

Who Administers Wraparound?

An Examination of the Training, Beliefs, and Implementation Supports for Wraparound Providers

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The wraparound care management process has been cited as a promising means for making evidence-based treatments relevant and accessible to youth with mental health needs and their families. However, there has been little research on the background and training of providers who participate on wraparound teams. In the current study, the authors examined the prevalence of wraparound implementation nationally in systems of care and the background, training, organizational supports, and perceptions of evidence-based treatments (EBTs) for professionals who implement wraparound. Results suggest that wraparound implementation is common across communities and that wraparound providers are different from other professionals. They are, for example, less likely to have an advanced degree, more likely to have received their training from agency inservices, less likely to receive manuals with their training, and more likely to report fully implementing treatment protocols. Wraparound providers are also more likely to report that their agency or organization mandated implementation of EBTs. Results provide several implications for wraparound model specification, development of quality assurance supports, and a need for higher education to better orient trainees to models and philosophies such as wraparound.

Providers of services to children with intensive mental health needs have come under increased pressure to accomplish multiple and challenging tasks. Increased adoption of “system-of-care” values, initially proposed in the mid-1980s (Stroul & Friedman, 1996) and supported by the President’s *New Freedom Commission Report* (U.S. Department of Health and Human Services [USDHHS], 2003) has led to expectations that service delivery be collaborative across agencies, family-driven, culturally competent, and provided in the community whenever possible. In addition, children and adolescents are ex-

pected to have an individualized plan of care that describes how services and supports will be tailored to meet their unique needs and those of their families (USDHHS, 2003). Meanwhile, expansion of the research base on treatment effectiveness has led to calls for these care plans to include “evidence-based” services and supports (Hoagwood, Burns, Kiser, Ringeisen, & Schoenwald, 2001). Finally, the growth of the family movement has reinforced the role of parents and family members as full partners in the development and implementation of care plans (McCammon, Spencer, & Friesen, 2001).

These parallel advancements have put pressure on states and local communities to coordinate care in a way that embodies all these values and priorities. As a result, use of the wraparound process for care planning and management of children with serious emotional and behavioral problems has increased. Recent estimates put the number of children engaged in some version of the wraparound process at 200,000 (Faw, 1999). Furthermore, prominent discussions of the national children’s mental health agenda have suggested that improving outcomes for these families will require care management processes such as wraparound to ensure that evidence-based practices are accessible, appropriate, and relevant to families (Tolan & Dodge, 2005).

Wraparound has been referenced in children’s mental health literature since the 1980s and generally has a positive research base (see Burchard, Bruns, & Burchard, 2002, for a review); however, there has been a lack of evaluations using rigorous research designs (Farmer, Dorsey, & Mustillo, 2004). A primary impediment to the use of rigorous research designs to evaluate the wraparound process has been the model’s history of poor specification and inconsistent implementation. This has been

addressed in recent years through description of specific wraparound principles (Burns & Goldman, 1999; Walker et al., 2004), a description of provider and team activities (Bruns, Walker, et al., 2004), and necessary system and program supports (Walker, Koroloff, & Schutte, 2003). Such work has allowed researchers to create fidelity and implementation measures. Trainers can also be more consistent in the support they give to programs, and states and local communities are able to develop provider regulations and accreditation procedures. In addition, the first randomized control studies of a well-specified wraparound process are now under way (Walker & Bruns, 2006a; Walker & Bruns, 2006b).

SUPPORTING WRAPAROUND IMPLEMENTATION

As the wraparound process has become better specified and more amenable to consistent implementation, critical implementation and workforce development issues have been identified. As Fixsen, Naoom, Blase, Friedman, and Wallace (2005) described, any attempted intervention ultimately consists of intervention processes and outcomes as well as implementation processes and outcomes. To achieve successful implementation, organizational structures and cultures must support professionals in their efforts to adhere to the intervention model.

Although wraparound is viewed as a process and not a focal treatment, developing supports for wraparound implementation is also a critical priority. However, supporting involved professionals such as wraparound facilitators, parent professional partners, and team members (e.g., psychologists, social workers) is complex because of the range of skills and knowledge they must have to properly implement the process (Walker & Schutte, 2005). These professionals (particularly wraparound facilitators, who are a central component of any wraparound team) must, for example, be fluent in the principles and activities of the wraparound process as well as participate in essential team processes, such as setting goals, defining and selecting strategies, and monitoring progress (Bruns, Walker, et al., 2004; Walker & Schutte, 2005). In addition, because the individualized fitting of effective services and supports to the needs of families is central to the wraparound process, professionals who participate on wraparound teams should also be familiar with the evidence base on specific treatments and approaches (Friedman & Drews, 2005).

In sum, the wraparound movement has reached a point where examining implementation procedures and workforce issues is needed to support wraparound's increased use in children's service settings. As proposed by the community intervention and deployment model described by Hoagwood, Burns, and Weisz (2002), implementation research, conducted parallel to efficacy and effectiveness studies, will ultimately accelerate deployment of promising approaches into the field. However, to date, there has been little research on the background and

training of those who implement the wraparound process with children and families. Such information will be useful to wraparound trainers, agency administrators, and child services policymakers alike.

THE CURRENT STUDY

The current study examined the characteristics of service providers who report using the wraparound process, including the nature of their wraparound training, the support received from their employment organization, and their perceptions of and familiarity with evidence-based treatments (EBTs). The characteristics of those who use wraparound were compared with the characteristics of those who do not report the use of wraparound. This study extends from a prior effort, the Evidence-Based Treatment (EBT) Survey, which was administered as part of the national evaluation of the federal Comprehensive Community Mental Health Services Program for Children and their Families (CCMHS) to service providers working within systems of care nationally (Walrath, Sheehan, Holden, Hernandez, & Blau, 2006). Results of the prior study have revealed that providers of service to children with serious emotional disturbance tend to be highly familiar with evidence-based and promising practices and generally perceive these practices to be effective. However, across practices, there was a tendency to report partial implementation and wide variation in employment organization support around implementation (Walrath et al., 2006).

Relevant to the current study, findings from the EBT Survey reinforced the prominence of the wraparound process within systems of care nationally (Walrath et al., 2006). The survey results showed that among the treatments and approaches presented to respondents, wraparound was the second most frequently reported, with 18.2% of all respondents reporting that wraparound was one of the three primary practices used in their work. In addition, 75% of respondents stated that they believed wraparound was an effective practice, higher than many established EBTs (Walrath et al., 2006).

The goals of the current study were to better understand the characteristics of professional staff that use the wraparound process, including their training, implementation supports, and familiarity with and attitudes toward EBTs. Because a large number of respondents to the EBT Survey stated they used wraparound in working with children and families, comparison of wraparound providers to nonwraparound providers on key survey items was possible. This comparison allows for an investigation of what kinds of resources and supports may be needed for providers who implement wraparound or participate as professionals on wraparound teams. The current study also provides a better understanding of wraparound providers' familiarity with and attitudes toward the use of EBTs. This is especially critical for the wraparound model, given its status as a care planning and management process intended to fit effective services and supports to the needs of families.

METHOD

Participants

Sample Identification and Selection. The CCMHS, funded by the Substance Abuse and Mental Health Services Administration (SAMHSA) Center for Mental Health Services (CMHS) began in 1993 to support communities that develop and implement systems of care for children with serious emotional disturbance and their families. Within this program, a system of care is a coordinated network of community-based services organized to meet the challenges of children and youth with serious mental health needs and their families. Families and youth work in partnership with service organizations to ensure that services are effective, strength-based, culturally appropriate, and provided in the least restrictive environment possible. CMHS funded 126 communities between 1993 and 2005 in 50 states and two territories. The EBT Survey was conducted with providers in a subset of these communities as part of the congressionally mandated national evaluation of the CCMHS program. More detail about the national evaluation can be found elsewhere (Holden, Friedman, & Santiago, 2001; Holden et al., 2003).

For purposes of the EBT Survey, a comprehensive list of direct mental health service providers from 28 communities affiliated with the CMHS initiative was developed. These 28 communities were targeted based on their year of initial federal funding or year of initial affiliation with the federal initiative and its national evaluation. Twenty-six of the communities received federal system-of-care funding in 1997–1998, and the remaining two participated as nonfunded comparison communities studied as part of the national evaluation. A structured telephone interview with a leader in each of the 28 identified communities helped generate a list of direct service providers. In the interview, the community leader identified all the organizations in that community providing mental health services to youth who have serious emotional disturbance. Ultimately, 571 appropriate agencies were identified ($M = 19.7$ agencies, range = 1–129) across the 28 communities.

Telephone contact with each identified agency/organization was used to obtain a list of children's mental health service providers. Across the 28 communities and 571 agencies, 1,669 providers were deemed appropriate respondents using the above criteria ($M = 5.5$ respondents per agency; range = 1–90 per agency). Agency/organization representatives were also asked to identify other local agencies/organizations that provide services to children with severe emotional disturbance; those not previously identified were also contacted. A proportional sampling technique was used with an average of 50 respondents per community targeted and drawn from the full list of identified potential provider respondents. Using this approach, 1,402 potential provider respondents were selected from the full list and included in the sample. Given the goal of an average of 50 respondents per system-of-care community, a sampling strategy identified 80 or more potential respondents in system-of-care communities.

Provider Demographic and Professional Characteristics.

Providers self-reported on their age, gender, and race/ethnicity. For race/ethnicity, respondents were asked to identify Hispanic/Latino, American Indian, Asian, Black or African American, Native Hawaiian, White, and/or other. Because of the underrepresentation of nonmajority race/ethnicity categories, respondent race/ethnicity was dichotomized into non-Hispanic White versus other for the purpose of the current study. In addition, providers were asked about their primary employer and current position, years as a mental health service provider, years as a children's mental health service provider, and highest academic degree earned. For the current analysis, primary employer and highest degree earned were dichotomized into mental health agency versus other and master's degree or higher versus other, respectively.

Evidence-Based Treatment (EBT) Survey

The EBT Survey was a 65-item Web-based survey (with available hard copy) of direct mental health service providers to children with serious emotional disturbance and their families. Approximately 20 min were required to complete the survey. The EBT Survey contained questions related to provider demographic and professional information, familiarity with existing evidence-based practices, and perceived effectiveness of existing evidence-based practice. In addition, questions were asked about training received for evidence-based practices reported as used, employer support provided for training, and the extent to which evidence-based practices were being implemented according to guidelines. More information on the development of the EBT Survey can be found elsewhere (Walrath et al., 2006). The specific EBT Survey variables and indicators used in the current study are described below in greater detail.

EBT Familiarity, Perceived Effectiveness, and Use. The EBT Survey included a list of 33 existing treatments or treatment approaches compiled through a two-stage process. First, a comprehensive review was conducted of the literature on evidence-based treatments in community settings (Burns & Hoagwood, 2004). Academic consultants then reviewed the list and provided feedback and recommendations on treatment inclusion/exclusion (e.g., widely used and promising practices were recommended for inclusion in the survey list). Thus, the final list contained a range of commonly used treatments and treatment approaches that have a range of empirical support. Although some on the list were focal treatments for specific problem areas (e.g., Systematic Desensitization), some have broad application (e.g., Brief Strategic Family Therapy) and others may not necessarily be characterized as a "treatment" as much as a process (e.g., Wraparound, Case Management, Family Education and Support). For convenience's sake, in the rest of this article, approaches listed on the survey will be referred to as "treatments."

For each treatment, providers indicated whether they believed it resulted in positive outcomes for children and families.

Providers gave the following responses:

1. Yes, it results in positive outcomes.
2. No, it does not result in positive outcomes.
3. Familiar with the treatment but do not know if it is effective.
4. Not familiar with the treatment.

Providers' familiarity with each treatment was assessed with a dichotomization of the above response options. Familiarity was represented by combining the following:

1. Yes, it results in positive outcomes.
2. No, it does not result in positive outcomes.
3. Familiar with the treatment but do not know if it is effective.

Unfamiliarity was represented by "not familiar with the treatment." Provider perception of the treatment effectiveness variable was represented by an alternate dichotomization of the above response into effective ("Yes, it results in positive outcomes") versus not effective ("No, it does not result in positive outcomes" and "Familiar with the treatment but do not know if it is effective").

Providers identified up to three primary evidence-based treatments, other than medication, that they used in the course of their work. Each respondent in the current study sample identified at least one evidence-based practice, and over 90% of the sample identified three. Those open-ended practice responses were then coded and compared against the list of commonly used approaches (described above) that was included in the knowledge and effectiveness portion of the survey.

Wraparound Versus Nonwraparound Service Provision.

As previously described, providers identified up to three evidence-based treatments, other than medication, that they used in the course of their work. Respondents were classified as wraparound providers if they indicated wraparound as any one of the three practices. Nearly one fifth (18.1%) of the study participants indicated wraparound as one of their three primary evidence-based practices.

EBT Training and Implementation. Providers were asked a series of questions related to training for the treatments they identified as using (up to three were identified per provider respondent). Training-related variables in the current study included whether initial training was received through an inservice training or alternate format, years since initial training, and frequency of follow-up training activities (*never* = 0, *less than annually* = 1, *at least annually* = 2, *at least once per month* = 3, or *once per week* = 4). Providers were also asked whether a manual was provided with their training, the extent to which they followed the guidelines provided in the manual (*never* = 1, *almost never* = 2, *sometimes* = 3, *almost always* = 4, and *always* = 5), and the extent to which they implemented the full

treatment protocol (*never* = 1, *sometimes* = 3, and *always* = 5). Finally, providers were asked whether they were required by their agency/organization to provide evidence-based treatments.

Procedure

A five-stage mailing process, consistent with the Dillman Method for Mail and Internet Surveys (Dillman, 2000), was used to recruit selected potential respondents ($N = 1,402$) for the cross-sectional EBT Survey. More information on the recruitment strategy can be found elsewhere (Walrath et al., 2006). Potential participants received a token incentive (magnet) during recruitment. The study procedures were reviewed and cleared through a federally authorized institutional review board. Participants indicated consent either by entering their user name and password and electronically indicating their willingness to continue with the Internet survey or by returning their hard copy survey via mail. A 44% (616/1,402) response rate was obtained, which was consistent with other reported Web-based response rates (Dillman et al., 2003; Frazee, Hardin, Brashears, Smith, & Lockaby, 2003; Ladner, Wingenbach, & Raven, 2002). The majority of respondents (73%) completed the survey via the Internet. There were no significant differences between the demographic characteristics of hard copy respondents and Web-based respondents, with the exception of race/ethnicity. A significantly higher percentage of hard copy respondents were non-Hispanic African American (10.7%) as compared to Web-based respondents (3.6%), $\chi^2(7, N = 425) = 15.8, p < .05$.

Participant Characteristics. Of the 616 providers who responded to the survey, 453 confirmed they were direct service providers and identified at least one evidence-based treatment that they used in the course of their work. The sample of providers who stated they implemented at least one evidence-based treatment and thus were included in the current study ($n = 453$) did not differ significantly from those excluded from the current study ($n = 163$) with regard to their average age, $t(517) = .92, p = .36$; number of years worked as a mental health service provider, $t(503) = .66, p = .51$; gender, $\chi^2(1, N = 517) = .06, p = .81$; or race, $\chi^2(1, N = 616) = 1.6, p = .20$. The two groups did differ, however, with regard to whether they were employed by a mental health agency, $\chi^2(1, N = 616) = 38.8, p = .001$; whether they had an advanced degree, $\chi^2(1, N = 616) = 5.1, p = .02$; and their employment position, $\chi^2(1, N = 455) = 30.0, p = .001$. Specifically, a smaller proportion of respondents included in the current study sample were employed by mental health agencies (60.5%) as compared to those excluded (87.1%). In addition, a greater proportion of respondents in the current study sample had advanced degrees (90.1%) as compared to those in the excluded group (83.4%); and a greater proportion of the current study sample were clinicians (51.5%) as compared to those excluded (28.1%). These differences are not anticipated to bias the generalizability of the current study findings because observed differences in characteristics were likely due to exclusion of respondents who were

not direct service providers and therefore not the intended population for generalizability.

The majority of providers in the current study sample were women (61.4%) and non-Hispanic White (86.3%), with an average age of 42.2 ($SD = 10.8$) years. The respondents were experienced children's mental health service providers ($M = 11.4$ and $SD = 8.4$ years of experience as a mental health service provider; $M = 9.4$ and $SD = 7.4$ years as a mental health service provider for children with serious emotional disturbance), and the vast majority had earned a master's degree or higher (90.1%). More than one half of these providers were employed by a mental health agency (60.5%), with 51.5% employed as clinicians/therapists, 13.6% employed as clinical social workers, 7.2% employed as case managers/care coordinators, 7.0% employed as counselors, 3.9% employed as psychologists, and 16.7% employed in other positions (e.g., family support workers, mental health nurses, administrators).

Analyses. Descriptive statistics were first conducted at the community level to examine the representation of wraparound and nonwraparound providers at the community level. Bivariate analyses (t test, chi-square) assessed the relationship between the provision of wraparound (Yes/No) and (a) provider demographic and professional characteristics, (b) EBT familiarity and perception of EBT effectiveness, and (c) EBT training and implementation. Logistic regression and analysis of covariance (ANCOVA) assessed the relationship between the provision of wraparound and each of the EBT training and implementation characteristics, controlling for demographic and professional characteristics. Respondents who indicated that wraparound was one of their primary practices were categorized as "wraparound providers" ($n = 82$) regardless of what other practices they listed. Providers who did not list wraparound among their practices were categorized as "nonwraparound providers" ($n = 372$).

RESULTS

Community-Level Analyses

Preliminary analyses were conducted to assess the number of respondents who reported using wraparound (wraparound providers) and the number who did not report using wraparound (nonwraparound providers) in each of the 28 communities included in the study. The mean number of respondents using wraparound was 3.04 ($SD = 2.39$; range = 0–8) per community compared to 13.74 ($SD = 8.08$; range = 2–35) respondents per community not using wraparound. Twenty-five of the 28 communities (89%) had at least one wraparound provider in the study sample, and 16 communities (57%) had at least three wraparound providers. Meanwhile, the largest number of wraparound providers for a single community was eight. These results point to widespread prevalence of wraparound implementation in funded system-of-care communities and also in-

dicating that findings about wraparound implementation from the study reflect the perspectives of providers across many communities.

Demographic and Professional Characteristics

As detailed in Table 1, wraparound and nonwraparound providers were similar in race, gender, age, and work history. More than 85% in both groups reported a non-Hispanic White race/ethnicity, two thirds were women, and the average age was slightly more than 40 years. Both wraparound and nonwraparound providers reported, on average, slightly more than a decade of experience as mental health providers and slightly less than a decade of experience working with children.

Interesting differences between the two provider groups did emerge. Specifically, a higher percentage of wraparound providers (73%) were employed by a mental health agency/center (not including private mental health practices) when compared to nonwraparound providers (58%). In further examining this difference, wraparound providers were less represented than nonwraparound providers in nonmental health environments such as juvenile justice but were more represented in child welfare than nonwraparound providers.

There were several other differences between the groups. First, though the majority of respondents in both provider groups had earned a master's degree or higher, a lower percentage of wraparound providers (79%) had obtained a master's as compared to nonwraparound providers (93%). Finally, approximately half of both provider groups indicated they were clinicians or therapists; however, there were nearly three times the number of case managers/coordinators in the wraparound provider group (16%) than there were in the nonwraparound provider group (5%).

EBT Familiarity, Perceived Effectiveness, and Use

Familiarity With Evidence-Based Treatments. The level of familiarity with treatment approaches was high and similar among wraparound and nonwraparound providers, with over 95% of respondents in both the wraparound and nonwraparound provider groups reporting familiarity with medication treatment for attention-deficit/hyperactivity disorder (ADHD) and mood disorders, anger coping/management, assertiveness training, behavior therapy, cognitive-behavioral therapy, mentoring, modeling, problem-solving skills training, respite, social skills training, and therapeutic foster care. There were only two treatments with which fewer than half of both groups of providers were familiar: voucher-based contingency management and Webster-Stratton's parent and children series (see Table 2).

As noted previously, the pattern of findings regarding treatment familiarity was similar for both wraparound and nonwraparound providers. Despite the high level of familiarity across all respondents and the general pattern of similarity between wraparound and nonwraparound providers, there were

seven treatments for which there was a meaningful discrepancy (i.e., 5%–10% discrepancy) in familiarity between the wrap-around and nonwrap-around providers, which indicated the wrap-around providers were less familiar with the treatment than the nonwrap-around providers. Specifically, fewer wrap-around providers reported familiarity with emotive imagery therapy, exposure therapy, parent management trainings, behavioral management training, rational emotive therapy, systematic desensitization, and voucher-based contingency management (see Table 2). In addition, there was one meaningful discrepancy between wrap-around and nonwrap-around providers (i.e., 5%–10% discrepancy), which indicated greater familiarity of functional family therapy on behalf of wrap-around providers.

Recognizing that professional training and roles of wrap-around versus nonwrap-around providers may have accounted for some of these significant differences, treatment familiarity for the two groups was reassessed for treatments that reached significance after restricting the sample to clinical staff (i.e., removing care coordinators, case managers, and “other” professions from the sample). Results showed a similar pattern of difference, but smaller discrepancies between groups were identified, with all differences closing to within 5%. Only one treatment (voucher-based contingency management) showed a change in direction, with more providers in the wrap-around group being familiar after care coordinators, case managers, and other profession respondents were removed from the analysis.

Perceived Effectiveness of Evidence-Based Treatments.

Difference in perception of effectiveness among providers familiar with the various evidence-based treatments was also examined. Again, few differences were found with regard to perception of effectiveness of treatments presented for wrap-around versus nonwrap-around providers. More than 80% of respondents in both provider groups perceived anger coping/management, medication for ADHD and mood disorders, behavior therapy, behavioral parent trainings, case management, cognitive-behavioral therapy, family education and support, mentoring, modeling, parent-child interaction therapy, problem-solving skills, and social skills training to be effective. In contrast, fewer than 50% of respondents in both groups perceived exposure therapy, emotive imagery therapy, voucher-based contingency management, and Webster-Stratton’s parent and children series to be effective.

There were five treatments for which there were significant between-group differences in effectiveness perception. Significantly more wrap-around providers perceived mentoring, parent management training, and respite to be effective when compared to nonwrap-around providers. Significantly fewer wrap-around providers perceived cognitive-behavioral therapy and relaxation training to be effective (see Table 2). When the sample was restricted to only clinical providers and analyses were rerun for those treatments associated with significant group differences, between-group differences disappeared for mentoring and cognitive-behavioral therapy.

TABLE I
Demographic and Professional Characteristics by
Wraparound Provision Status

Demographic & background characteristics	Wrap-around provider ^a	Nonwrap-around provider ^b
Race: Non-Hispanic White	87.8%	86.0%
Gender: Women	65.3%	68.2%
Age		
M	42.5	41.10
(SD)	(10.87)	(10.66)
Years as MH provider		
M	11.63	10.61
(SD)	(8.65)	(6.89)
Years as MH provider to youth with SED		
M	9.48	8.80
(SD)	(7.53)	(6.91)
Employed by MH*	73.2%	57.7%
Advanced degree: master’s or higher**	79.3%	92.5%
Primary position*		
Case manager/coordinator	16.4%	4.9%
Clinician/therapist	46.6%	52.8%
Clinical social worker	8.2%	15.0%
Counselor	1.4%	8.4%
Psychologist	6.8%	3.1%
Other	20.5%	15.7%

Note. MH = mental health; SED = serious emotional disturbance.

^a*n* = 82. ^b*n* = 371.

p* < .05. *p* < .01.

Use of Evidence-Based Treatments. Across provider groups, the reported use of specific treatments other than wrap-around listed on the survey was low, with only two treatments reported as used by 10% or more of both the wrap-around and nonwrap-around provider groups (cognitive-behavioral therapy and parent education). Reported use of other treatments should be interpreted with caution given that respondents were only allowed to identify up to three primary practices used in their work. Nonetheless, there were significant between-group differences in the utilization of six treatments. Specifically, far fewer wrap-around providers reported using behavior therapy and cognitive-behavioral therapy when compared to nonwrap-around providers, and although nearly 9% of nonwrap-around providers reported using relaxation training, no wrap-around providers reported using this treatment approach. Alternatively, nearly three times the number of wrap-around providers reported

TABLE 2
Treatment Familiarity and Perception of Effectiveness by Wraparound Provision Status

Treatment	Providers familiar with treatment (%)		Providers who perceive treatment to be effective (%)		p
	Wraparound	Nonwraparound	Wraparound	Nonwraparound	
Anger coping/management	98.7	98.9	82.9	86.2	ns
Antidepressants for mood disorders	100.0	100.0	92.3	89.8	ns
Assertiveness training	94.8	96.6	71.2	73.1	ns
Behavior therapy	100.0	99.4	87.0	89.6	ns
Behavioral parent training	84.4	92.6	80.0	83.4	ns
Behavioral teacher training	71.4	72.8	56.4	57.5	ns
Brief strategic family therapy	93.2	90.2	68.1	61.5	ns
Case management	100.0	99.7	88.3	80.9	ns
Cognitive-behavioral group therapy for adolescents	92.3	95.7	66.7	73.5	ns
Cognitive-behavioral therapy	98.7	99.4	85.3	93.0	.03
Commonsense parenting	68.8	70.9	64.2	65.3	ns
Emotive imagery training	55.8	64.0	34.9	29.3	ns
Exposure therapy	63.2	71.8	37.5	45.2	ns
Family education and support	100.0	99.4	94.8	92.0	ns
Functional family therapy	80.0	72.6	70.0	63.9	ns
Interpersonal therapy for adolescents	85.5	86.0	66.1	71.0	ns
Mentoring	100.0	98.9	92.0	80.6	.02
Modeling	98.7	99.1	81.6	87.4	ns
Multisystemic therapy	85.5	87.7	78.5	79.2	ns
Parent management training	75.6	81.5	71.2	67.3	.04
Parent-child interaction therapy	80.3	85.0	85.2	83.7	ns
Problem-solving skills training	96.3	98.6	85.3	86.4	ns
Rational emotive therapy	84.2	90.7	54.7	59.1	ns
Relaxation training	98.7	98.3	71.1	83.5	.01
Respite	100.0	98.9	85.7	74.9	.04
Self-control instruction training	68.4	71.5	65.4	63.7	ns
Social skills training	100.0	99.7	92.3	91.7	ns
Stimulant medication for ADHD	97.4	100.0	90.8	86.0	ns
Systematic desensitization	88.5	93.5	53.6	63.6	ns
Therapeutic foster care	100.0	96.6	71.1	67.8	ns
Voucher-based contingency management	32.9	40.7	44.0	35.7	ns
Webster-Stratton's parent and children series	17.3	18.6	6.7	6.3	ns

Note. "Providers who perceive treatment to be effective" was only analyzed for individuals who reported being familiar with the treatment. Individuals reporting that they were unfamiliar with the treatment were excluded from the perception of effectiveness analyses. ADHD = attention-deficit/hyperactivity disorder.

using case management when compared to nonwraparound providers. Seven times the number of wraparound providers reported using therapeutic foster care when compared to nonwraparound providers. Finally, though approximately 4% of wraparound providers indicated using respite, less than 1% of nonwraparound providers reported its use (see Table 3). The analyses were repeated after restricting the sample to clinical providers. The direction of the findings remained the same in all instances; however, the group differences associated with the use of behavior therapy and respite were reduced to non-significant.

EBT Training and Implementation

Differences in training and implementation supports for wraparound versus nonwraparound providers were explored through a series of uncontrolled bivariate analyses and through logistic or linear regression analyses that controlled for demographic and professional variables characteristics. This showed significant between-group differences (see Table 4). Uncontrolled bivariate analyses showed significant differences between the two groups for the majority of training and implementation factors. Wraparound providers reported fewer years passed since their

TABLE 3
Treatment Use by Wraparound Provision Status

Treatment reported as used	Wraparound (%)	Nonwraparound (%)	<i>p</i>
Anger coping/management	8.5	16.4	<i>ns</i>
Assertiveness training	2.4	4.0	<i>ns</i>
Behavior modification	4.9	10.8	<i>ns</i>
Behavior therapy	3.7	11.1	.041
Brief strategic family therapy	2.4	5.1	<i>ns</i>
Case management	28.0	8.6	.001
Cognitive-behavioral therapy	30.5	71.4	.001
Commonsense parenting	1.2	1.1	<i>ns</i>
Eye movement desensitization and reprocessing	1.2	3.8	<i>ns</i>
Exposure therapy	1.2	2.4	<i>ns</i>
Family education and support	3.7	5.4	<i>ns</i>
Family systems theory/therapy	3.7	8.4	<i>ns</i>
Functional family therapy	6.1	4.6	<i>ns</i>
Interpersonal therapy for adolescents	0.0	4.0	<i>ns</i>
Mentoring	2.4	1.9	<i>ns</i>
Modeling	4.9	7.5	<i>ns</i>
Multisystemic therapy	9.8	8.4	<i>ns</i>
Parent management training	8.5	8.4	<i>ns</i>
Parent-child interaction therapy	4.9	8.4	<i>ns</i>
Parent education	9.8	10.2	<i>ns</i>
Problem-solving skills training	1.2	6.2	<i>ns</i>
Rational emotive therapy	4.9	11.6	<i>ns</i>
Relaxation training	0.0	8.9	.005
Respite	3.7	0.3	.003
Self-control instruction training	0	0.8	<i>ns</i>
Social skills training	8.5	15.1	<i>ns</i>
Systematic desensitization	0.0	3.8	<i>ns</i>
Therapeutic foster care	7.3	1.6	.004
Voucher-based contingency management	1.2	1.9	<i>ns</i>

initial training on the model (6 yrs vs. 10 yrs). They were also more likely to have received initial wraparound training through an agency-sponsored inservice (49%) when compared to providers of nonwraparound treatments (24%). Wraparound providers were significantly more likely to report implementation of the full protocol when compared to nonwraparound providers reporting implementation of other evidence-based treatments. Only 42% of wraparound providers reported receiving a manual as part of their training compared to 60% of nonwraparound providers. Finally, a significantly larger percentage of wraparound providers reported that they were required to provide evidence-based treatments by their employer than nonwraparound providers (54% vs. 34%).

Logistic or linear regression analyses were performed for each of the training and implementation factors that reached bivariate significance at the $p < .05$ level (i.e., full implementation of the protocol, agency-sponsored inservice, agency requirement to use evidence-based treatment, years since receipt of initial training, and provision of a manual during training). In addition to entering provider group status (wraparound vs.

nonwraparound) as a predictor, race, age, gender, and years of mental health service provision to children were also entered as covariates. The findings from these analyses are summarized below.

The independent relationships between wraparound provision and each of the five training and implementation factors remained significant after controlling for provider characteristics. Specifically, after controlling for provider demographic and professional characteristics, wraparound providers were nearly twice as likely to report being required by their employment agency to use evidence-based treatments ($B = .68, SE = .29, p < .05$); 2.5 times more likely than nonwraparound providers to have received their initial training through an agency inservice ($B = .91, SE = .29, p < .01$); and nearly 50% less likely to have received a manual during their training ($B = -.75, SE = .29, p < .01$). In addition, after controlling for provider demographic and professional characteristics, wraparound providers on average reported full implementation of the protocol more often ($M = 3.8$) than nonwraparound providers reported implementation of other evidence-based treatments

TABLE 4
EBT Training and Implementation by Wraparound Provision Status

Training/implementation variable	Wraparound	Nonwraparound	<i>p</i>
Extent to which full protocol is implemented (range = 1–5)			
<i>M</i>	3.81	3.38	.001
(<i>SD</i>)	(0.94)	(1.06)	
Frequency of follow-up training (range = 0–4)			
<i>M</i>	2.18	2.00	<i>ns</i>
(<i>SD</i>)	(0.85)	(0.96)	
Years since initial training			
<i>M</i>	6.20	10.00	.0001
(<i>SD</i>)	(5.61)	(6.78)	
Extent to which treatment guidelines provided in the manual are followed (range = 1–5)			
<i>M</i>	4.28	3.93	.06
(<i>SD</i>)	(0.78)	(0.84)	
Initial training received through agency-sponsored inservice	48.8%	23.5%	.0001
Manual provided with training	41.5%	59.6%	.003
Required by agency to provide EBTs	54.7%	34.7%	.001

Note. EBT = evidence-based treatment.

($M = 3.4$), $F(1, 342) = 7.59$, $p < .01$. Also, wraparound providers reported significantly fewer years had passed since initial wraparound training ($M = 6.3$ years) compared to nonwraparound providers' treatment trainings ($M = 9.5$ years), $F(1, 320) = 19.78$, $p < .001$. The direction and magnitude of the findings remained consistent when these regression analyses were rerun with the restricted clinical provider sample.

DISCUSSION

The wraparound process has been characterized as a mechanism through which individualized needs of children with serious mental health challenges are matched to effective services and supports while ensuring that the services and supports are relevant and accessible to that child and his or her family (Tolan & Dodge, 2005; Walker & Bruns, 2006a). High-quality wraparound is a complex undertaking, and professionals serving on wraparound teams (facilitators, family support workers, and other providers) require significant training and other supports (Walker, Koroloff, & Schutte, 2003), including a grounding in the evidence base on individual services and supports that might be used. As such, it is useful to examine the characteristics of the professionals who serve on wraparound teams and their familiarity and knowledge about different treatment options.

The current study found widespread implementation of the wraparound process in communities funded through the federal systems-of-care program, with at least one provider reporting participation in wraparound implementation in 25 of the 28 communities included in the study. Results also suggest that providers who reported wraparound as one of their primary practices differ substantially from providers who did not report the use of wraparound. Though wraparound providers who participated in the current survey did not differ from other types of providers with respect to age, gender, race, or experience in the field, they were less likely to have a master's degree, more likely to be employed by a mental health agency/center, and they reported substantial differences in how they were trained and supported to implement wraparound, compared to providers administering other treatments.

Wraparound providers were also less likely to describe themselves as therapists, counselors, or clinical social workers and more likely to describe themselves as case managers. This is not surprising given that care coordinators or wraparound facilitators (who may also refer to themselves as case managers) are key components of wraparound teams. Nonetheless, it should be noted that 63% of those who provided wraparound described themselves as clinicians, social workers, or psychologists. Though some of these professionals may also serve as wraparound facilitators, it is likely that the majority of these indi-

viduals represent professionals who participate on wraparound teams in a capacity other than facilitator.

Wraparound Training and Supports

The most interesting results from this study were those that showed differences in training and supports for providers who implement the wraparound process as compared to providers who did not report using wraparound as one of their three primary practices. These findings remained significant even after controlling for the differences in characteristics of providers in the two groups. First, results indicate that wraparound providers received their training more recently and were twice as likely to have been trained through agency-sponsored inservices when compared to nonwraparound providers. Second, wraparound providers were less likely to receive training manuals. These findings are not surprising for several reasons.

First, full descriptions of wraparound principles and procedures (e.g., Burchard et al., 2002; Burns & Goldman, 1999; VanDenBerg & Grealish, 1998; Walker & Bruns, 2006b) have only emerged in the past 10 years. As a result, training manuals for wraparound have also only recently been introduced (e.g., Eber, 2003; Grealish, 2000; VanDenBerg & Rast, 2003), and graduate programs are unlikely to have begun to consider inclusion of the model as part of curricula until recently. In addition to its relative newcomer status, wraparound's grounding in principles of family-driven, rather than professional-driven, care, as well as its status as a care coordination process (rather than a formal clinical treatment), has likely contributed to providers receiving training internally through their employment or home agency. Certainly, professional training programs are less likely to prepare future social workers and psychologists for wraparound teams than to provide, for example, training on individual therapy techniques or the principles of social work practice.

To fill this void, mental health and other agencies may need to train and support wraparound process implementation through in-house methods or through the use of external trainers who come into agencies to provide training and coaching (Rast & Bruns, 2005). To explore this question, a correlation was calculated between wraparound providers' years in the mental health field and likelihood of receiving training via agency inservice. This analysis found that number of years in the mental health field was not associated with greater likelihood of receiving wraparound training via inservice. This suggests that even young providers tend to receive professional development from their employers to implement wraparound.

Another interesting result from the current study indicates that, on average, wraparound providers are more likely to report that they fully implement the wraparound model than nonwraparound providers who are reporting on implementation of other treatments. At the same time, wraparound providers are less likely to report receiving an implementation manual than nonwraparound providers who are reporting on other treatments. Lack of implementation manuals supports the assertion

that the wraparound process has traditionally been underspecified and not manualized. Alternatively, many providers and provider agencies may perceive wraparound as a philosophy rather than as a process that can be specified, trained to, and otherwise supported. Somewhat disconcertingly, these results also imply that the lack of a training manual may actually be associated with a greater perception of full implementation. This makes some sense, because a provider who has not been told what specific procedures to employ will not know when he or she is deviating from the model. In general, these findings are problematic when viewed in light of a growing set of studies indicating that adherence to wraparound principles may result in better outcomes for youths and families (e.g., Bruns, Rast, Walker, Peterson, & Bosworth, 2006; Bruns, Suter, Force, & Burchard, 2005) and that training, coaching, and other supports tend to lead to greater fidelity (Bruns, Suter, & Leverentz-Brady, 2006).

Wraparound Providers and Evidence-Based Practices

Results of comparisons between wraparound and nonwraparound providers suggest that there are fewer differences between these groups regarding familiarity with and perceptions of specific treatments than regarding training and supports for implementation. Wraparound providers were less familiar with several treatment approaches, almost all of which were individual therapy models (e.g., exposure therapy, rational emotive therapy, systematic desensitization). Though somewhat attenuated, most of these differences were observed even after restricting analysis to clinical professionals in the two groups.

Regarding perceptions of effectiveness, only five differences were found of a total of 33 treatments and treatment approaches when comparing wraparound to nonwraparound providers. Significantly more wraparound providers perceived modeling, parent management, and respite care to be effective, and significantly fewer perceived cognitive-behavioral therapy and relaxation training to be effective. Wraparound providers also are more likely to use case management, therapeutic foster care, and respite. Together the familiarity and perceived effectiveness findings suggest that wraparound providers are more likely to rely on—and vouch for the effectiveness of—models that are more community-based and less like office-based therapies. This is not surprising, given the different paradigm presented by wraparound, which typically considers a broad array of service options, including family support services such as respite. These differences may also have arisen because wraparound is typically aimed at youth with the most serious emotional and behavioral problems, and these methods are often employed for more serious or complex problems.

Perhaps most interesting is the finding that wraparound providers are more likely to report that they are required to use evidence-based practices. There are many confounds that may account for this finding, such as the greater percentage of respondents employed by mental health agencies, the number of

respondents who considered wraparound an evidence-based practice, or other factors we cannot statistically control. Nonetheless, this is an encouraging finding and one not attenuated by the restriction of the sample to clinical professionals in the two groups. It is possible, although not necessarily supported by the current study, that if professionals serving on wraparound teams are required to use evidence-based practices, they may be more likely to consider the evidence base for specific interventions as they brainstorm options for a family, possibly contributing to more positive outcomes.

Limitations

Although results begin to point to some interesting findings about professionals who serve on wraparound teams, the current study has several methodological constraints that must be considered. First, respondent recruitment focused on participants identified by federally funded systems-of-care grant communities. Such communities and the providers they identify may differ from providers nationally. For example, these communities may have in part used their funding to provide training and implementation supports for the development of comprehensive intervention approaches, including wraparound. Second, providers were limited to the identification of up to three treatments they provided, and no information is available regarding treatments used beyond the three identified in the survey. It is possible that some of the providers in the nonwraparound group participate in wraparound implementation but did not list it among the three models they use. Third, the overall response rate for the survey was below 50%. Despite its consistency with other Web-based surveys, this too might limit the generalizability of findings.

Perhaps more substantively, interpreting results is more difficult because of our reliance on data from a large-scale survey that was not designed to study wraparound providers or any other specific intervention. Specifically, wraparound is a very different approach than most of the other treatments listed in the EBT survey. Unlike a specific therapy technique usually administered by a clinician, wraparound is a complex process that can involve many different types of professionals. Respondents in the current study who reported administering wraparound might be participating in different ways. A primary distinction that would be important to know is whether the provider is participating as a wraparound facilitator or as a team member with another type of role on the wraparound team (e.g., mental health provider, family support worker, etc.). Without fully knowing the roles of respondents in our wraparound group, interpretation of results becomes more speculative.

Implications

Despite the above limitations, the current study presents some of the first information about the wraparound implementation process and workforce characteristics. This information provides helpful implications for members of communities using the wraparound process as well as those who are working to de-

velop implementation supports for wraparound so these communities can fully benefit from the model. First, the low rate of manual receipt as part of training validates concerns that wraparound is underspecified and can be poorly understood without specific guidelines. Although many professionals consider wraparound more of a philosophy than a procedure, those aiming to employ wraparound teams to support families should recognize that years of research on group processes have shown that team goals are more frequently achieved when planning processes are explicit and adhered to (Walker & Schutte, 2005). Recent research has also begun to demonstrate relationships between adherence to wraparound principles and outcomes for children and families. Fortunately, the mounting effort to define the wraparound process (Walker & Bruns, 2006b), the advent of wraparound implementation measures (Bruns, Suter, Burchar, Leverenz-Brady, & Force, 2004), and better understanding of implementation supports for wraparound (Rast & Bruns, 2005) and community-based interventions in general (e.g., Fixsen et al., 2005) can help current and future wraparound efforts.

Results from the current study also support another frequent observation from within the children's mental health services field: Workforce development for more innovative, community-based, and family-centered methods such as wraparound does not typically come from higher education. Instead, twice the number of wraparound providers in the current study received their training from agency inservices. Such results reinforce calls for higher education programs in the social services and mental health fields to more consistently educate their students in principles of systems of care and skills that can be applied to contemporary services systems, such as engaging families and children in flexible community-based treatment approaches (Huang, MacBeth, Dodge, & Jacobstein, 2004).

Finally, results from the current study continue to highlight the complexity of the relationship between evidence-based practices and individualized care procedures such as wraparound (Friedman & Drews, 2005). Although it is somewhat perplexing that providers identified wraparound as one of the primary "evidence-based" approaches they use, it is encouraging that wraparound providers are frequently employed by agencies that reinforce the use of EBTs. Assuming that the use of wraparound is not in and of itself fulfilling that agency requirement, this implies that the wraparound process may function well as a convergence point of services that are both grounded in evidence for effectiveness and accessible and relevant to families. Yet, at the same time, wraparound providers were less likely to be familiar with a host of potentially useful treatment approaches. This underscores the importance of attempts to educate professionals serving on wraparound teams about the research base on effective practices so they can present them as options to a family and team.

Future Research

In addition to the above implications for policy and practice, the current study points to a host of future research directions. First,

a clear limitation of the current study is that it is unable to examine questions of training and supports for persons who implement wraparound in adequate depth. For example, what is the full nature of supports that wraparound facilitators typically receive before implementing the model? Are they trained, coached, and supervised similarly to professionals who implement other protocols? A national study is currently under way to better understand the methods that communities and programs use to support wraparound implementation, including such issues as training, supervision, and fidelity monitoring. However, full answers to the above questions will require a more rigorous multisite study of programs or communities whose methods of implementing “wraparound” are better understood.

Second, there is a clear need to design research studies that can better examine the relationship between implementation of the wraparound process and implementation of evidence-based treatments within the wraparound process. As proposed by Weisz, Sandler, Durlak, and Anton (2006), changes in system operating systems such as wraparound are theoretically “free to vary” (p. 645) with implementation of EBPs, making it possible to evaluate the potentially synergistic relationship between wraparound implementation and use of EBPs and child and family outcomes. At the same time, however, some have observed that the effort required to implement systems change activities such as the wraparound process may make it challenging for community systems to expend the additional effort required to implement EBPs with fidelity (Walrath, Johnson, & Sheehan, 2006). Qualitative and quantitative research that examines the ability of communities to simultaneously implement wraparound and EBPs would be a first step, after which it would be a logical next step “to test a model in which the community-based strengths and potent delivery systems of wraparound [are] united with the empirical strength of evidence-based interventions, to promote and protect mental health in children and their families” (Weisz et al., 2006, p. 645).

Conclusion

As described herein, there are many ways that mental health professionals can benefit from understanding both specific procedures of the wraparound process and the research base on child and family services. The current study found strengths as well as needs in both these areas, with multiple implications for how professionals who serve on wraparound teams are trained and supported. At a broad level, there is a clear need to integrate the notions of evidence-based practice and individualized care models such as wraparound and to resist the tendency to frame these as competing ideas. Although this has historically proven challenging, communities that have successfully reconciled the importance of both individualized, team-based care and evidence-based practices have demonstrated the potential to both enhance services and improve outcomes (Friedman & Drews, 2005). Perhaps the current results showing that wraparound providers are often familiar with EBTs—and possibly are required to implement them—may be taken as a small positive sign that the field is making progress in this area. At the

same time, these and many other results point to an important next step: enhancing the knowledge base of these community- and family-based providers with the ultimate goal of integrating science and practice.

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Authors’ Notes

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