency management), or the use of common factors for group therapy generally. Important questions remain to be explored, which are perhaps best addressed through observational, ethnographic, and qualitative research designs. Finally, there may be limits to the generalizability of this study; although the sample's demographics are comparable with the NAADAC membership and the U.S. treatment workforce (as discussed above), its international generalizability is unknown and

certain therapists may have had greater motivation to take the survey based on recruitment strategies; moreover, this study design is unable to show differences between those who took the survey vs. those who did not. Nonetheless, as the most in-depth exploration of treatment-as-usual for SUD group therapy to date (of which we are aware), this study may be valuable to both researchers and clinicians in bridging the persistent research-practice gap.

Conclusions

An underappreciated dimension of the research-practice gap for SUD treatment is a focus of clinical research on individual therapy, versus the majority of treatment being delivered in group format. An important step for reducing this gap is the exploration of treatment-as-usual for group therapy. This study is a preliminary investigation in this regard, using a survey of 566 specialty SUD treatment clinicians in the United States about their most commonly used group therapy practices, especially in relation to EBT practice components. This study confirms the widespread use of group therapy in SUD treatment settings, including the predominant use of open groups. It also shows that clinicians report high utilization of EBT components, with low or moderate use of questionable practices. Clinicians' attitudes about EBTs and beliefs about addiction were correlated with the use of certain EBTs and questionable practices. Future clinical research and implementation strategies would likely be most effective by beginning with a group therapy delivery context in mind, including the particular findings reported in this study.

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