Chapter Three

Issues of Implementation and Impact of Evidence-Based Services

Implementing Evidence-Based Programs in the Real World

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Introduction

For some time now, a number of researchers and program developers have been actively assisting others who are replicating their evidence-based programs and practices. In effect, these researchers and program developers are becoming purveyors of their programs and practices. Purveyors are individuals who have intimate knowledge of a program or practice who actively work to implement that practice or program with fidelity and good effect (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005).

A purveyor must possess detailed content knowledge of the intervention, an understanding of the underlying theoretical basis of the intervention, and sophisticated knowledge of implementation strategies and procedures. Currently we have very little cumulative, formal information about the processes utilized by program developers as they take responsibility for helping others implement their evidence-based practice or program. If evidence-based practices and programs are to achieve their promise, (a) they must be accessible; (b) program developers and purveyors must have the capacity to assist new sites in implementation; and, (c) we must understand the current capacity of developers and purveyors to assist new sites in relation to need and demand.

In an effort to better understand the supply side of evidence-based program implementation, interviews were conducted with evidence-based program developers and purveyors. This paper highlights study findings regarding the roles and responsibilities of program developers and purveyors, and program developer and purveyor capacity.

Method

Program developers from the National Registry of Evidence-Based Programs and Practices (NREPP) and similar registries were asked to participate in telephone interviews in order to learn more about the above conceptual areas.

A structured, telephone interview guide was developed with the input of a research advisory panel comprised of evidence-based program developers and implementers, federal partners, and leaders in the children and adult mental health field who were familiar with or had leadership roles related to promulgating or promoting evidence-based approaches.

The following results are based on the findings from 20 interviews with child welfare and violence prevention program developers and purveyors of evidence-based programs, selected for review by the Centers for Disease Control and Prevention. Qualitative analyses were conducted with Atlas.ti (Scientific Software Development, 1997).

Results

Program Developer Roles and Responsibilities

All of the interviewees indicated that they were involved in the implementation of the evidence-based program, but not all of the interviewees played a role in the original development of the evidence-based intervention. However, those interviewed did indicate that most of the program developers were still involved with the program, but primarily in a research or program development mode, as opposed to program implementation.

The majority of those interviewed are members of a formalized group of individuals who disseminate the program. They are comprised of for-profit and not-for-profit organizations, with not-for-profit organizations more likely to be found in or associated with a university setting. Since the services and supports provided by many of the purveyors to meet the needs of communities did not fit well within traditional academic departments, a strategy utilized by university faculty or researchers was to develop an organization in partnership with or outside of the university setting. The development of these affiliated entities facilitated the work of the program developers in their new roles as purveyors, allowing then to provide an array of services to communities, provider organizations, and states interested in adopting and implementing their program.

Others have not formed groups or organizations to disseminate their program/practice. These few "lone rangers" tend to be faculty or researchers at a university who assist others in implementing their program by training alone, or have trainers upon whom they can call, or whose implementation strategy is simply to provide program materials.

Many of the program developers and purveyors we interviewed did not set out to do this kind of work (i.e., implementation of evidence-based programs). Their goals were to conduct a research study that demonstrated the effectiveness of their program or to develop a program that would fulfill a need in the field. For many, their roles changed when they realized their program had the potential to make a difference, or when the demand for their program had exceeded their current capacity. As benefit became apparent and demand grew, some program developers chose to develop materials that consumers could use in the implementation of their program at the adopting site. Additionally, others offered training in their particular intervention, and/or consultation, while others turned their programs over to publishing companies for broader dissemination. A smaller subset of researchers and program developers purposely organized themselves into active purveyor groups.

Program developers and purveyors were asked to rate the degree of responsibility they assumed when working to assist others in implementing their program or practice. They were asked to characterize their degree of responsibility based on four options (see Table 1).

In conducting the interviews and analyzing the data, the sense was that most developers fell into one of two extremes, (i.e., options A or D) and that their degree of responsibility and interaction with communities and provider organizations interested in implementing their program therefore could be described as primarily re-active or pro-active. Additionally, many developers described their intent as D, but their practice fell somewhere between options A and C.

Table 1
Program Developer Degree of Responsibility

This next question concerns the degree to which you/your group helps others make use of your program. I will read four options then you can tell me which option best describes what your group does.
A. You/We do what we can by telephone and email but it is up to the users of our program to contact us to help solve problems as they try to put the program/practice in place.
B. You/We do what we can by telephone and email and when problems arise we will make a site visit and help connect the users of our program with resources that might help them.
C. You/We spend a lot of time with the users of our program to coach them on-site and actively help solve implementation problems.
D. You/We will do whatever it takes to help them be successful. Their success is our success; their failures are our failures.

The majority of those we interviewed had a difficult time choosing one option, and stated that their degree of involvement depended upon context. Developers and purveyors cited financial constraints as their primary reason for not being able to do more than option A: "we are constrained by finances, we don't have independent funding to do any of this." Interestingly, a few of the program developers indicated that providing option D would create overdependence: "It is probably B, we certainly will try to give them minimally sufficient assistance so that they don't become dependent on us but they are able to solve the problems, so really D sounds like to me, do whatever you can, that can create an overdependence, it is the same thing when we work with parents, you could be available every time an issue comes up with their child or you can teach them skills that they can then generalize so that they don't have to constantly be seeking help. So we tend to try to keep the dependence down even with organizations."

Interviewees were asked to describe their primary responsibilities to the organizations and practitioners with whom they work. Their responsibilities ranged from passive dissemination of information (e.g. sending out materials) to actively guiding program installation and quality monitoring (e.g. coaching staff, assessing program fidelity). Activities described by more pro-active purveyors were related to program development, training, technical assistance, evaluation, development of data systems, certification of practitioners, and establishment of communities of practice. Program developers' or less active purveyors' responsibilities tended to be more limited to material dissemination, presentations and publications, and training. Many of the program developers interviewed provided training and technical assistance, but not necessarily as part of their model; so that in some cases a consumer could purchase materials without being trained in the model or without ever interacting with the program developer. Other developers exercised more control over how their program was to be adopted and implemented by packaging or requiring training as part of the program: "We conduct the training...they can't get the program without coming to the training and we do the training."

It is not surprising that developer's descriptions of their primary responsibilities were closely linked to how they rated their degree of responsibility, with more active purveyors identifying the C and D options, and less active purveyors identifying A and B. Developer perception's of roles and responsibilities, specifically whose role or responsibility it is to do the work of implementation, is a key finding of this study. Generally speaking, many program developers viewed implementation of a program or practice as the adopting site's responsibility, while others recognized that they could play a larger and more effective role in implementation but did not have the capacity necessary to provide those services. There was much discussion of whose role and responsibility it was to implement a program at the site level. Many program developers viewed their role as one of providing the necessary information, materials, and guidance, but the managing and maneuvering of all the complexities of implementing the program at the site was the adopting agency's responsibility.

Program Developers' and Purveyors' Capacity

Interviewees were asked how many organizations or practitioners they had worked with in the past two years; answers ranged from eleven into the thousands. There seems to be an inverse relationship regarding the degree of responsibility assumed by purveyors for outcomes and successful implementation and the number of organizations and practitioners with whom they work. Active purveyors, meaning those who provide a whole cadre of services to the sites they work with, were more likely to have worked with fewer entities (e.g. 11 to 100 organizations) in the past couple of years. Developers and purveyors who indicated having worked with thousands were more likely to have worked with practitioners only, and more likely to have disseminated program materials or implemented by training (or training of trainers) alone.

In order to get a sense of developers' current and future capacity to assist organizations and communities, developers were asked what it would take them to triple the number of sites or practitioners they work with and whether they would be willing to create ten times more implementation sites. The answer to this question came down to having the resources available to do so. When comparing

non-profits to for-profits, non-profits indicated that in order to triple the number of sites they work with currently, they would need to increase awareness and marketing of their programs and increase funding for implementation sites. Non-profit evidence based program developers and purveyors—specifically community based non-profit organizations—indicated that they were competing with for-profits who were perceived to have more resources: "There are more programs out there now to compete with and there are some that all they do is promote their program and of course, I don't have those resources."

Non-profits also noted that program developers and purveyors in university settings may have different incentives for doing this kind of work (e.g. publications and grant funding), and that some program developers and purveyors received greater exposure because they were able to conduct experimental research (randomized controlled trials) on their programs and therefore qualified for listing as a model program. "That is another reason we have troubles, that we have decreased utilization of our workshops because of those indexes [registries]...we haven't had the type of research to make it to the top of that list. The criteria are all experimentally designed, it costs a fortune to do the research, and we made a decision to disseminate...people badly need these programs, so we have put all our emphasis, and what little money and emphasis we could into dissemination through workshops."

For-profits also indicated a need for greater funding for implementation sites to afford the evidence-based program itself, as well as the associated infrastructure costs such as trainers, administrative staff, overhaul of internal processes, and regional technical assistance services. Almost all of the developers interviewed were willing to triple the number of sites and practitioners they work with if they had access to more trainers, better program funding, and wider marketing of their program.

Although most of the program developers agreed that they would develop ten times more implementation sites and practitioners if the resources were available to them, some program developers were cautionary. Some suggested that their programs need to be studied in greater detail, and others felt like they couldn't adequately provide all the services required to implement the program successfully at a new site if they were spread too thin. However, the need to develop more implementation sites was widely recognized as the only way to achieve a higher penetration rate and the desired social and service change that would accompany new ways of providing services. The motivation to develop more sites is best captured by one program developer: "You are talking 100-150,000 [youth] in placement, plus another half that number ready to go, and another greater number of kids coming back out and still having problems, and so [when] we look at the level of need in the United States, a ten-fold growth strategy would probably begin to make a dent in that population…the intent from our side is to have an impact on business as usual…and to do that you at least have to have something beyond the single digit percentage impact in terms of service delivery system."

The majority of interviewees did not have a formal process in place for assessing program adopter's capacity to implement the program. Many program developers and purveyors indicated that it was not their responsibility to "qualify [adopting organizations] as buyers," indicating that "we are a service provider, so if somebody comes and says we want service, we provide [it] if they can pay." Further, it was the role of the adopting organization to assess whether or not they have the capacity to implement the program: "We leave it up to the organizations themselves...to make an assessment of the utility and viability and replicability of the program." Others indicated that although they would not accept adopters that did not have the capacity to implement their program, they did not have any mechanism in place for assessing capacity. Some program developers stated they assessed capacity informally through telephone conversations with interested adopters; others used a readiness checklist or an application process to assess potential adopter's "resources and ability" to implement their program. They also provide sites with some anticipatory guidance that serves as a screening tool: "What I want to do is give the decision maker all the information that they need to firmly make the decision to go in this direction or to look in another direction."

Conclusion

The interview results point to the complexities faced by those trying to implement evidence-based programs in new settings. It appears that implementation strategies associated with successful outcomes on a broad scale are not routinely practiced. In order to move implementation of evidence based programs and practices along and to make a dent in services as usual, future transitions from program developers to purveyors need to be more purposeful and less grounded in the school of hard knocks. Additionally, there is a need for better communication between program developers/purveyors of evidence-based programs and communities and agencies (implementers). Communities and agencies need to better understand the purveyor's view of their roles and responsibilities and therefore what providers and communities will need to do to "fill in the blanks." Structural and funding mechanisms need to change, as the current structural and funding mechanisms for the work of purveyors is to "catch as catch can." Finally, the demand for evidence-based programs and practices generally exceed the supply, yet the use of evidence-based programs and practices are being mandated, in some cases by states and the federal government. Clearly, new mechanisms must emerge to help program developers and purveyors to scale up and build the capacity to meet this demand.

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Hawaii State's Perspective: Going to Scale with Multiple Evidence Based Services

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Note: This presentation was part of the Topical Discussion, Prioritizing and Scaling up Evidence-Based Programs *(Chair: Frances Wallace).*

Introduction

This paper describes how the state of Hawaii's Child and Adolescent Mental Health Division (CAMHD) has successfully implemented multiple evidence based services (EBSs) and is bringing them to scale; that is, they are growing to planned size and maturing to autonomous sustainability. In this paper, the historical and organizational context of CAMHD's EBS initiative, the new state level function of EBS System Supervisor, and some of the challenges and solutions that have emerged during implementation to date are overviewed. Nationally, CAMHD has been one of the earliest state systems of care to make such an effort, and this case study may well inform the current efforts of numerous other states now attempting such EBS implementation.

Infrastructure and Strategy

CAMHD's transformation into a nationally recognized system of mental health care for youth with severe emotional and behavioral disorders is rooted in federal and local pressures from the Felix Consent Decree (1994-2005). Hodges, Ferreira, Israel, & Mazza (2006) describe how the Hawaii system of care leveraged change in the early transformation years and became exemplary for: (a) family and community stakeholder involvement, (b) the use of empirical data to guide decision-making, and (c) its value basis. It was only after the system of care was fashioned that its EBS approach was created—in response to emergent community and legislative demands for clinical effectiveness and accountability from the new system.

In 1999, CAMHD created a Task Force for Empirical Basis for Services, and in 2002 this task force became a permanent standing committee within the state-wide organization, charged with reviewing the literature on EBS, and synthesizing and disseminating findings throughout the system of care. Aspects of CAMHD's emergent infrastructure that have promoted "EBSness everywhere," and the core strategy of aligning contracting and reporting requirements that have facilitated state-wide adoption of multiple EBSs are overviewed below.

The EBS Committee, chaired by a University of Hawaii representative, has wide representation from university faculty, CAMHD staff, providers, families, and the general public. It meets monthly to review the published scientific literature to determine what works in real world settings with real world populations. For example, the Committee produced the "Blue Menu," an effectiveness ranking of treatments for specific diagnostic groups that is continuously updated and disseminated widely through the EBS Committee's Biannual Report. The EBS Committee is linked organizationally with CAMHD's Practice Development unit that is charged with increasing the quality of practice statewide through training and consultation. Major Practice Development initiatives are represented in CAMHD's overall strategic plan. Its specific capacity development activities occur through this unit's activities within CAMHD, with the contracted provider community, university partners, other child-serving government agencies, and the public. Together, CAMHD's EBS Committee and Practice Development unit are the major drivers of CAMHD's two-pronged approach to going to scale with multiple EBSs.

One is a broad-gauged Practice Development initiative to raise the level of practice across the board by providing foundational training for all CAMHD therapists and supervisors in evidence based practice elements extracted from the Blue Menu (e.g., reward, exposure, self-monitoring, etc.) for specific populations. This initiative will be implemented next year.

The second is the implementation of specific model EBSs for specific populations. CAMHD's Practice Development unit oversees and coordinates implementation of the three most effective EBSs for conduct disordered youth, the modal CAMHD consumer profile: Multi Systemic Therapy (MST), Multidimensional Treatment Foster Care (MTFC), and Functional Family Therapy (FFT). MST was first implemented over four years ago. It has now been sufficiently brought to scale, and management of our statewide MST network is contracted out to a provider agency. Practice Development first implemented MTFC last year, and is implementing FFT this year.

A core CAMHD strategy for going to scale with multiple EBSs is the alignment of contracting and reporting requirements. CAMHD procures its full array of direct services through contracts with private sector providers, and contracts bind providers to CAMHD's interagency guidelines and standards. Evidence based services for specific diagnostic groupings (oppositional/conduct, mood, and anxiety disorders) are identified in these guidelines and standards, and provider performance is monitored and enforced through provider reports and case-based reviews.

Additionally, treatment outcome and consumer functioning measures are required periodically, and monthly treatment plan summaries of change on treatment targets and EBS or evidence based practice elements used are required of all providers. CAMHD care coordinators monitor their cases closely, and administrators and other stakeholders monitor aggregated data for increases in use of EBSs and treatment effectiveness. In short, CAMHD's emphasis is a data-driven outcome orientation and it is anchored at the core.

Challenges and Solutions

For model EBSs such as MST, MTFC, and FFT, CAMHD's Practice Development has created a new state level function for their initial implementation years—a System Supervisor for each EBS. The author has served this function for the first implementation year of MTFC and will serve it for the initial implementation period of FFT as well. This centrally positioned professional staff serves as CAMHD's clinical lead for the new EBS in integrating it into an evolved system of care. The System Supervisor assists with contracting with the purveyor and providers, and functions as a facilitative bridge between the purveyor and the contracted provider.

The role typically involves establishing scale, timing, and readiness of providers and referral sources prior to initial implementation; then coordination of initial social marketing and rollout of the initial implementation; then intensive monitoring and trouble-shooting to ensure successful integration of the new EBS (with its own built-in quality assurance/fidelity monitoring) into the established system (with its own quality assurance/fidelity monitoring). In the early implementation year or years, this involves a good deal of coaching and assisting both the new EBS purveyors and providers on the one hand, and facets of the system of care on the other.

A number of challenges and solutions have emerged in the introduction of EBSs into CAMHD's system of care. One set involves the critical mass of referrals and therapists required for each EBS team in a state comprised of isolated areas (e.g., islands separated by water and sparsely populated rural areas). Statewide EBS dissemination often involves increasing the size of a team in a more urban area by one or more members living on a neighbor island or isolated distant area, combined with video-conferenced clinical team meetings and extra inter-island travel to provide the isolated member(s) with the extra supervision and support they need. Another set of challenges involves referrals and discharges (e.g., ensuring proper articulation of eligibility criteria, referral appropriateness and volume), and EBS-specific distinction between clinical and administrative discharges so that the new EBS can be integrated and sustained in the existing system without fidelity threats or undue strains to the system. Other challenges involve staffing and administrative support; for example, leveraging provider incentives for EBS site accreditation, protecting model EBS staff time for indirect service implementation activity so they can build toward model fidelity and not immediate fee-for-service financial gain, and assisting the new EBS providers in navigating recruiting, credentialing, and attrition/replacement problems. Additionally,

challenges involve guiding the new EBS providers and purveyors to successfully overcome system and cross-system pressures antagonistic to model fidelity (e.g., health plan restrictions, court ordered treatment, role of concurrent treatment, etc). Further EBS System Supervisor challenges and solutions lie in the arena of proactive clinical and administrative input regarding interface of the new EBS team with their host provider, the cultural content and context of the Hawaiian environment, and administrative facilitation of special EBS needs in areas of billing, admission and discharge, and business-as-usual quality assurance requirements of the system of care.

Conclusion

Hawaii's CAMHD has been an early and successful pioneer in going to scale with multiple EBSs. Four primary factors have facilitated this. First is CAMHD's long-term commitment to EBSs, which has allowed development of an organizational infrastructure that facilitates EBS support and implementation. Second is CAMHD's outcome orientation and data-driven system. Third is specified implementation benchmarks for expansion and maintenance at scale by both the EBS purveyor and CAMHD, which facilitate an effective integration of the new EBS into the system of care with the right balance between model fidelity and census growth. And fourth is the newly evolved and centrally positioned role of a System Supervisor for the EBS, dedicated to facilitating the implementation of the new EBS from readiness assessments through initial implementation and finally to maintenance, site accreditation by the EBS purveyor, and eventual hand-off to a contracted statewide manager when grown to scale. As other states contemplate going to scale with multiple EBSs, it is hoped that they may derive some lessons learned from Hawaii's experience.

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Symposium
Improving Quality in a System of Care by Implementing an Evidence-Based Practice with Accountability

Chair
Jim Wotring

Authors
Jim Wotring et al.
Shari-Beth Goldman et al.
Luann J. Gray et al.
Kay Hodges et al.
Sandy Roethler

Symposium Introduction

State and local efforts to implement an evidence-based practice, Parent Management Training-Oregon Model (PMTO), are discussed. Wotring provides a state implementation perspective in selecting, planning, and piloting an evidence-based practice. Goldman describes the state training initiative, including measures to assure compliance with training requirements from organizations and participants. Gray describes implementation of an evidence-based practice (EBP) within a system of care and details the experience from a provider level, including training additional staff at the agency level. Hodges describes the evaluation of outcome of the PMTO training and presents data to-date. Roethler discusses the benefits of PMTO over other approaches from the perspective of a parent and advocate.

Implementing Evidence Based Practice in a State Public Mental Health System

Jim Wotring, Kay Hodges, & Marion Forgatch

Background

The Michigan Department of Community Health (MDCH) in partnership with Eastern Michigan University continually analyzes client level outcome data that are gathered across the state from providers to identify ways to improve quality of services. This initiative is referred to as the Level of Functioning (LOF) Project. The state uses the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2000) as the client level outcome measure for all youths served by the public mental health system. In 1994 the data were reviewed to determine which evidence based practices should be implemented in Michigan. Successful outcomes were observed for only 50% of the youth with behavior disorders despite an average length of stay in treatment of 11 months (Hodges, Xue, & Wotring, 2005). These data were instrumental in the state's decision to introduce statewide training in Parent Management Training-Oregon Model (PMTO; Patterson, 2005) to improve the quality of services. For the past 24 months Michigan has been implementing PMTO statewide. This paper describes the findings that led to selecting PMTO as an evidence-based treatment, followed by the implementation steps involved in selecting, planning and conducting training in PMTO.

Method

Participants. Participants for this study were 16,767 children served by providers funded by the public mental health system in the fiscal years 2000 to 2004. Youth were between the ages of 5 and 18 years old and had a serious emotional disturbance.

Instruments and procedures. The instrument used to evaluate outcome is the Child and Adolescent Functional Assessment Scale (CAFAS: Hodges, 2000). Based on the behavioral items endorsed, a youth can receive a score on each of eight subscales that indicates level of impairment: severe (30), moderate (20), mild (10), or minimal or no impairment (0). The subscale scores can be summed to determine an overall score or used separately to determine different client types (Hodges, 2004). The CAFAS is administered at intake, quarterly, and exit. The providers submitted CAFAS data monthly to the LOF Project.

Results

Data Providing Impetus for Change

Examination of Figure 1 shows that over 50% of the youth served in the public mental health system had behavior problems. Of these youths with behavioral impairments, 25.3% had only behavior problems and 25.1% had behavior problems with co-occurring mood problems. Also, between 25% to 37% of the youth served in the public mental health system were deemed to be pervasively behaviorally impaired, defined as severely (30) or moderately (20) impaired on all three of the following CAFAS subscales; School, Home, or Behavior Toward Others. This was observed for each age group, from ages 6 to 17 years old. In addition, based on the data presented in Figure 2, a minimum of 35% of all youth served by the public mental health system could benefit from PMTO. Upwards of 93% of the youths could eventually benefit from PMTO, as that is the percent exhibiting at least mild non-compliance in the home.

Figure 1
CAFAS Client Types for Youths with SED served by Michigan Public Mental Health

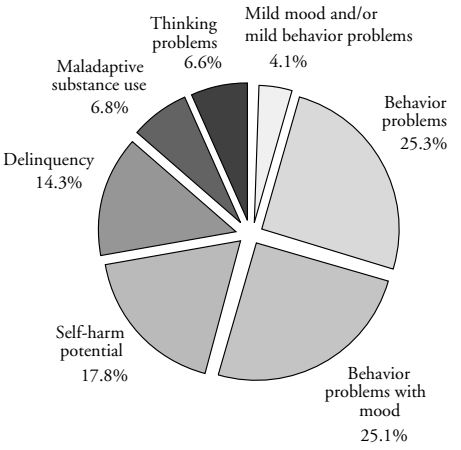
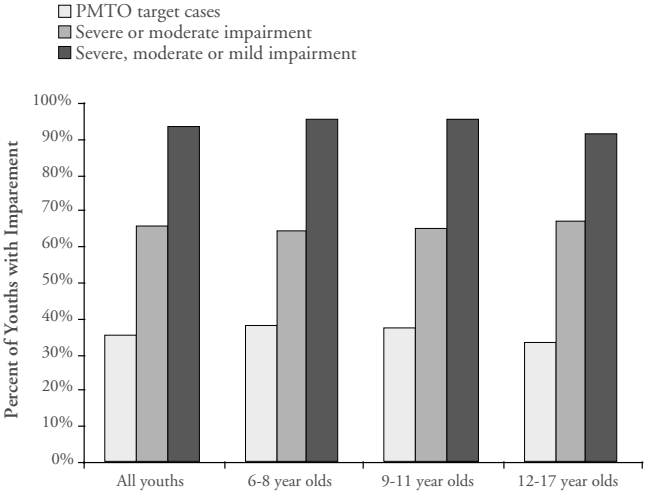


Figure 2
Percent of Youths Who Could Potentially be Impacted by Parent Management, Based on State Mental Health Data for Fiscal Year 2000 to 2004 (*N* = 16,767)



Logic Model Developed

A logic model was also developed that was used to help develop the statewide theory of change. This was developed with the statewide PMTO steering committee in a series of broad participatory sessions. The logic model can be briefly summarized with a discussion of the assumptions, outcomes, and proposed measurements. The assumptions that drive the logic model are: PMTO will improve services to children and families; families will like PMTO due to improved functioning; treatment will positively affect other family members; PMTO can be used across the array of services; providers will work with the state to problem solve as training is provided; an infrastructure will be developed at the state and provider level that includes organizations, utilization management, and performance measurement; there will be strong leadership and partnership between the state and providers; and finally, data will be gathered to monitor fidelity and outcomes. The model provides that the following outcomes will be assessed: fidelity to the PMTO model, measured by the Fidelity of Implementation Rating System (FIMP; Knutson, Forgatch, & Rains, 2003); improved child and family functioning (measured by the CAFAS; Hodges, 2000); improved family satisfaction with services (measured by the family satisfaction with session scale); improved parenting skills (measured by the Caregiver Wish List; Hodges, 2002); and finally, improved staff skills/competency in PMTO (measured by the FIMP).

Description of Training Activities

The purveyor of PMTO training is Implementation Sciences International (ISII), a training arm of the Oregon Social Learning Center (OSLC), where PMTO was developed. Training activities include attendance at workshops, videotaping of therapy sessions, receiving feedback on the videotaped sessions, and participation in consultation over the phone or in person. There were a total of 15 workshop days, spread over five sessions and led by three staff from ISII, who are referred to as "mentors." Each of the mentors has been associated with OSLC for more than a decade and are experienced clinicians.

The workshops were highly interactive and experiential, including brief presentations of concepts followed by extensive role-play, group exercises, and demonstration videotapes. In addition to attending the workshops, trainees were required to videotape sessions of their work implementing the PMTO Model with a minimum of five families. Tapes were sent to the mentors on a weekly basis. The mentors provided written feedback and conducted bi-monthly phone supervision sessions. The trainees also received instruction in the measure used to assess treatment fidelity for PMTO, the FIMP (Forgatch, Patterson, & DeGarmo, 2005; Knutson, Forgatch, & Rains, 2003).

Discussion

Issues that appear to be central for successful implementation include: leadership at a state and local level, administrative support and oversight required to implement an evidence-based practice and overcome challenges to implementation, and change management strategies employed in implementation of an EBP (Wotring, Hodges, Xue, & Forgatch, 2005). A key issue to consider when implementing EBPs within a statewide system of care is capacity building within the state for successful statewide implementation of an EBP. In Michigan, we are engaged in developing levels of expertise within the PMTO trainee group. Depending on their interests and individualized skill sets, certified PMTO graduates may help train more PMTO trainees by coaching recently trained staff (i.e., ongoing supervision) or conducting PMTO training workshops for new trainees. In addition, some will be involved in ensuring fidelity beyond training, by using the FIMP to rate a sample of PMTO treatment sessions. Strategies will need to be employed to resolve implementation problems as they arise.

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Statewide Initiative to Embed Evidence-Based Treatment in a Public Mental Health System

Shari-Beth Goldman, Jim Wotring, Kay Hodges, & Melanie Hassel

Introduction

The Michigan Department of Community Health (MDCH) uses the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2000) as the client level outcome measure for all youths served by the public mental health system. CAFAS data revealed that 50.4% of the youths had moderate or severe behavioral problems (Wotring, Hodges, Xue, & Forgatch, 2006) and showed successful outcome for only approximately 50% despite an average length of stay in treatment of 11 months (Hodges, Xue, & Wotring, 2005). These data were instrumental in the state's decision to introduce statewide training in Parent Management Training-Oregon Model (PMTO; Patterson, 2005) to improve the quality of services. In 2005 MDCH entered into a training contract with ISII. Prepaid Inpatient Health Plans (PIHPs) submitted proposals for participation in PMTO training.

Method

Participants

Out of 13 PIHPs submitting applications, nine were selected for a cost sharing arrangement with the state paying 50% and the PIHP paying 50% of the training costs. Two additional PIHPs not selected for cost sharing elected to pay 100% of the cost to train their staff, for a total of 19 trainees from 11 PIHPs covering 15 Michigan counties. The trainees were divided into two groups (G1 and G2) with a staggered training schedule (see Table 1) scheduled to be completed over two years.

Training activities with PMTO mentors from ISII included workshops with instruction on the five Core Parenting Practices of PMTO and extensive role-play to practice skills learned. The workshops consisted of 18 days of training over a 10-month period (a series of six 3-day workshops). Phone consultations provided coaching on training cases twice monthly. Instruction was included on the measure used to assess treatment fidelity for PMTO, the Fidelity of Implementation Rating System (FIMP; Knutson, Forgatch, & Rains, 2003). Trainees were required to complete videotaped treatment with two baseline families prior to the training, three training families, and two certification families. Feedback and phone consultation with ISII mentors were provided for the taped sessions. Upon receiving a rating of good fidelity to the model with the certification families, trainees become certified PMTO Specialists.

Table 1
Training Schedule

	Oct	*Nov*	*Dec*	*Jan*	*Feb*	*Mar*	*Apr*	*May*	*Jun*	*Jul*	*Aug*	*Sept*
Year 1 2005-06	Baseline G1 2 BL families – Tx as usual				Begin G1 Training Begin with 3 training families							
					WS1		WS2		WS3	WS4		WS5
	Baseline G2 2 BL families – Tx as usual						Begin G2 Training Begin with 3 training families					
							WS1		WS2	WS3	WS4	
Year 2 2006-07	G1 training continues				G1 PMTO Training & Certification Complete							
				WS6								
	G2 training continues						G2 PMTO Training & Certification Conplete					
	WS5			WS6								

Measures

Researchers from Eastern Michigan University partnered with MDCH and ISII to select, develop, and oversee data collection methods used during the training project. Table 2 summarizes the therapist measures utilized during the statewide PMTO training. Some measures focused on readiness and progress of trainees, while others assessed organizational readiness and support of trainees.

Table 2
Therapist Measures Utilized during Statewide PMTO Training

Measure	*Assessment Schedule*
Pre-Assessment Measures	
Request for Participation (RFP)	Selection process
Readiness Checklist (PIHP/CMHSP)	Selection process
Readiness Checklist for Trainee Candidates	Selection process
Completed by trainee	
MI_PMTO Support and Consultation tool (web based)	
Training Activities	Once per week during training
Case Activities	Updated once per week during training
Level of Support for PMTO Training activities	Once per week during training
Questionnaires	
Learning Transfer System Inventory	Baseline; Post Certification
Therapy Procedures Checklist	Baseline; Post Certification
Therapist Professional Attitudes and Background Questionnaire	Baseline; Post Certification

Request for Participation. The Request for Participation consists of six open-ended questions and a section to create a project work plan used to assess issues of PIHP commitment and ability to participate in the project.

Readiness Checklist (PIHP). Subsections of the Readiness Checklist for PIHPs examine fiscal support, CAFAS training, staff support, family involvement, and dissemination planning. The instrument consists of 37 four-point Likert-type items anchored at "*Completely Disagree*" and "*Completely Agree*."

Readiness Checklist for Trainee Candidates. The Readiness Checklist assesses trainee commitment and ability to participate in the project. The instrument consists of 13 four-point items anchored at

"*Completely Disagree*" and "*Completely Agree*" with questions on willingness to attain reliability and follow training program procedures.

MI_PMTO Support and Consultation Form. A web-based format was developed from tools previously used by Michigan and Norway. The Training Activities section tracks activities which a trainee participated in during the previous week. The Case Activity section tracks compliance with collecting client outcome assessments and documents the number of sessions. The Level of Support for Training Activities page assesses the trainees' perceptions about the level of support received for the PMTO training.

Learning Transfer Inventory (LTSI: Holton, 2003). This measure evaluates learning transfer with a focus on agency and organizational elements. The LTSI consists of 89 items composed of 5-point Likert-type scales used to measure 16 different subscales. The first 76 items are used to measure 11 constructs to evaluate which characteristics impacted training program attendance. The last five constructs, measured by 36 items, are used to determine factors important to training that are non-program specific. Subscales measured by this instrument include learner readiness, motivation for learning transfer, personal outcomes, personal capacity for transfer, peer support, supervisory support, change resistance, and self efficacy (Holton, 2003).

Therapist Professional Attitudes and Background Questionnaire. The Therapist Professional Attitudes and Background Questionnaire was adapted from existing instruments used in Norway's implementation of PMTO. The measure assesses professional staff experiences and attitudes on therapeutic and supervisory practices. Information is gathered on educational background, professional experience, theoretical preferences, training level, and clinical experience. Twenty 5-and 7-point Likert-type scales are used to measure exposure, experience, and attitudes regarding PMTO. Two items are used to assess colleague support and four items are used to assess attitudes on current levels of coaching.

Therapy Procedures Checklist. The Therapy Procedures Checklist was adapted from Weersing, Weisz, & Donenberg (2002), with their consultation and permission. This instrument has 50 three-point items, which are used to determine the degree to which therapists incorporate differing techniques and is used to assess the extent to which therapeutic orientation is a factor in trainees' development of fidelity to PMTO principles.

Results for Training Program

Workshop (WS) completion. Of the 19 candidates, all but one had perfect WS attendance. One candidate, a member of G2, later dropped out of the training program because of illness. This candidate attended all days of WS 1, 2, and 4, missed WS 3 because of hospitalization, and terminated activity by WS 5. Thus, 94.7% of the candidates attended all 18-workshop days.

Baseline family completion. All but two candidates, both in G2, completed baseline families.

Training family completion. The nine members of G1 are presently at month 16 in the training program. G1 candidates have completed 18 training families, have 12 active training families, and 11 families have dropped from treatment. They have received a total of 135 written or verbal feedbacks from the PMTO mentors based on viewing DVDs of the trainees' sessions, for a mean of 13.5 per candidate (range 7 to 20). G2 is presently at month 14 in the training program. With one candidate dropped, the remaining nine members have completed 20 training families, have 5 active cases, and 6 families have dropped. They have received a total of 118 DVD-based feedbacks from PMTO mentors, for a mean of 13.1 per candidate (range 7 to 20).

Certification completed. One candidate has completed certification, a member of G2. Time to achieve certification for this candidate was 12 months. Others are close to completion.

Discussion

The current data indicate that the purveyors have successfully engaged the trainees in the intensive program. When compared to other training initiatives it is clear, when examining the number of hours spent on training alone, that the state is seriously committed to the success of this training initiative. It has also been extremely successful in retaining trainees and moving them along throughout the training program. With one exception, trainees attended 100% of the 18 workshop days, are participating in treating families, and sending the trainers DVDs of their treatment sessions for coaching and evaluation. The purveyors have delivered an impressive amount of one-on-one coaching to the trainees. The Michigan Department of Community Health also has on its agenda the creation of a statewide plan to develop regionally centralized training organizations with coaches and the capacity to measure model fidelity of those being trained.

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Integrating Evidence-Based Practice in the System of Care

Luann J. Gray & Rosa M. Thomas

Introduction

In 2005 the establishment of Kalamazoo Wraps, a community-based initiative to expand wraparound services and improve our system of care, was facilitated by funding from a SAMHSA grant. Kalamazoo Wraps supports new evidence-based practice models, such as Parent Management Training-Oregon (PMTO; Patterson, 2005). As we implement PMTO, we are carefully planning dissemination of PMTO and how the evidence-based practice is linked to other elements within the system of care. This paper describes the data that supported the need to implement PMTO in the community and the efforts taken to integrate it into our system of care. Kalamazoo Wraps is using a broad range of strategies to implement PMTO as the supply of clinicians certified in PMTO cannot yet meet the requests for participation in PMTO.

Method

Participants. Participants are 98 youths who presented to the Kalamazoo Community Mental Health and Substance Abuse Services (KCMHSAS) for mental health services. The ages ranged between 5 and 18.

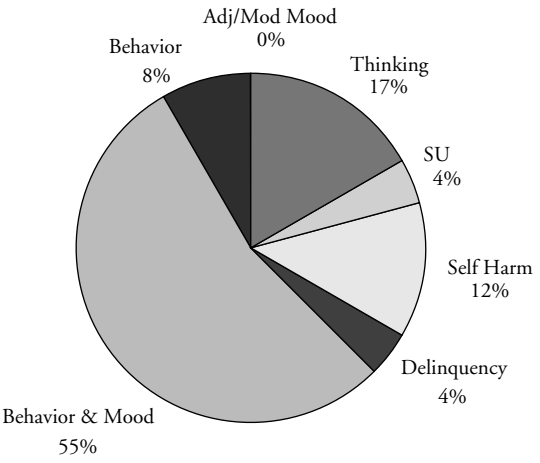
Instruments. The CAFAS (Hodges, 2000) was used to evaluate level of functioning. Treating therapists assessed the youth pre- and post-treatment.

Results

Youths Served by Client Type

Figure 1 shows the percent of youths by client type. Youth with behavioral problems constituted 62.5% of the referrals (54.2% had behavioral problems with co-occurring mood disturbance and 8.3% with behavioral problems). Additional analyses revealed that 79.2% of all referred youths were characterized by pervasive behavioral impairment, defined as being severely or moderately impaired on all three of the following CAFAS subscales: School, Home, Behavior Towards Others. Of these youths, the proportion of those who had no major comorbitiy is 62.5% (as reflected in Figure 1).

Figure 1
Client Types for Fiscal Year 2005-2006 for Kalamazoo Wraps



Training PMTO Coaches within Kalamazoo Wraps

In Kalamazoo, some providers are directly linked to the public mental health system and others work for private, non-profit agencies and serve a broad spectrum of families. Kalamazoo has started a pilot program with the Oregon Social Learning Center and two clinicians from Easter Seals of Oakland County, who were trained in a Michigan "early adopters" PMTO training. These two trainers are teaching the PMTO model to six mental health professionals within the Kalamazoo Wraps system of care. This is essentially training of second-generation PMTO clinicians.

Staff were selected through an application process that involved interviewing prospective clinicians and outlining expectations. Experience as a family therapist, a desire to learn the model, and agreement to adhere to the training protocol were required. It was also important for clinicians to consider how learning the model would assist them in their work with families. Additionally, there were requirements for the agencies sending staff. They committed to supporting their staff and to participating in the evaluation of PMTO via the Level of Functioning project with the Department of Community Health and Eastern Michigan University. Agencies were also required to support their staff by adjusting caseloads during the training phase and assuring that training families could be served. The payer of services to the agencies of those staff-in-training also had to devise a process to insure that providers received reimbursement for services.

PMTO training requires training therapists to fidelity. Video-taping of sessions is required to enhance the skill building and to permit measurement fidelity of implementation, using the Fidelity of Implementation Rating (FIMP; Forgatch, Patterson, & DeGarmo, 2005; Knutson, Forgatch & Rains, 2003). Understanding the theoretical framework as well as obtaining supervision from a trained PMTO specialist is fundamental. The specialist also rates the trainees' tapes with the FIMP, which is an observational system designed to quantify the extent to which a trainee displays competent adherence to the core components of PMTO.

Sustaining fidelity to PMTO principles requires that therapists continue to receive coaching after training. Coaching and role-play are critical because they result in modeling of the techniques, followed by the trainees practicing the skills.

Discussion

The data presented in Figure 1 provide strong evidence that the majority of parents of youths referred to the mental health center could benefit from Parent Management Training. The mental health system was an "early adopter" for enrolling in the PMTO training. Currently, the PMTO Specialist who was trained by Marion Forgatch and her colleagues is involved in training other mental health professionals to be coaches in PMTO and is collaborating with the broader community to embed PMTO principles.

Efforts have been made to successfully implement PMTO throughout the system of care, including at daycare centers, in the schools, and with juvenile justice partners.

Collaboration with daycare centers. Two key principles of PMTO are teaching good directions and encouragement. These two elements of PMTO are being introduced to daycare staff, Early-On staff, teachers, and parents by Kalamazoo Wraps.

Collaboration with school system. Many of the schools are implementing Positive Behavioral Supports (PBS). Both PBS and PMTO focus on positive behaviors and are structured models in which role play and coaching are significant tenets. Kalamazoo Wraps is participating in PBS training initiated by the school system. When parents and school staff are trained in a similar fashion, the Kalamazoo system of care increases the likelihood of success for youths both at school and in the home.

Collaboration with juvenile justice. Recently Kalamazoo Wraps began working with a small group of parents whose children are involved with 9th Circuit Court, Juvenile Division Drug Court. Parents in this group are offered the PMTO model, which consists of five core-parenting practices: Encouragement,

Setting Limits/Discipline, Monitoring/Supervision, Problem Solving and Parent Involvement. They also have the opportunity to talk with other parents about their progress.

While the commitment to a successful implementation of PMTO remains high among participants, there are obstacles and challenges to implementing PMTO within a system of care that is in its infancy. One challenge involves educating program administrators and clinicians in private practice on the effectiveness of the model. Administrators who are unfamiliar with the model are often intrigued when shown PMTO outcome research. Community-based therapists not only respond to outcome research but also appreciate having training and educational opportunities during times that do not conflict with their schedules.

A second challenge involves the long-term commitment that training requires. Training schedules in Kalamazoo include 15 full days of meeting with the trainee team, one to two hours of weekly supervision with the trainer based on staff progress, video-taping with families and the time required to review and critique tapes. Once training is completed, maintaining model fidelity becomes important and is accomplished via ongoing supervision. Supervision during the post-training period is less intensive and less frequent, but ongoing measurement of fidelity is critical to successful implementation. Costs involved for both trainer and trainee can range from lost hours of productivity ("billable hours") during the training period to the purchase of space and equipment.

A third challenge is to assure that parents and youth are involved at all levels of implementation. Parents are members of the governance model at the system of care level and on the local implementation team. A fourth challenge is to educate the community about PMTO. This includes staff across systems that may make referrals, families who may wish to participate in PMTO, and other community members and educational staff. Finally, a fifth challenge is to develop a plan for workforce development that outlines the process for dissemination of the PMTO model. Michigan is developing a broad dissemination plan. Each of the two SAMHSA-funded system of care sites in Michigan are actively partnering in the development of the state and local plans for dissemination.

KCMHSAS is working with the Michigan Department of Community Health and local partners to fully address each of the challenges and anticipates that they will be met in the near future.

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Outcome Indicators for Youth's Functioning and Parent's Child Management Skills: Evaluating PMTO Trainees

Kay Hodges, Jim Wotring, Yange Xue, Marion Forgatch, Melanie Hassel, & Scott Hadley

Introduction

Statewide data collected on youths receiving public mental health services in Michigan suggested that training the workforce in parent management techniques would be beneficial for at least half of the families served (Hodges, Xue, & Wotring, 2004; Wotring, Hodges, Xue, & Forgatch, 2005; Xue, Y., Hodges, K., Wotring, J. 2004). Studies on the efficacy of parent management training (PMT) have demonstrated that improvement in parenting practices is associated with reduced noncompliance in the home (Forgatch, DeGarmo, & Beldavs, 2005; Martinez & Forgatch, 2001) and reduced teacher-reported behavior problems in school (Forgatch & DeGarmo, 1999; Forgatch et al, 2005). Because changing parenting skills has been shown to be paramount to reducing behavioral impairment in children, the Michigan public mental health system is implementing intensive training in PMT, using the Oregon model (referred to hereafter as PMTO). The logic model developed for this initiative by a committee of stakeholders specifies that the measure to assess child functioning will be the Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 2000) and the measure to assess parenting skills will be the Caregiver Wish List (Hodges, 2002). This paper describes the outcome data collected to date for the PMTO training program, which is about 20% of the data that will collected by the end of the training.

Method

Subjects

The criteria for participant families are as follows: (a) age of child is 5 to 12 years old, (b) child must reside with at least one caregiver, who cannot be addicted to substances, neglectful, a sexual predator, or actively psychotic, (c) at intake, the child's scores on the CAFAS meet the following criteria: moderately or severely impaired on the Home subscale, severely or moderately impaired on either the School or Behavior Toward Others subscales, and not severely impaired on the other subscales which would indicate serious comorbidity (i.e., Community [i.e., delinquency], Mood/Emotions, Self-Harmful Behavior, Substance Use, or Thinking).

In this paper data are presented on three samples of participants: before-training sample, during-training sample, and a statewide comparison sample. The before-training sample refers to participants who received treatment from the PMTO trainees before the trainees began their training. Each trainee was to have two before-training cases. The during-training sample consists of participants who were treated during the trainees' training period. The statewide sample provides data on cases admitted in the fiscal year 2005-06, and includes 992 youths who met the selection criteria for youth participants for age and CAFAS scores.

To date, CAFAS scores are available for the before-training (29 youths, of which 67% were males and the average age was 9.3 years), the during-training (20 youths of which 72% were males and the average age was 9.0 years), and statewide samples (992 youths of which 72% were males and the average age was 9.3 years). The Caregiver Wish List (Hodges, 2002) data are available for 15 families in the before-training sample and 9 families in the during-training sample. Caregiver Wish List data are not available for the statewide sample.

Measures

Each youth is rated on the Child and Adolescent Functional Assessment Scale (CAFAS: Hodges, 2000). A score is generated for the total scale and for each of the eight subscales (Hodges, 2003).

The Caregiver Wish List (Hodges, 2002) has two parts. The first part, entitled Skill Wish List for Your Child, consists of 14 questions about the child's behavior. The second part, entitled Skill Wish List for You, consists of 53 items that ask the caregiver about his or her own parenting behavior. The items are grouped into six skill domains: Providing Direction and Following Up, Encouraging Good Behavior, Discouraging Undesirable Behavior, Monitoring Activities, Connecting Positively with the Youth, and Problem Solving Orientation. Each item consists of a question and a 5-point response option. The response options are specific to the question, although they primarily refer to frequency (e.g., Hardly Ever, Once in a while, Sometimes, Often and Most of the time). The directionality of the scoring varies across items. For approximately half of the items, the response option reflecting the most frequent occurrence of the behavior is the most skillful answer; whereas for the remaining half, the least frequent occurrence of the behavior is the most skillful answer. The Caregiver Wish List was developed using social validation procedures and then piloted in a child welfare agency. Preliminary data analyses with the pilot sample suggested that numeric values, ranging form 1 to 5, with 5 indicting greater skill, can be assigned to the response options. These scores can then be summed to generate domain scores (Hodges, Hull, & Xue, 2006).

Procedures. Each child is rated by the practitioner on the CAFAS and the caregivers in each family complete the Caregiver Wish List prior to beginning treatment and at the end of services. For the Caregiver Wish List, the practitioners read the questions to the caregivers, who mark their response options on their copy.

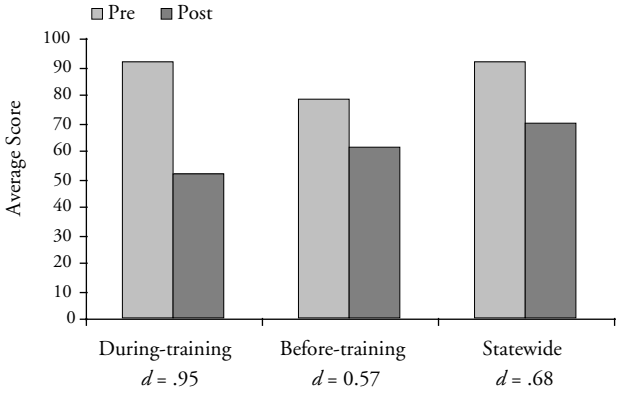
Analyses. Total and subscale scores are generated for the CAFAS and the Caregiver Wish List. Paired *t*-tests were conducted to assess pre to post changes. The intake CAFAS scores for the CAFAS are constrained by the selection criteria.

Results

Child and Adolescent Functional Assessment Scale (CAFAS)

CAFAS Total Score. Changes in average CAFAS total scores from intake to last CAFAS assessment are presented for the three samples in Figure 1. For each sample, a significant decrease in impairment was observed, although the effect size was large for the during-training sample (d = .95) and moderate for the before-training (d = .57), and statewide samples (d = .68).

Figure 1
Change in Average CAFAS Total Score from Intake to Last CAFAS



Note: All *t*-tests are signficant.
For *d* statistics, .20 = small effect, .50 = moderate, > .80 = large

CAFAS Subscale Scores. For all three samples, statistically significant reductions were observed for each subscale except for the Mood subscale for the before-training sample. However, large effect sizes, defined as a *d* statistic of .80 or higher (Cohen, 1988), were only observed for the during-training sample. Furthermore, for this group, large effect sizes were observed for four CAFAS subscales, including the Moods subscale. For the during-training group, the effect sizes for each subscale were: School/Work $d = 0.95$; Home $d = 1.01$; Behavior Towards Others $d = 1.14$; Moods/Emotions $d = 0.80$. For the before-training sample, the effect sizes were: School/Work $d = 0.53$; Home $d = 0.52$; Behavior Towards Others $d = 0.65$; Moods/Emotions $d = 0.35$. For the statewide sample, the effect sizes were: School/Work $d = 0.49$, Home $d = 0.74$, Behavior Towards Others $d = 0.57$, Moods/Emotions $d = 0.30$.

CAFAS Outcome Indicators. Successful outcomes were assessed, using three outcome indicators: the percentage of youths who achieved a 20 point reduction in total CAFAS score, no severe impairments at last CAFAS (for those youths with one or more severe impairments at intake), and having a total CAFAS score of 40 or less at last CAFAS. For all three outcome indicators, the during-training group had the highest proportion of improved youths. For reduction of CAFAS total score (> 20 pts), the results were: during-training 75%, before-training 44.8% and statewide 53.6%. For no severe impairments at last CAFAS, the results were during-training 77.8%, before-training 50%, and statewide 49.7%. For total score of 40 or less at exit, the results were: during-training 50%, before-training 25%, and statewide 24.3%.

Caregiver Wish List

Wish List for Your Child – Child Compliance. The caregivers in the during-training sample reported a significant decrease in frequency in their child's noncompliance from pre- ($M = 42.11$, $SD = 9.33$) to post-treatment ($M = 31.00$, $SD = 8.86$), with a large ($d = 1.13$) effect size, $t(8) = 3.39$, $p < .01$. In comparison, the findings were non-significant for the before-training sample, with a mean pre-treatment score of 40.6 ($SD = 8.21$) and a post-treatment score of 39.6 ($SD = 8.17$), $t(14) = .41$, *ns*.

Wish List for You – Parenting Skills. For the "Wish List for You," results are reported for the total score as well as for each of the six domain subscales. For the total score, the parents in the during-training group reported a significant increase in parenting skills, $t\ (8) = 5.11$, $p < .001$, with a large effect size ($d = 1.70$). In contrast, the results were non-significant for the before-training group for the total score, $t(14) = 1.77$, *ns*. For the six domains scores, the parents in the during-training group reported a significant increase in skills from pre- to post- treatment for: Providing Direction and Following Up, $t(8) = 2.36$, $p < .05$, Discouraging Undesirable Behavior, $t(8) = 4.42$, $p < .002$, Monitoring Activities, $t(8) = 2.53$, $p < .04$, and Problem Solving Orientation, $t(8) = 2.74$, $p < .03$. For the before-training sample, there were no significant pre- to post-changes in any of the six domains.

Discussion

Youth in the families who received treatment from trainees enrolled in PMTO training made substantially greater improvements in day-to-day functioning, compared to the youths who received treatment-as-usual (i.e., before-training and statewide sample). This was observed for the CAFAS total score as well as for three behavior subscales and the Moods subscale of the CAFAS. Thus, the benefits to youth behavior problems were accompanied by improvement in mood. On the Caregiver Wish List, the parents in the during-training sample reported increased frequency of youth compliance and an increase in use of effective parenting behaviors, as evidenced by the significant change in total score for parenting behaviors and in four of the six subscales. In contrast, the parents in the before-training sample reported no significant improvements on the Caregiver Wish List. The parents whose therapists had the benefit of PMTO training reported feeling more skilled and confident in managing their children's difficult behavior.

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The Benefits of Parent Management Training (Oregon Model) from a Parent's Perspective

Sandy Roethler

Background

I am in a unique position to reflect upon the benefits of PMTO training because I am both a parent who has undergone Parent Management Training-Oregon Model (PMTO) through my local community mental health agency, and am an executive director of the local family resource center. I opted to participate in PMTO for several reasons.

First, as a parent of a child with Bipolar Disorder, I spent many hours researching the best methods for parenting children with mental illness and managed to cobble together something that worked for my family. This was before my current employment, before I heard the words "best practices" or "evidence-based practices." All I knew was that there had to be something other than time-out, and other methods that worked with typical kids, to help me parent my atypical child. When I heard about PMTO, I was eager to try it. Anything that gave me an opportunity to learn something new or improve my skills was welcomed.

In addition to filling my personal needs, as a panelist I chose to participate in PMTO because of my role as a community leader and advocate for other parents of children with emotional disorders. If something was found to really work for this population of children, this director wanted to be able to tell families who used my agency to try that "something." Conversely, if the program didn't work, I wanted to be able to spare families from further frustration over yet another program that wasted their time.

Need

It is important to note that this director has a master's degree in family and consumer communication (Family Studies Department) from the University of Wisconsin-Madison. I am married, White, affluent, and have no other children. I also have taken several parenting classes with my spouse, in addition to reading many, many parenting books. Despite these advantages, I still found my parenting task to be extremely hard.

Parenting children with behavior and/or emotional disorders is difficult. While that may sound trite, a statement the reader can blithely skim over, it is imperative that practitioners understand this. Despite all the skill in the world, the level of patience, creativity, quickness, and determination needed is well above and beyond what anyone can imagine. Parenting these children is just plain hard. PMTO seeks to address this, through a systematic, simple approach that builds trust and respect. From this parent's perspective, it actually provided the user with more patience, more determination, more hope, and reduced the sense of urgency of having to come up with immediate solutions on the spot.

Results

From my perspective, PMTO has been more useful and successful than other types of parenting skill improvement methods, especially group parenting classes. PMTO is provided one family at a time and focuses on role-playing and hands-on learning, based on the family's life experiences. It teaches a family to encourage the child, provide good directions, monitor behavior, reward positive behaviors, minimize undesirable behaviors, and problem-solve. The focus is always on building respect for the child and for the parents. PMTO is better than other parenting skill builders because:

- PMTO recognizes and builds upon the specific family's skills and strengths, rather than spending too much time on skills a family may have already mastered successfully. Families have limited time, and if they attend a class that appears to be covering ground they already know, they will lose interest and stop attending.
- PMTO is all about the one particular, participating family, so the attention, questions, problem solving, etc. are all very specific. The family doesn't need to listen to questions from other parents whose children may not exhibit the same types (or severity) of problems. It can be discouraging to listen to others who think their biggest problem is not being able to get their child to bed, for example, when their own child is skipping school or beating up other children, etc.
- PMTO moves at the family's pace. If the family needs to spend less time in one area, say, encouragement, the training can move faster in that area. If the family needs to spend more time on a specific area, the training can spend multiple weeks on this skill until they master it. A classroom just moves at one speed, and if it's the wrong speed, people will quit going or will tune out.
- Role-playing in PMTO is the key to success because it is based on how the family's child is likely to behave (not on some generic examples), so the family can practice the "right" responses until they become second nature. That way, they are ready when the child starts with his usual distraction or stall tactics. The parents have practiced, so their "hot buttons" are harder to push.
- Finally, PMTO uses easy, practical steps that are easy to remember in the heat of the moment. It helps parents remain calm, keeps them from being dragged into arguments, and helps them maintain control. Parenting classes frequently focus on a superficial "philosophies," such as "think of your child as being spirited instead of naughty." PMTO teaches the family actions, which are truly useful.

Future Implications

PMTO is closely aligned with the Positive Behavior Supports (PBS) movement taking place in the schools in Kalamazoo County. Both focus on encouragement, monitoring behavior, and supporting the types of behavior a family and society want to see. It is helpful to have both approaches taking place in the county, because youths will receive a consistent message with a consistent approach, and schools and parents can support one another. Finding ways to further link PMTO and PBS will be important.

Next steps can include expanding teaching PMTO to other people in the child's life, including extended family, leaders of extracurricular activities, teachers, and others. This will provide consistent interactions with youths, will convey the social expectations of behavior to the youths, and will encourage respect for and from youths in other settings outside the home.

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MTFC Hawaii: Integrating an Evidence-Based Practice into an Established System of Care

Teru L. Morton
Gerard Bouwman

Introduction

Hawaii's Child and Adolescent Mental Health Division (CAMHD) is a statewide system serving approximately 2,500 severely emotionally and behaviorally disordered youth. Fashioned under the Felix Consent Decree (1994-2005), it has received national recognition as an "exemplary system of care due to its ability to involve family and community stakeholders in a value-based system that has become increasingly effective at using empirical data to guide decision-making" (Hodges, Ferreira, Israel, & Mazza, 2006). Not surprisingly, CAMHD places a strong value on evidence-based services (EBSs).

This paper describes the integration of a EBS, Multidimensional Treatment Foster Care (MTFC), into CAMHD's system of care. MTFC is the leading EBS for out of home placement of adolescents with mental health issues (Hawaii Department of Health, 2004; Hoagwood, Burns, Kiser, Ringeison, & Schoenwald, 2001). MTFC treats youth with conduct disorder, and these youth represent the majority of CAMHD's population. MTFC uses trained foster parents as the primary treatment agent; an individualized point-and-level system; and engagement of the family of origin throughout treatment to return youth successfully to their families, diverting them from corrections and institutional trajectories, and resulting in good long term cost savings (Chamberlain & Reid, 1998; Fisher & Chamberlain, 2000). An MTFC team consists of five clinicians with highly delineated roles and a pool of trained foster parents serving a total of 10-12 families. This model delivers intensive services requiring a high level of supervision and support. It is a very prescriptive treatment, and therefore fidelity monitoring is important. MTFC now has more than 40 years of research supporting its effectiveness and has been implemented in 60 sites worldwide (e.g., Chamberlain, 2003). This case study offers several lessons learned for other state or other systems of care contemplating EBS implementation.

Method

The implementation process began in 2004, when the decision was made to bring MTFC to Hawaii. There was extensive information exchanged between CAMHD, the funder, and TFC Consultants, the purveyor of training and consultation. In 2005, Patricia Chamberlain (MTFC's founder), and leaders from TFC Consultants visited Hawaii for provider information meetings and CAMHD planning meetings. Later that year CAMHD conducted its site selection by issuing a Request for Proposals to the provider community for two demonstration sites. Through this competitive bidding process, CAMHD awarded contracts for MTFC services to two agencies, each on a different island. At approximately that time, the first author was assigned the role of CAMHD's MTFC System Supervisor. The purpose of this new role was to: (a) bridge and facilitate site readiness, social marketing for referring agents and local stakeholder networks, and oversee startup; and (b) monitor and assist the three-year implementation by identifying and working around barriers in successful startup, growth with fidelity, and site accreditation. In the last two weeks of July 2006, TFC Consultants provided several days of initial clinical training for both MTFC teams and newly recruited foster families, and the doors of the new EBS opened for business in August 2006.

Results

Six months into the program, one agency had suffered attrition in the key Program Supervisor role, but otherwise the foster family recruiting and training had gone well and the program had admitted 7 cases and trained 17 foster families. The other agency had admitted four cases and trained six foster families. This slower growth was due to insufficient time dedicated by the team's Program Supervisor,

and that staff's 1.00 F.T.E. had been restored. Evaluations from CAMHD's ongoing utilization and performance monitoring data concurred with those entailed in TFC Consultants' quarterly implementation reports and monthly consultations; the progress of implementation of MTFC in Hawaii was, at six months, above average in developing capacity with fidelity and showed good long term prospects for growth.

In addition, a number of expected and unexpected challenges had been encountered and overcome in the integration of a new EBS into an established system of care:

- ***Referrals and discharges.*** Managing referral appropriateness and rate necessitated clear articulation of eligibility/exclusion criteria and model-centered differentiation of clinical vs. administrative discharges, along with training of CAMHD care coordinators in procedural accommodations that facilitated integration into the existing delivery organization.
- ***Staffing and administrative support.*** CAMHD's contracted provider agencies encountered difficulties in hiring new MTFC team members, which were surmounted by expediting credentialing and other staffing issues. Additionally, CAMHD's MTFC System Supervisor worked to ensure that agencies protected their MTFC staffs' indirect service time, and resisted the temptation to deploy them on other programs because of low census.
- ***Funding.*** CAMHD provides cost-reimbursement funding for new EBS programs in early implementation periods, ensuring healthier growth with fidelity than fee for service reimbursement, which is more familiar for CAMHD's provider agencies. Implementation required some provider training in the fiscal domain so budgets could be built and adhered to.
- ***System and cross-system pressures.*** An established system of care has internal pressures that can threaten model fidelity through business-as-usual requirements in fiscal, clinical, and utilization management domains which conflict with the model. These intra-systemic pressures of building census of the new EBS vs. maintaining model fidelity require that the System Supervisor run interference with various parts of the established system of care. In addition, CAMHD's sister child-serving agencies (schools, social services, courts, etc.) often impose their requirements on CAMHD youth, necessitating advocacy and trouble-shooting for the new EBS across various systems.

Conclusions

New EBS implementation is occurring in all sectors of children's mental health nationally now. Each implementation case study is informative in different ways. The authors (one of whom is familiar with Hawaii's implementation and integration efforts and the other with MTFC's implementation efforts worldwide), concur on the unique features of implementing MTFC in Hawaii. The first feature concerns the MTFC System Supervisor role and its degree of involvement in identifying and solving problems, and in coordinating the different parties. This new role, created at the central administrative level, has been invaluable in our success to date in implementing and integrating the new EBS in this system. The second feature is the role and performance of CAMHD's care coordination and referring centers statewide, which allow for local community accommodations between new MTFC programs and their referring agents. Integration efforts targeting both central and local community levels allow for more points of contact and make it easier to correct problems as they arise. A third unique feature is the admittedly difficult environment this state imposes on out-of-state business. A fourth and final feature unique to implementation of MTFC in Hawaii lies in Hawaii's proactive response to the Felix Consent Decree, which resulted in its active orientation to EBSs, and its generally accommodating and supportive context. Implementation contexts encountered by EBS purveyors like TFC can be downright hostile, whereas Hawaii's agreeable orientation has contributed to a shorter, faster, less troubled initial implementation and integration of MTFC into its system of care.

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Implementing Evidence-Based Practices within Systems of Care: Implications for Staff Turnover

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Introduction

There is considerable interest in implementing evidence based practices (EBPs) in youth systems of care, however implementing EBPs in "real world" settings remains a substantial challenge. This study seeks to contribute to our understanding of the relationships between EBP implementation and organizational behavior in order to improve systems of care for children and their families. While research has examined the influence of mental health and social service organizational context on turnover (Aarons & Sawitzky, 2006; Glisson & James, 2002), very little work has investigated the impact of actual EBP implementation on the service provider workforce. Such knowledge can help systems and agencies anticipate and minimize potential organizational costs and identify ancillary organizational benefits associated with EBP implementation.

Successful implementation of EBPs typically requires adherence to specific intervention protocols accompanied by fidelity monitoring that increases oversight of job activities. Such conditions are expected to reduce job autonomy and hence negatively impact work attitudes of job satisfaction and organizational commitment. These effects may, in turn, contribute to increased turnover intentions and subsequent staff turnover (Knudsen, Johnson, & Roman, 2003).

Given that prior research has documented high rates of turnover in youth service systems (Aarons & Sawitzky, 2006; Glisson & James, 2002) the potential for further barriers to staff retention poses a significant concern. Alternatively, recent research found that programs implementing an EBP exhibited lower than average turnover rates (Sheidow, Schoenwald, Wagner, Allred, & Burns, 2007).

This study explores the relationship between EBP implementation and staff turnover in a statewide implementation of an evidence-based intervention to reduce child neglect in high-risk families (Gershater-Molko, Lutzker, & Wesch, 2003). Our primary hypotheses include (1) implementing the new EBP will be associated with greater employee turnover, (2) receiving ongoing monitoring will be associated with greater employee turnover, (3) implementing the new EBP and receiving ongoing monitoring will be associated with the highest employee turnover, and (4) greater job autonomy will be associated with a reduced likelihood of employee turnover.

Methods

This study is part of a larger, longitudinal project examining organizational factors in the implementation of SafeCare®, an EBP consisting of structured modules that focus on child health, home safety, and parent-child bonding, within the statewide children's service system in Oklahoma. A unique aspect of this project is the inclusion of a 2 X 2 experimental design, in which the SafeCare® EBP intervention to reduce child neglect (Gershater-Molko et al., 2003) vs. services as usual (SAU) is crossed with the level of job monitoring (monitored vs. unmonitored). It is important to note that monitoring was framed as "ongoing consultation" intended to support provider competence and excellence in practice for both the SafeCare® and SAU control conditions. There were 21 case management teams in six regions in the state with roughly one quarter in each condition.

Data for this study are derived primarily from comprehensive web-based surveys completed by case-managers working in a network of nonprofit agencies contracted by the state. Four biannual waves of survey data have been collected with an average wave response rate of 95% over the four waves. For this study, we examine all case managers included in Waves 1-3 and determine their employment status at the start of Wave 4. Since the focus of this study is on workers' response to changing working conditions,

employees known to have left the organization involuntarily were not included in the analyses. A total of 139 case-managers met these criteria. The majority of the respondents were female (84.8%), White (62.3%), and most had completed at least some graduate education (58.7%). The average age was 37.1 (*SD* = 10.4) years with an average job tenure and monthly caseload of 2.4 (*SD* = 3.2) years and 9.5 (*SD* = 3.4) children, respectively.

The primary independent variables were: (1) whether the team was implementing the EBP vs. SAU (binary coded 1 or 0); (2) whether the team was receiving monitoring (binary coded 1 & 0); and (3) the employee's assessment of their job autonomy (measured with an 11 item job autonomy scale; Knudsen et al., 2003; Wang & Netemeyer, 2002; Marchese & Ryan, 2001).

Individual provider characteristics expected to influence staff turnover included staff turnover intentions and overall work attitudes (job satisfaction & organizational commitment). Turnover intentions represent the extent to which staff members anticipate leaving their current position and were measured by a five item scale (Knudsen et al., 2003; Walsh, Ashford, & Hill, 1985). Work attitudes were assessed by averaging scores for a 10 item job satisfaction scale and a 13 item organizational commitment scale (Glisson & Hemmelgarn, 1998).

Additional factors related to job conditions and employee characteristics were also examined. Measures of job conditions included average monthly client caseload and whether the case management team was located in an urban geographic area (urban, binary coded 1 and 0). Demographic information included gender (male, binary coded 1 and 0), race (White, binary coded 1 and 0), educational attainment (at least some graduate school, binary coded 1 and 0), age (natural log of age used in regression models), and years working at the agency (natural log of years at agency used in regression models).

Logistic regression analyses were conducted with the Stata 9 statistical software package (StataCorp, 2005) to examine the dichotomous dependent turnover variable (1 = left agency and 0 = still with agency). An adjusted standard error was utilized to account for the clustering of case-managers within teams.

Results

The average annualized case manager turnover rate was 27.9%. As shown in Table 1, the turnover rate was highest in the least "restricted" work setting, no monitoring and no EBP implementation (37.2%) and lowest in the most "restricted" work setting (both monitoring and EBP implementation, 15.7%).

Table 1
Annualized Turnover Rates by Experimental Condition

		Monitored	
		No	*Yes*
SafeCare EBP	*No*	37.2%	31.9%
	Yes	31.0%	15.7%

Table 2 presents the coefficients for the multivariate regression models as well as the odds ratio and statistical significance for each variable. The odds ratio indicates the risk of turnover relative to the reference category for dichotomous independent variables or for a unit change in continuous independent variables. Values less than one suggest a reduced likelihood for turnover, whereas values greater than one indicate a greater likelihood of staff turnover.

The findings from Model 3 show that, controlling for a range of employee characteristics, job attitudes, and job conditions, those in the monitoring condition experienced about one-third the probability (35.7%) of leaving their agency relative to those without monitoring. Model 4 examines

the crossed-effects of the two experimental conditions. The findings indicate that relative to those implementing the EBP and receiving monitoring, all other groups experienced greater turnover, although only one group differed significantly. In all analyses, higher job autonomy was associated with a significantly reduced likelihood of turnover.

Table 2
Logistic Regression Analyses of Case Manager Turnover

	Model 1 Odds Ratio	*Model 2* Odds Ratio	*Model 3* Odds Ratio	*Model 4* Odds Ratio	*Model 4* 95% OR Confidence Interval	
Male	0.756	0.613	0.634	0.633	0.269	1.492
White	1.171	1.205	1.276	1.267	0.564	2.847
Graduate School	1.797	1.878	1.719	1.716	0.563	5.225
Age	0.057***	0.043***	0.044***	0.044***	0.007	0.278
Years at Agency	0.891	0.870	0.764	0.767	0.338	1.741
Case Load	0.912**	0.897**	0.886**	0.887**	0.813	0.967
Urban Community	1.698	1.453	1.044	1.025	0.369	2.848
Turnover Intentions		1.329	1.418	1.418	0.980	2.054
Job Autonomy		0.559***	0.536***	0.535***	0.400	0.716
Job Attitudes		1.304	1.337	1.338	0.981	1.824
Monitored			0.357*			
SafeCare EBP			0.859			
No EBP/No Monitor				3.303	0.894	12.204
No EBP/Yes Monitor				1.250	0.343	4.561
Yes EBP/No Monitor				2.964*	1.045	8.402

* $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$

Discussion/Conclusions

The annualized turnover rate of 28% for the overall study population is similar to or less than other reported turnover estimates for child welfare workers (from 30% to as high as 85%; Mor Barak, Levin, Nissly, & Lane, 2006). Unexpectedly, the annualized turnover rate for case managers participating in the EBP and receiving ongoing monitoring was significantly lower than the other groups (16% to over 30%). This relationship persisted in the multivariate analyses such that Hypotheses 1 and 2 were not supported. Contrary to hypotheses based on prior job autonomy research, neither implementing this EBP nor monitoring staff were related to increased employee turnover. In fact, the opposite effect was found; monitoring was associated with a significantly reduced likelihood of turnover. Hypothesis 3 was also not supported since case managers experiencing both monitoring *and* implementing SafeCare demonstrated the lowest, rather than the highest, likelihood of leaving an agency. Support was found for Hypothesis 4, as case managers with a greater sense of job autonomy were much less likely to leave the agency.

One limitation of this study is that the initial training for the EBP was under way during our first wave of data collection. As such, the findings may contribute more information regarding the impact of ongoing, sustained EBP and monitoring on staff retention rather than the impact of initial EBP implementation.

The implications from this research are significant. Contrary to expectations, we found that implementing and utilizing EBPs did not negatively impact employee turnover and may indeed help to decrease turnover rates. This finding helps to lessen concerns about potential workforce problems associated with adopting and implementing an EBP. Additionally, the findings suggest that incorporating an appropriate monitoring component into the EBP process may promote greater staff retention. The additional interaction and support promoted through ongoing consultation with case managers may be perceived as helpful, rather than as reduced job autonomy. In this manner it may be more appropriate to frame the employee oversight functions as ongoing consulting, coaching, and practitioner support.

Consistent with prior research, promoting employees' sense of autonomy and control over their work environment does appear to reduce staff turnover. This approach may represent an important and potentially replicable mechanism for increasing staff retention in other service settings. Further analyses will be conducted in this longitudinal study as the sample size and follow-up time increase.

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Implementation of Evidence-Based Practice: The Role of Leadership and Provider Attitudes

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Introduction

Effective leadership is of concern across nations and cultures, and private and public organizations. Effective leadership is particularly important in public mental health services because there are demands for high productivity, quality services, and increasingly, implementation of evidence-based practices (EBPs). Along with this concern, there is increasing momentum to move EBPs into mental health and social service settings (Burns, 2003; Goldman et al., 2001; Essock et al., 2003; Glisson, 2002; Ringeisen & Hoagwood, 2002). While there is a considerable literature on organizational factors associated with implementation of innovation in business settings (Frambach & Schillewaert, 2002), there is increasing examination of factors that may facilitate or hinder implementation of EBPs in public sector systems of care (Aarons & Sawitzky, 2006). Research focusing on implementation of innovation in these settings can inform stakeholders about factors that facilitate and/or hinder the implementation process. A better understanding of such factors can lead to the development of optimal implementation strategies tailored to systems of care for youth and their families.

More positive attitudes toward adoption of EBPs are associated with key worker characteristics including higher educational attainment, professional status, and job tenure (Aarons, 2004). However, service workers operate in a complex context that includes a number of organizational process influences and organizational characteristics likely to impact adoption of innovation (Gotham, 2004). Leadership is associated with key organizational and clinical process factors in youth systems of care that are also important in implementation of EBPs including working alliance (Aarons, Woodbridge, & Carmazzi, 2003) and organizational culture and climate (Aarons & Sawitzky, 2006). Thus, leadership is an important factor to consider in youth systems of care.

This paper uses mixed-methods presenting data from two studies with the respective goals of: (1) examining the perceived importance of leadership in implementation of EBPs in youth systems of care from the perspectives of consumers, clinicians, administrators, and policy-makers and (2) examining the association of leadership with mental health service provider's attitudes toward adopting EBPs. Findings from the latter study were published previously (Aarons, 2006). For Study 1 it was hypothesized that leadership would emerge as important in implementation of EBPs from the perspective of multiple stakeholders, and for Study 2 that more positive leadership would be associated with more positive attitudes toward EBPs.

Methods

Study 1

Participants. Participants were 31 stakeholders from the youth system of care in San Diego County, California and included consumers, clinicians, administrative staff, program managers, agency directors, and policy makers. Sixty-one percent of participants were female, 74% were Caucasian, 10% Hispanic, 3% African-American, 3% Asian-American, and 10% Other. The mean age of participants was 44.4 years (*SD* = 10.9). Sixty-nine percent of participants had experience implementing EBPs.

Procedures. Concept mapping involved the use of focus groups to develop a set of statements defining facilitators and barriers to EBP implementation. Statements were then sorted by participants and rated with regard to their importance and changeability. Analyses included multidimensional scaling and cluster analysis to identify salient factors for EBP implementation.

Study 2

Participants. Participants were 303 service providers from a larger study of organizational factors affecting behavioral health services in 49 public sector mental health programs in San Diego County, California (Aarons, 2004). Eighty percent of respondents were full-time employees; interns were less prevalent in the service system (24.9%) relative to fully employed staff (75.1%).

Measures for Study 2

Provider Demographics. A worker survey incorporated questions regarding provider demographics and organizational characteristics including provider age, sex, education level, professional status (intern vs. professional), and job tenure.

Attitudes Toward Evidence-Based Practice. The Evidence-Based Practice Attitude Scale (EBPAS; Aarons, 2004) was used to assess provider attitudes toward adopting EBPs. The EBPAS is a 15-item measure with four subscales: (a) *Appeal:* the extent to which the provider would adopt an EBP if it were intuitively appealing, (b) *Requirements:* the extent to which the provider would adopt an EBP if it was required, (c) *Openness:* the extent to which the provider is generally open to trying new interventions and would be willing to try or use EBPs, and (d) *Divergence:* the extent to which the provider perceives EBPs as not useful and less important than job experience. The EBPAS uses a total scale score representing global attitudes toward adopting EBP. The overall Cronbach's alpha reliability for the EBPAS is good (alpha = .794) and subscale alphas range from .93 to .66 (Aarons, McDonald, Sheehan, & Walrath-Greene, 2007). The EBPAS validity is supported by associations of EBPAS scales with both individual provider-level attributes and organizational characteristics (Aarons, 2004).

Leadership. The Multifactor Leadership Questionnaire (MLQ; Bass & Avolio, 1995) was used to assess the providers' perceptions of supervisors' transformational and transactional leadership behaviors. Transformational leadership was assessed with four subscales of idealized influence, inspirational motivation, intellectual stimulation, and individual consideration (α = .90). Transactional leadership was assessed with subscales including contingent reward, laissez-faire, and management by exception (α = .85). Providers were asked to judge the extent to which their immediate supervisor engaged in specific behaviors measured by the MLQ. Each behavior was rated on a 5-point scale ranging from 0 = *not at all*, to 4 = *to a very great extent*.

Survey Procedure. Surveys were administered to groups of providers. The lead investigator, project coordinator and/or a trained research assistant conducted interviews and/or survey sessions. Informed consent was obtained prior to the survey.

Analyses. Five multilevel regression analyses controlling for provider demographics were conducted in order to examine the associations of leadership with each of the four EBPAS subscales and the total scale. Multilevel analyses were conducted with Mplus to control for the effects of the nested data (Muthén & Muthén, 1998-2004).

Results

Analysis of focus group data identified 14 clusters or factors that believed to facilitate or hinder EBP implementation. Further content analysis and drilling down resulted in identification of statements related specifically to leadership and a unique leadership factor was identified. Table 1 shows all 15 factors likely to impact EBP implementation. Leadership was rated most important and also was judged to be most changeable of any of the identified implementation factors.

Table 1
Rankings of Stakeholder Rated Importance and Changeability of Implementation Factors

Importance	*Changeability*
1. Leadership	1. Leadership
2. Funding	2. Clinical perceptions
3. Staff Dev/Support	3. Consumer values
4. Staff resources	4. Staff Dev/Support
5. Costs	5. Impact on clinical practice
6. Research/Outcomes	6. Research/Outcomes
7. Beneficial EBP features	7. Consumer concerns
8. Political dynamics	8. Agency compatibility
9. Clinical perceptions	9. System readiness/compatibility
10. Consumer values	10. Staff resources
11. Consumer concerns	11. Beneficial EBP features
12. System readiness/compatibility	12. Political dynamics
13. Impact on clinical practice	13. EBP limitations
14. EBP limitations	14. Costs
15. Agency compatibility	15. Funding

Regression results from Study 2 presented in Table 2 show that higher ratings of supervisor transactional leadership were significantly positively associated with greater provider openness to adopting new interventions ($p < .05$). More positive transformational leadership was significantly positively associated with the requirements subscale, indicating a greater willingness to adopt EBPs given the requirement to do so ($p < .05$). Higher ratings of transformational leadership were associated with a lower perceived divergence of usual care with EBPs ($p < .05$). Finally, both transformational and transaction leadership were positively associated with more overall openness to EBPs ($p < .05$).

Table 2
Multilevel Regression Analysis of the Association of Transformational and Transactional Leadership with the Subscales of the Evidence-Based Practice Attitude Scale Among 303 Providers Working in 49 Publicly Funded Mental Health Programs for Youths

	Appeal			*Openness*			*Requirements*			*Divergence*			*Total*		
Variable	*Coef*	*SE*	*z*	*Coef*	*SE*	*z*	*Coef*	*SE*	*z*	*Coef*	*SE*	*z*	*Coef*	*SE*	*z*
Age	.001	.004	0.167	.007	.005	1.557	-.001	.005	-0.264	.008	.005	1.633	.000	.003	-0.146
Sex	.193	.074	2.605†	.133	.089	1.498	.047	.137	0.344	.019	.077	0.245	.088	.065	1.346
Education	.104	.044	2.362†	-.024	.041	-0.574	-.052	.052	-1.004	-.013	.041	-0.318	.010	.032	0.318
Intern	.122	.069	1.750*	.033	.092	0.362	.148	.137	1.081	-.119	.086	-1.383	.106	.064	1.653*
Job Tenure	-.011	.009	-1.190	-.039	.013	-3.030†	-.005	.015	-0.355	.011	.016	0.694	-.016	.008	-1.984*
TF Leadership	.052	.047	1.104	.063	.059	1.063	.164	.073	2.234*	-.112	.051	-2.189*	.098	.034	2.854†
TA Leadership	.115	.080	1.438	.360	.075	4.817†	.174	.124	1.400	.116	.093	1.247	.133	.072	1.835*

Note: Coef = Unstandardized regression coefficient; SE= Standard Error; TF = Transformational; TA = Transactional; N = (303); $^{*}p < 0.05$; $^{\dagger}p < 0.01$
Source: Aarons (2006)

Discussion

Study 1 showed that leadership was rated as the most important implementation factor and also one of the most changeable. This is a critical finding because it is important to identify factors that are not only important, but that can be supported to improve the implementation of EBPs. While other factors were also deemed important (e.g., funding) others were also deemed less changeable than leadership and therefore less likely targets for organizational improvement. Effective leadership not only inspires and motivates others, but effective leaders are able to implement strategies for change and identify and garner needed resources to support EBP implementation. Study 2 showed that leadership was associated with mental health service provider attitudes toward adopting EBPs. The two well studied leadership styles of transformational and transactional leadership were both associated with provider attitudes toward EBPs. More positive leadership was associated with more positive attitudes and poorer transformational leadership was associated with perceived divergence of EBP and usual care.

Taken together, the results of these two studies support the notion that leadership, in community based children's service systems, is an important consideration when implementing EBPs. This perspective was garnered from multiple stakeholders including consumers, agency representatives and policy makers. The fact that this multi-stakeholder perspective is supported by the empirical study of leadership and attitudes provides support for leadership as a critical consideration in EBP implementation. Further work should delineate how and with whom to improve leadership in youth service systems.

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Symposium
Implementation and Adaptation of Evidence Based Treatment for American Indian and Alaskan Native Children Exposed to Trauma

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Chair
Dolores Subia BigFoot

Discussant
Holly Echo-Hawk

Authors
Jami Bartgis et al.
Teresa D. LaFromboise

Symposium Introduction

Dolores Subia BigFoot

This symposium addressed the issues of implementing evidence based treatments (EBTs) as they relate specifically to American Indian (AI) and Alaska Native (AN) populations, including the adaptation and implementation process of EBTs with AI/AN children exposed to trauma. Implementation steps for creating culturally based adaptations of EBT were presented, outlining the essential considerations and the current knowledge necessary to move EBT to AI/AN treatment providers and tribal communities.

The use of EBTs has particular poignancy for AI/ANs since this population typically is not included in clinical trials. EBTs are being promoted but AI/AN tribal groups are quite hesitant to adopt, much less incorporate into their service, treatment programs that may hold little relevance for them. Given their unique cultural history and their desire to retain their own healing ways, AI/AN administrators and researchers have grave concerns when they are not part of the evaluation of the treatments. It is understandable, given the history of psychology and misunderstandings among the field of mental health toward the Indigenous Peoples of the United States, that tribal programs express high concern for the potential of psychological and cultural harm toward AI/AN children and their families and communities. Spero Manson (2006) described the epistemological tensions in the arena of mental health research with AI and AN people. Some of this tension results from the confusion about terminology with the use of a term like "mental illness" versus the term "mental health." Specifically, AI/AN people embrace wellness as a self determined concept, which is a positive image and has little or no stigma typically associated with mental illness. Additional considerations include risk, etiology, and treatment versus the prevention and promotion of wellness.

Thus, AI/AN populations may strongly argue that there is a need for more focus on prevention and promotion of wellness, opposed to approaches that the majority population view as desirable. Large-scale, population-based surveys and randomized clinical trials, which are the gold standard for scientific evidence, have not been conducted with AI/AN populations. We cannot say with certainty what works if no scientific evidence is available. Nor do we have epistemological knowledge related to gender, social class, and variation within the culture. Discussions about AI/AN children and their families and communities must also include consideration of the historical forces that shaped the contemporary context for much of the discussion itself. Other dimensions which need to be included are historical trauma, intergenerational trauma, and historical grief; these are meaningful concepts for this population and relatively recent efforts are underway to explore and explain what these constructs may include or expand toward.

Process of EBT Adaptation

It is against this background that the process of adapting EBT was initiated. The Indian Country Child Trauma Center (ICCTC, 2006), at the University of Oklahoma Health Sciences Center, supported by the National Child Traumatic Stress Network and the Substance Abuse and Mental Health Services Administration, has developed, refined, and disseminated culturally relevant trauma intervention models for use with children in Indian Country. ICCTC has identified a set of empirically supported child trauma intervention models, and has built on the foundation of Native traditional teachings and practices to develop culturally relevant treatment interventions.

The premise of the cultural adaptation is the belief that AI and AN cultures have current healing practices, activities, and ceremonies that were and are used therapeutically and are based on knowing how to instruct individuals regarding relationships, child rearing, understanding healing, and understanding what makes life balanced as well as unbalanced.

The treatment protocols discussed here incorporate both common and tribal-specific cultural perspectives and traditions, focus on principles of current evidence-based models, and are designed to accommodate the substantial individual variability in cultural identity among AI/AN people.

American Indians and Alaskan Natives are taught by being told, "Watch, Listen, I am going to tell you what to do, now watch, see me do it this way. Do you understand? Do you need to ask me anything, here you do it, now go show your little sister how to do it."

The Native concept of teaching is:

- Watch
- Listen
- Told what to do
- Ask questions
- Practice
- Teach

Based on the foundation of Native concepts of learning, an implementation plan was designed as part of the adaptation. The process was extensive and included the use of cultural consultants who identified the core components, the method of training, degree of commitment to new clinical practice, implementation issues, willingness by tribal government for a tribal agreement, and a level of on-going support for program and system change. Additional aspects included a model for strength based community collaboration, and a model for systems collaboration. Part of the model on implementation and dissemination include professional development and the readiness to change toward evidence based interventions.

The summary below by Jami Bargis describes efforts to implement culturally adapted EBTs at the organizational level and at the systems level. The second paper describes the American Indian Life Skills Development Curriculum, which was designed to reduce suicide and other challenging behaviors among at-risk AI/AN youth. Models being refined for use with AI/AN children and their families and communities include:

Honoring Children, Making Relatives

Parent Child Interaction Therapy is the clinical application of techniques to support the process of teaching parents how to improve their parenting skills. Honoring Children, Making Relatives (Funderburk, Gurwitch, & BigFoot, 2005) is the clinical application of parenting techniques in a tradition framework that supports the belief of AI/AN culture of honor, respect, extended family, instruction, modeling, and teachings.

Honoring Children, Respectful Ways

Honoring Children, Respectful Ways (HCRW; Silovsky, Burris McElroy, BigFoot & Bonner, 2005) is designed for AI/AN children in order to honor children and promote their self-respect as well as respect for others, for their elders, and for all living things. The combination of many factors can lead children and youth toward inappropriate sexual behavior, such as poor physical boundaries with others, seeking physical comfort from other children and youth, or touching others' private parts. Inappropriate sexual behaviors of AI/AN children and youth can have wide ranging impact on not only the children but also can significantly affect the family, the extended family, and the community, and can result in serious negative social consequences.

The HCRW curriculum identifies inappropriate behavior of AI/AN children and youth and culturally congruent methods of teaching them appropriate ways to honor who they are and promote their AI/AN

heritage by utilizing traditional healing and cultural practices. The adaptation of this treatment approach is congruent with the central beliefs, components, and approach of the original evidenced-based group treatment program for children with sexual behavior problems.

Core components of the HCRW protocol include rules about sexual behavior and physical boundaries, age appropriate sex education, strategies that both support the children following and using these rules, and learning skills to manage their behavior. The skills include feeling identification, coping, relaxation, impulse control, problem solving, abuse prevention, and social relationship skills.

Honoring Children, Mending the Circle

The third model being refined is Trauma-Focused Cognitive-Behavioral Therapy (TF-CBT), a model of psychotherapy which combines trauma-sensitive interventions with elements of cognitive behavioral therapy into a treatment designed to address the unique needs of children with problems related to traumatic life experiences.

TF-CBT has been adapted based on traditional AI/AN beliefs and practices about behavior, health, healing, humor and children. The premise of the cultural adaptation is the belief that AI/AN cultures have current healing practices, activities, and ceremonies that were and are used therapeutically and are based on knowing how to instruct individuals regarding thoughts, emotions, physical reactions, and spiritual connectivity. For example, with trauma-exposed children, a common symptom is intrusive thoughts that create anxiety and inability to concentrate. During many traditional ceremonies or activities led by ceremonial, traditional, or spiritual healers, participants are instructed to "leave bad thoughts at the door" or to "come in with good thoughts." A technique used in TF-CBT is "stop sign," where the child is instructed to use a stop sign image when intrusive thoughts begin. Another common behavioral reaction to trauma is the physical sensation of rapid heart beat and rapid breathing resulting in distressful or uncomfortable sense of self. Again instructions in traditional ways during ceremonial or related activities are to "bring yourself to this place, think about this place, close your eyes, breathe in, think about where your body is, your spirit, your connection with Mother Earth, you being okay with who you are." This kind of instruction is similar to the instruction in relaxation techniques for TF-CBT.

TF-CBT is the clinical application of techniques to support the healing process of trauma. Honoring Children, Mending the Circle (BigFoot & Schmidt, 2006) is the clinical application of the healing process in a tradition framework that supports the belief of AI/AN culture of spiritual renewal leading to healing and recovery.

Honoring Children, Honoring the Future

The Honoring Children, Honoring the Future component consists of several elements: (a) the implementation of the American Indian Life Skills Development Curriculum (AILSDC), developed by Teresa LaFromboise; (b) consultation to tribes and tribal programs on suicide prevention and intervention strategies, and healing activities; (c) co-sponsorship of a suicide risk assessment and crisis intervention training and support; (d) coordination and collaboration with other entities on policies or strategies for suicide prevention and intervention; (e) development of a trauma brochure for AI/AN adolescents; and (f) evaluation.

Summary

EBTs adapted with careful consideration to the world view of AI/NA can be relevant, allowing for specialized treatments to be offered by tribal providers and promoting tribal partner participation in interventions that incorporate Native world views and practices. This allows for AI/AN children who are experiencing trauma access to treatment that is delivered in a systematic approach within a meaningful context in the community setting with which they are familiar and in a cultural environment they can identify with that has an appreciation for the past.

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Infrastructure Development for Implementing and Integrating Culturally Adapted Evidence-Based-Practices Into a System of Care for American Indian Youth in Oklahoma

Jami Bartgis & David Asetoyer

Introduction

In an effort to work towards accountability, there is a growing body of support for the use of evidence-based practices (EBPs) to improve the mental health treatment outcomes for youth and their families. Isaacs and colleagues (2005) discuss how, although the use and expansion of EBPs appears to be a good solution for addressing ethnic disparities in mental health, it is very possible that EBPs may widen the health disparities gap if there is no attention to cultural and linguistic competence. Attempts to attend to cultural aspects of EBPs include adaptations to EBPs and practice-based evidence. Adaptations to EBPs are attempts to modify an EBP by changes in the service delivery approach, the goals of the therapeutic relationship, or any components of the treatment to better reflect the cultures, values, and beliefs of the population served (A. Whaley, Hogg Foundation, as cited by Echo-Hawk, Hernandez, Huang, & Isaacs, 2006). The major concern with cultural adaptations of EBP is that once changes are made the practice is no longer evidence-based and new evidence has to be established.

In an effort to improve the quality of services to Oklahoma youth, the Oklahoma System of Care (SOC) began to support EBP use through policy and practice. Currently, several EBPs are in various stages of development, but cultural adaptations have not yet begun. Statewide implementation has not yet been achieved on any EBP.

In 2005, the Indian Health Care Resource Center (IHCRC) was awarded a Circles of Care (CoC) grant to plan a system of care for urban American Indian youth in Tulsa, Oklahoma. As a part of the planning activities, IHCRC identified EBPs as a missing link for improving quality of services but recognized the need for considering cultural relevance. This paper addresses the implementation and integration of two culturally adapted EBPs into the system of care for American Indian youth in Tulsa and strategies for collaboration with the Oklahoma SOC.

Methods and Findings

Organizational Level Implementation: IHCRC

Organizational level methods include training and implementation of the culturally adapted EBPs. The Indian Health Care Resource Center (IHCRC) participated in training offered by the Indian Country Child Trauma Center (ICCTC), Honoring Children, Respectful Ways and Honoring Children, Mending the Circle. These trainings provided the basic components to the EBP, Treatment of Children with Sexual Behavior Problems and Trauma Focused Cognitive Behavioral Therapy, respectively, as well as the cultural adaptations for American Indian communities. ICCTC offers technical assistance for implementation by conducting on-site visits and weekly teleconference calls to discuss implementation issues.

At the organizational level, major challenges for implementation included clinical support for continued training and staffing and the organizational need to provide a quantity of crisis management instead of quality EBPs. This "putting out fires" approach to behavioral health care is common place in American Indian service systems and is a major obstacle to overcome.

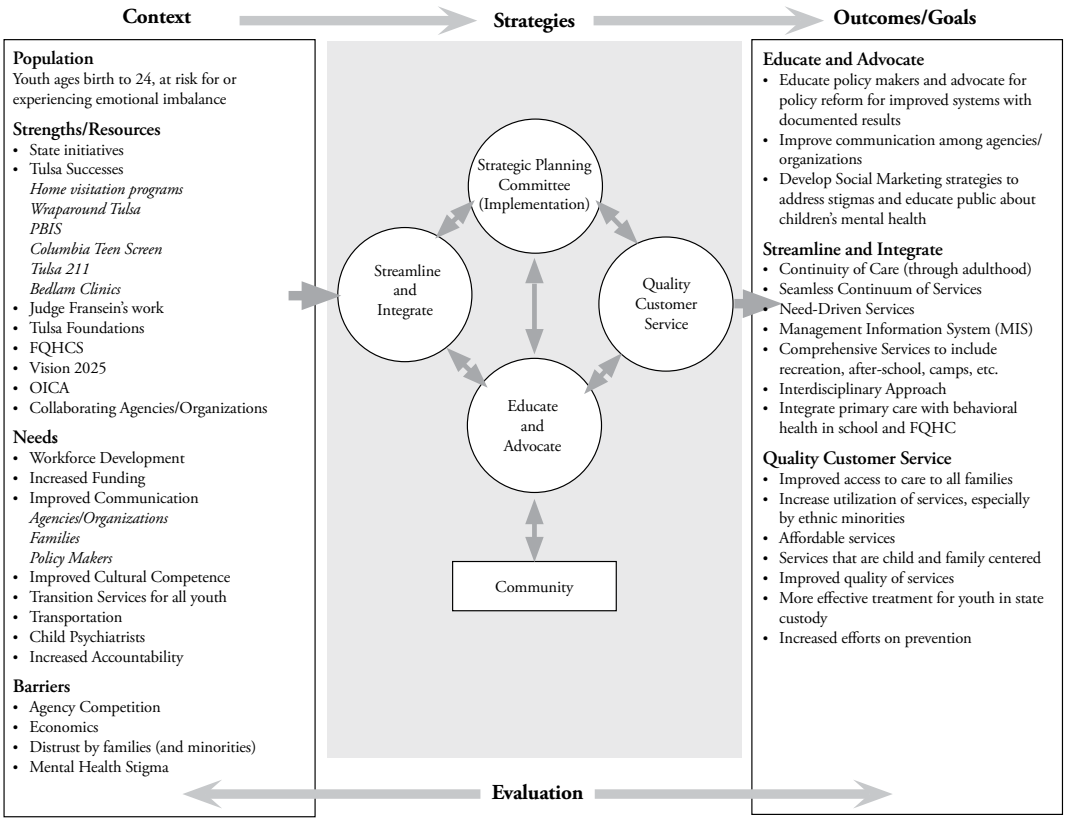
Hernandez and Nesman (presented by Hernandez, 2006) proposed a model for examining organizational/system implementation domains for improving cultural competence (see Figure 1 for IHCRC adapted model). The premise of this model is the greater the compatibility between the infrastructure and the direct service domain, the greater the cultural competence. The IHCRC organizational mission is to provide quality, comprehensive health care to urban Indians in a culturally sensitive manner that promotes good health, well-being, and harmony. However, with a high patient volume and long waiting lists, the methods for providing patient care have become less controlled by the providers and more controlled by organizational demands. In other words, patients may be seen as little as once a month so that more people have the opportunity to receive services. This, of course, limits the quality of services that are provided because once-a-month sessions address crises but afford little time to implement an EBP. Additionally, the high volume rate and the use of part-time psychologists who get paid on a fee-for-service basis limits support for additional training and required staffing needed to implement EBPs. Specific strategies to overcome these obstacles are being addressed, but planning efforts are examining policies on training support for EBPs, creating staff positions specifically to address crisis and case management, and creating mechanisms for consistent communication regarding case loads.

System Level Integration: Tulsa, Oklahoma

Systems-level methods include creating avenues for integrating culturally adapted EBPs into the greater system of Tulsa and creating strategies for collaboration with the Oklahoma SOC. The Oklahoma SOC began a pilot site in Tulsa in March of 2000. This project, called "Wraparound Tulsa," fueled the Tulsa community momentum of creating a seamless system of services to youth experiencing serious emotional difficulties and their families. The role of the Tulsa Children's Behavioral Health Community Transformation Team is to create such a comprehensive transparent system and membership includes many of the major providers and stakeholders of youth services in Tulsa including IHCRC, as well as state representatives such as the Office of Governor Brad Henry, Oklahoma SOC, the Oklahoma Transformation Initiative, and family representations such as the Federation of Families for Children's Mental Health.

Goals for integrating culturally adapted EBPs into the greater Tulsa system of care included educating the community about the importance of considering cultural competence of providers and organizations, cultural factors in EBP delivery, advocating for inclusion of cultural competence when developing policies and procedures for direct services, and attempts to develop formal relationships with Team members to streamline referrals of American Indian youth to providers trained in the EBP and the cultural adaptation. The beginning process toward realizing these goals included two facilitation meetings held in May of 2006 to begin the development of a logic model to develop a plan to guide and evaluate the work of the Tulsa system of care (shown in Figure 1). As a part of this meeting, cultural and

Figure 1
Tulsa Children's Behavioral Health Community Team



linguistic competency moved from being a separate area in the model to being an overarching theme to include in every aspect of the system. The meeting identified specific needs of delivering quality services and cultural competence and outcomes of improving quality of care and increased utilization of services by ethnic minorities. From this, two workgroups were formed, each addressing EBPs as a component of the work. From an organizational level, the Quality Customer Service Workgroup focused on training and implementation of EBPs, and at a system level the Streamline and Integrate Workgroup worked to integrate of EBPs into the broader system of care. Additionally, the Oklahoma SOC is working closely with CoC to develop and implement a broader cultural awareness and competency training for Tulsa.

At the system level, one of the major challenges for integration into the SOC included developing formal collaborative agreements for streamlining referrals. For example, attempts were made to create a Memorandum of Agreement with a local Community Team member that receives the majority of referrals for children displaying sexual behavior problems. Although negotiations were successfully made at the clinical administration level, the agreement was rescinded at the executive level.

Another major challenge at the system level includes linking needs to outcomes through strategies. The development of the Tulsa Children's Behavioral Health Community Team logic model resulted in strategies for creating workgroups. However, creating workgroups provides no clear, measurable strategy for change. To address this concern the Steering Committee of the Community Team has committed to the development of logic models for each of the workgroups to guide activities and evaluate outcomes. This logic model development process has started with two of the three workgroups.

System Level Integration: State of Oklahoma

As a member of the Tulsa Children's Behavioral Health Community Transformation Team, the Oklahoma SOC was involved in the infrastructure development in Tulsa. IHCRC CoC and the Oklahoma SOC began more formal discussion about cultural competency for American Indian youth across the state. The first of these discussions was held at a State-Tribal Meeting facilitated by Holly Echo-Hawk during the Oklahoma SOC's Annual Children's Behavioral Health Conference in April of 2006. This meeting was attended by Oklahoma SOC and Oklahoma Transformation Grant representatives as well as representatives from tribal communities and Indian programs. The major feedback from the communities was (a) that American Indian youth and their families are suffering, (b) there have been historically strained relationships between the tribes and the state, and (c) that the state needs to "come to our communities" to see the context and conditions in which American Indian youth live.

From this meeting, the Oklahoma SOC recognized a lack of tribal voting membership in the by-laws and began to examine ways to improve representation. IHCRC CoC agreed to organize and facilitate Oklahoma Tribal Children's Mental Health Meetings through monthly conference calls funded by the Oklahoma SOC. The first monthly conference call was held in September of 2006. This process serves as an avenue for tribal communities that are invested improving children's mental health SOC to learn about state-level activities and provide input to the state's work in children's mental health transformation. In addition to developing mechanisms for policy-level input from Indian communities, collaboration with the state is creating opportunities for cultural competency training in communities and planning for statewide inclusion to attend to cultural factors in EBPs with American Indian youth.

Conclusion

This summary examined the infrastructure development needed at the organizational level to implement and integrate culturally adapted EBPs into a system of care. Infrastructure development is an ongoing process. However, several concepts have already emerged from the current system-assessment. First, buy-in is needed at all levels for implementation of cultural competence and system-wide integration. Second, through creative partnership efforts cultural and linguistic competency can be improved by sharing resources and improving the compatibility between the infrastructure and the direct service functions of a system.

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School/Community-Based Prevention of American Indian Youth Suicide

Teresa D. LaFromboise

Introduction

Native American community members have recently voiced their alarm over the high rates of death by suicide in American Indian/Alaska Native (AI/AN) communities, especially among its adolescent members, in hearings held in the aftermath of the Red Lake High School shooting. Although the incidence of suicide varies across American Indian age and tribal groups, reports of suicide at the national level reveal that it is the second leading cause of death for AI/AN males between the ages of 15 to 24. AI/AN males not only commit suicide at rates almost twice that of other racial groups, their rates increase with age far more dramatically than those of other groups (Metha & Webb, 1996). The suicide rate for AI/AN female adolescents is nearly three times the rate for White female adolescents (American Psychiatric Association, 2003).

The impact of youth suicide in Indian country cannot be underestimated. The resultant "loss of family members reverberates throughout our communities, putting other family members at risk for depression, grief reactions, poor work performance, drug and alcohol use, and domestic violence as well as for the contemplations of suicide themselves" (C. Grimm, personal communication, September 9, 2003). Due to the overwhelming impact that the loss of tribal members has on the AI/AN community, it is necessary to take a more comprehensive approach to preventing this behavior.

An integrated risk profile of AI/AN adolescent suicide has yet to be developed. However, risk factors associated with Indian youth suicide include little family support, greater quantity and frequency of alcohol use, greater depressive symptomatology, experience of suicide ideation, or previous attempts at suicide (Manson, Beals, Dick, & Duclos, 1989). Risk factors for suicide attempts among Navajo adolescents reported by Howard-Pitney, LaFromboise, Basil, September, and Johnson (1992) reported a risk profile for Zuni adolescents showing significant correlations between suicide ideation and past suicide attempt behavior, drug and alcohol use, depression, hopelessness, stress, psychological symptomatology, negligible social support, less liking for school, and limited interpersonal communication. Additional risk factors such as weak AI/AN ethnic identity, loss of cultural supports, and school difficulties have also been noted by Novins, Beals, Roberts, and Manson (1999). Furthermore, Yoder, Whitbeck, Hoyt, LaFromboise, and Stubben (2005) found that enculturation, negative life events, perceived discrimination, and low self-esteem were also related to the likelihood of suicidal ideation.

American Indian Life Skills Development Curriculum (AILSDC)

In a review of suicide prevention programs in AI/AN communities, the American Indian Life Skills Development Curriculum (AILSDC) developed by LaFromboise (1995) stood out as a program that used risk and protective factors specific to AI/AN youth to inform the development of prevention strategies, provided details of how culture-specific factors are related to an increased risk of suicidal behavior, and contained material for work with students at risk for suicidal behaviors as well as students in general (Middlebrook, et al., 2001). The AILSDC was also the only evidence based suicide prevention program in Indian country and has been recognized by the Department of Health and Human Services in 2005 as a SAMHSA program of excellence. It was also recognized by the National Registry of Effective Programs in 2004.

The AILSDC was found to reduce suicidal thoughts and behaviors and feelings of hopelessness among AI/AN youth. It was also found to increase problem solving skills and suicide intervention skills with AI/AN youth through activities based on cultural knowledge gained through community resources (LaFromboise & Howard-Pitney, 1995). A unique feature and strength of the AILSDC curriculum is that it was specifically tailored to be compatible with the norms, values, beliefs, and attitudes of the communities with which it was first developed. Special attention was paid to the worldviews,

communication styles and forms of recognition within those communities. Extensive community input was solicited during its development to examine key aspects of helping and problem solving in the culture and to establish community support for the intervention.

Currently, a pilot study is underway to further test the effectiveness of the AILSDC with a total of approximately 1,000 middle school students on a two different Northern Plains reservations. The AILSDC is being implemented alongside Reconnecting Youth (Eggert, Thompson, Randell, & Pike, 2002), a comparable intervention that is not tailored to the AI/AN population but found to be effective with suicidal youth. Reconnecting Youth is a life skills-based prevention program designed for high-risk youth with a trajectory toward high school dropout. This intervention has been shown to decrease suicidal behaviors, depression, anger, hopelessness, and stress among youth at risk for school dropout and suicide (Eggert, Thompson, Herting, & Nicholas, 1995). Specific results of the effectiveness of Reconnecting Youth with the AI adolescent population have not been reported. These two school-based conditions will be compared to a control condition and the curriculum found to be most effective will be subsequently offered.

A randomized pre-, post-test design with a six-month and one-year follow-up will be employed in this research. A multi-method evaluation approach will be used to assess the effectiveness of the intervention conditions that includes self-reported individual risk, mediating, and protective factors associated with suicide, as well as teachers' and trained judges' behavioral observations of suicide intervention skills targeted in the curriculum. Given that this is a school-based study, academic belonging will be included as outcome measures with measures of suicidal behavior and related risk factors.

Furthermore, a mediational model of suicidal behaviors will be tested, considering the impact of individual and environmental resources mediated through cultural mechanisms. To that end individual risk factors for suicide to be considered are: psychological distress (including depression, anger, and stress) and suicidal behavior (including suicidal ideation, friends' history of suicide, and family history of suicide and substance use). Protective factors such as self-efficacy, coping, problem solving, and social support will also be assessed. Mediating factors such as enculturation (i.e., participation in traditional activities, identification with American Indian culture, and traditional spiritual involvement), perceived community support, and perceived discrimination will be evaluated to help expand upon current research efforts in AI/AN youth risk behavior and cultural empowerment.

Conclusion

Information gleaned from this study will be a significant addition to the knowledge base in the area of factors related to AI/AN suicide, a very serious behavioral health concern. The design of the study will help to determine the relative effectiveness of the AILSDC, a culturally tailored program for suicide prevention. In addition, this study will allow an evaluation of a mediational model of suicidal behaviors. These results as a whole can be used to implement suicide prevention programs that fit the specific needs of AI/AN youth, thereby balancing the important goal of intervening with adolescents at risk for suicide with the practical need to use limited resources in the most efficient manner.

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Symposium Discussion

This symposium provided information on the integration of the State Systems of Care and Tribal Circle of Care and issues related to implementation and adaptation of evidence based treatment with American Indian (AI) and Alaska Native (AN) populations. The authors' examples illustrate the process of incorporating strength-based Native concepts such as relationship building, cultural identity, native teachings and other native-specific values that fit with the evidence based principles.

The discussion began with issues related to cultural adaptation of EBPs, and describes models being refined for use with AI/AN children and their families and communities, including *Honoring Children, Making Relatives; Honoring Children, Respectful Ways; Honoring Children, Mending the Circle; and Honoring Children, Honoring the Future*. These models provide a framework for the implementation plan for adapting and adopting EBPs.

Bartgis' paper then addressed efforts of the Indian Health Care Resource Center (IHCRC), which resulted in both the infrastructure development and integration of two culturally adapted EBPs into the system of care (SOC) for AI youth in Tulsa and strategies for collaboration with the Oklahoma SOC that serves a high population of AIs. The methods included implementing culturally adapted EBPs at the organizational level and creating collaborative avenues for integrating EBPs into a greater system of care at the system level. At the organizational level, major challenges for implementation included clinical support for continued training and staffing. At the system level, major challenges for integration included developing formal collaborative agreements for streamlining referrals. For both organizational and system level, buy-in is needed from top administration to direct service providers.

The efforts of the IHCRC were supported by the Indian Country Child Trauma Center (ICCTC), which provided training and technical assistance. The ICCTC, housed at the University of Oklahoma Health Sciences Center, Center on Child Abuse and Neglect, is developing and disseminating EBT approaches that are culturally modified for Native children who are victims of traumatic events. ICCTC has a nation-wide focus that encourages development partnerships from the 600 plus tribes, villages, and programs targeting treatment of tribal children within the continental United States. The overall goal of the ICCTC is to develop, refine, disseminate, and evaluate trauma-relevant intervention models for use with children in Indian Country. ICCTC has identified a set of empirically supported intervention models, and has built on the foundation of Native traditional teachings and practices to develop training manuals for four evidence based approaches.

The Indian Country Child Trauma Center has selected the American Indian Life Skills Development Curriculum (AILSDC) developed by LaFromboise (1995) as the program to implement in the Honoring Children, Honoring the Future component. The American Indian Life Skills Development Curriculum (AILSDC) is an outstanding program that uses risk and protective factors specific to AI/AN youth to inform the development of prevention strategies, provide details of how culture-specific factors are related to an increased risk of suicidal behavior, and contains material for work with students at risk for suicidal behaviors as well as students in general. The AILSDC is also the only evidence based suicide prevention program in Indian country and has been recognized by the Department of Health and Human Services in 2005 as a SAMHSA program of excellence. It was also recognized by the National Registry of Effective Programs in 2004.

LaFromboise's paper described how the curriculum was found to increase problem solving skills and suicide intervention skills with AI/AN youth through activities based on cultural knowledge gained through community resources. A unique feature and strength of the AILSDC is that it was specifically tailored to be compatible with the norms, values, beliefs, and attitudes of the communities with which it was first developed. Special attention was paid to the worldviews, communication styles and forms of recognition within those communities. Extensive community input was solicited during its development to examine key aspects of helping and problem solving in the culture and to establish community support for the intervention. Currently, AILSDC is being modified for younger school age students.

Native parents for generations have raised their children and have done so successfully. Children were raised knowing who they were, where they came from, and where they were going. Caregivers were the extended family and supported the extended family system to be a network of relationships. Native people had scientific knowledge since they knew about plants, dyes, heat, genetics, astronomy, structural engineering, and geometry. Nor were they ignorant of such scientific concepts as trial and error, inquiry, improvement, testing and solutions. When tribal communities create their own understanding of what is meaningful to them, there is less likelihood to create confusion, harm, distortions, and misinterpretations about health and healing. They understood the world by understanding and explanation, using the concept of circle, by using theory to explain how things cam to be, by viewing life holistic, and regarded their indigenous place on earth. This is how American Indians and Alaskan Natives taught about the world. It was a theory of how world functioned, how to be in world, what made up world. The purpose of this symposium was to bring traditional aspects, EBT, community readiness, and the concept of wellness together.

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Parent-Child Interaction Therapy in Systems of Care: Treatment Outcomes for Children with Disruptive Behavior Disorders in Real-World Settings

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Introduction

The main goal of the treatment effectiveness studies implemented by the national evaluation of the Comprehensive Community Mental Health Services for Children and Their Families Program is to examine whether children who receive an evidence-based treatment delivered in communities using a system of care model experience better outcomes and maintain those outcomes longer than children in the same system who do not receive the evidence-based treatment.

This study examines the results of the effectiveness of Parent-Child Interaction Therapy (PCIT) implemented in two system of care communities funded in 1998. This is a SAMHSA-funded study designed to provide PCIT for children with disruptive disorders in the two System of Care communities (site 1 and site 2).

Method

Treatment: Parent-Child Interaction Therapy (PCIT)

PCIT is an empirically supported treatment for young children with disruptive behavior disorders that emphasizes improving the quality of the parent-child relationship and changing parent-child interaction patterns. In PCIT, caregivers are taught specific skills to establish a nurturing and secure relationship with their child while increasing their child's pro-social behavior and decreasing negative behavior. This treatment focuses on two basic interactions: (a) Child-Directed Interaction (CDI), which is similar to play therapy in that caregivers engage their child in a play situation with the goal of strengthening the parent-child relationship; and (b) Parent-Directed Interaction (PDI), which resembles clinical behavior therapy in that caregivers learn to use specific behavior management techniques as they play with their child.

Design

The study design reflects an integrated data collection process that dovetailed with the child and family outcome study for the national evaluation. Additional details of the national evaluation can be found elsewhere (Holden, Friedman & Santiago, 2001; Manteuffel, Stephens, & Santiago, 2002). Children enrolled have to meet the identified criteria for the target population for the overall national evaluation as well as the requirement for the treatment effectiveness study (TES). To meet criteria for the TES, children had to be 5-10 years old, and have a diagnosis of ADHD, ODD, or conduct disorder.

Children who met the TES criteria were randomly assigned to the treatment or control group. The treatment group received the parent-child interaction therapy integrated into the system of care approach and the control group received system of care services as usual. The following measures were administered to both the treatment and the control group:

- Child Behavioral Check List (CBCL; Achenbach, 1991)
- Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1990)
- Behavioral and Emotional Rating Scale (BERS; Epstein & Sharma, 1998)
- Caregiver Strain Questionnaire (CGSQ; Brannan Heflinger, & Bickman, 1997)
- Family Assessment Device (FAD; Epstein, Baldwin, & Bishop, 1983)
- Eyberg Child Behavioral Inventory (ECBI; Eyberg & Pincus, 1999)
- Dyadic Parent-child Coding System-II (DPICS-II; Eyberg, Bessmer, Newcomb, Edwards, and Robinson, 1994)

Treatment fidelity measures also assessed whether the evidence-based treatments were implemented as intended.

Results

Demographic Characteristics

Site 1 recruited 91children into the treatment effectiveness study; 45 of the 91 children were randomly assigned to the treatment group and 46 to the control group. A comparison of six demographic variables (gender, age, race, custody, family income, Medicaid recipient) between the two groups did not show any significant differences (see Table 1). There were no significant differences in the proportion of males to females or in the average age of children between the treatment and control group.

Table 1
Demographic Characteristics

	Site 1			*Site 2*		
Demographic Variables	*Treatment Group*	*Control Group*	*Chi-Square*	*Treatment Group*	*Control Group*	*Chi-Square*
Gender	(*n* = 45)	(*n* = 46)	$\chi^2 = 0.267$	(*n* = 39)	(*n* = 33)	$\chi^2 = 0.204$
Male	62.2%	67.4%		61.5%	66.7%	
Female	37.8%	32.6%		38.5%	33.3%	
Age	(*n* = 45)	(*n* = 46)	$\chi^2 = 0.642$	(*n* = 38)	(*n* = 33)	$\chi^2 = 7.469$**
Mean	7.1 years	7.0 years	Avg age =	5.8 years	7.3 years	
0–5 Years	13.3%	19.6%	$F(1,90) = .086$	36.8%	9.1%	Avg age =
6–11 Years	86.7%	80.4%		63.2%	90.9%	$F(1,70) = 8.05$*
Race and Ethnicity	(*n* = 45)	(*n* = 46)		(*n* = 38)	(*n* = 33)	
African American	4.4%	6.5%	$\chi^2 = 0.189$	2.6%	9.1%	$\chi^2 = 1.386$
American Indian	6.7%	10.9%	$\chi^2 = 0.501$	0.0%	0.0%	n/a
Asian	2.2%	2.2%	$\chi^2 = 0.00$	0.0%	0.0%	n/a
Hispanic Ethnicity	11.1%	9.1%	$\chi^2 = 0.100$	0.0%	0.0%	n/a
Native Hawaiian or Pacific Islander	0.0%	0.0%	n/a	0.0%	0.0%	n/a
White	95.6%	89.1%	$\chi^2 = 1.323$	97.4%	97.0%	$\chi^2 = 0.010$
Biracial or Multiracial	15.6%	17.4%	$\chi^2 = 0.056$	5.3%	6.1%	$\chi^2 = 0.021$
Other	0.0%	0.0%	n/a	2.6%	0.0%	$\chi^2 = 0.881$
Custody	(*n* = 45)	(*n* = 46)	$\chi^2 = 2.452$	(*n* = 38)	(*n* = 33)	$\chi^2 = 4.569$
Two Parents	13.3%	15.2%		36.8%	30.3%	
Mother	51.1%	45.7%		42.1%	45.5%	
Father	4.4%	4.3%		5.3%	0.0%	
Adoptive Parents	6.7%	8.7%		5.3%	6.1%	
Foster Parents	2.2%	0.0%		0.0%	0.0%	
Ward of State	8.9%	15.2%		0.0%	3.0%	
Grandparents	8.9%	8.7%		7.9%	6.1%	
Other	4.4%	2.2%		2.6%	9.1%	
Family Income	(*n* = 43)	(*n* = 46)	$\chi^2 = 5.347$	(*n* = 38)	(*n* = 33)	$\chi^2 = 2.832$
Less than $10,000	37.2%	30.4%		31.6%	39.4%	
$10,000–19,999	9.3%	28.3%		39.5%	24.2%	
$20,000–34,999	18.6%	15.2%		23.7%	27.3%	
$35,000–49,999	14.0%	8.7%		5.3%	6.1%	
$50,000–74,999	16.3%	13.0%		0.0%	3.0%	
$75,000 & Above	4.7%	4.3%		0.0%	0.0%	
Medicaid Recipient	(*n* = 45)	(*n* = 46)	$\chi^2 = 1.946$	(*n* = 38)	(*n* = 33)	$\chi^2 = 0.058$
Yes	24.4%	13.0%		86.8%	84.8%	

*$p < 0.05$; **$p < 0.01$

Generally, there were similar distributions between the treatment and control groups in the number of children in each of the racial/ethnic groups except for Hispanics and American Indians. The control group did have a slightly larger number of children who were identified as American Indian, but these differences were not statistically significant. Although the groups were not significantly different in custody status, a somewhat higher number of children from the control group were wards of the state compared to the treatment group. The groups were similar on family income, but the treatment group had slightly more children with family incomes below $15,000 per year. Again, these differences were not statistically significant.

Site 2 randomized children at the school level. Schools within the service area were randomized into the treatment and control groups, and the therapists from the schools that were in the treatment group were trained to provide PCIT. Thirty-nine children were selected into the treatment group and 33 in the control group. On most demographic variables, the two groups in site 2 did not differ significantly; the exception was age. The control group had more children aged 6-11 years and fewer who were younger than 6 years of age (see Table1).

Baseline Child and Family Clinical Characteristics

The baseline child and family clinical characteristics were compared between the treatment and control group at both sites. The treatment and the control group at both sites were not significantly different at entry into the study in Total Problem T-scores on the CBCL. This similarity between the groups held for both externalizing as well as internalizing problems as measured by the CBCL. Mean functional impairment (as measured by the CAFAS) was slightly higher for the control group in site 2 but were not significantly different from the treatment group (see Table 2). The control group in site 1 reported higher mean scores on the BERS strength quotient than the treatment group, but the difference was not significant.

Table 2
Baseline Child and Family Characteristics of Participants in the Treatment Effectiveness Study

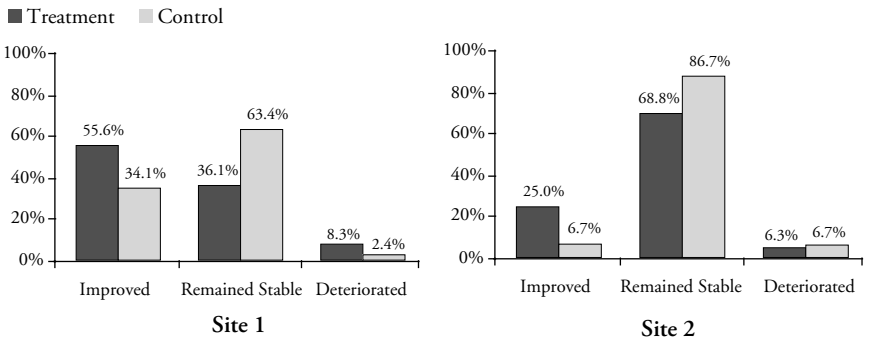
*Baseline Scores on Clinical Measures**	*Site 1*			*Site 2*		
	Treatment	*Control*	*F-Test*	*Treatment*	*Control*	*F-Test*
Functional Impairment (CAFAS)	(n = 45) 98.9 (31.5)	(n = 46) 97.0 (32.0)	$F(1, 90) = 0.084$ $p > 0.05$	(n = 38) 80.5 (41.5)	(n = 33) 95.8 (37.8)	$F(1, 70) = 2.580$ $p > 0.05$
Strength Quotient (BERS)	(n = 45) 86.0 (15.1)	(n = 46) 88.2 (15.2)	$F(1, 90) = 0.489$ $p > 0.05$	(n = 38) 91.0 (17.3)	(n = 32) 92.9 (13.4)	$F(1, 69) = 0.273$ $p > 0.05$
Total Behavioral Problems (CBCL)	(n = 45) 71.8 (6.3)	(n = 46) 71.2 (6.8)	$F(1, 90) = 0.178$ $p > 0.05$	(n = 39) 70.6 (7.0)	(n = 33) 70.8 (7.8)	$F(1, 71) = 0.027$ $p > 0.05$
Internalizing Problems (CBCL)	(n = 45) 64.8 (8.2)	(n = 46) 65.6 (8.4)	$F(1, 90) = 0.206$ $p > 0.05$	(n = 39) 63.7 (8.8)	(n = 33) 62.7 (8.8)	$F(1, 71) = 0.204$ $p > 0.05$
Externalizing Problems (CBCL)	(n = 45) 71.3 (7.3)	(n = 46) 70.1 (8.0)	$F(1, 90) = 0.539$ $p > 0.05$	(n = 39) 70.6 (7.0)	(n = 33) 70.4 (6.8)	$F(1, 71) = 0.014$ $p > 0.05$

* An independent t-test comparing the scores on the different clinical measures summarized in the Table above did not show significant differences.

The outcomes for the two sites were measured at baseline, 6 months, 12 months, and 18 months for site 1, and at baseline through 12 months for site 2. Sample sizes vary due to variations in response rates or in the subsample to which the outcome measure applies. On most of the outcomes, the treatment and the control group did not differ significantly except on the child competence subscale on CBCL and on caregiver strain (CGSQ) for site 1 and on the overall strength measure (BERS) for site 2. About 14.1% (n = 28) of the treatment group (Fisher's Exact, p = 0.042) improved on the child competence subscale of the CBCL from baseline to 18 months, while none of the children from the control group (n = 32) improved.

For caregivers in site 1 (see Figure 1), a significant difference was found between treatment and control group on caregiver strain. Most (54.6%) of the treatment group (n = 36) reported a decrease in strain from baseline to 18 months when compared to 34.1% of the control group (n = 41) (Fisher's Exact, p = 0.039). In site 2, no significant differences in improvement were found on caregiver strain between the two groups (see Figure 1). For site 2, there were significant differences in improvement from intake to 12 months on the strength measure (BERS). About half of the treatment group (n = 16) gained strengths over the 12 months, compared to 37.9% of the control group children (n = 29) (Fisher's Exact, p = 0 .034). Controlling for treatment dosage did not change the results reported above.

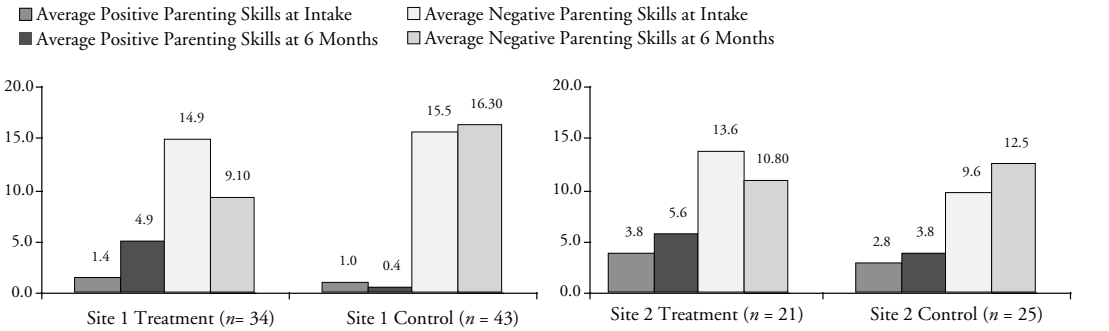
Figure 1
Reliable Change in Global Strain, Sites 1 and 2



There were no significant differences between the treatment and outcome groups at both sites on CAFAS and FAD.

Observational data from the DPICS-II indicates that from pre-treatment to post-treatment there were significant differences in parenting skills between the treatment and control groups in Site 1 (see Figure 2). A comparison of the positive skills composite (the number of parental labeled praises, behavioral description, and reflection in the child directed interaction) and negative skills composite (the number of parental commands, criticisms, and questioning in the child directed interaction) indicated that the parents in the treatment group significantly increased the number of positive skills and decreased the number of negative skills compared to the control group. No significant differences were found in Site 2 (see Figure 2).

Figure 2
Change in Positive and Negative Parenting Skill Composite from Pre- to Post-Treatment
Sites 1 and 2



Positive Skills (Time and treatment interaction effect): $F(1, 75)= 24.1$, $p < .01$.
Negative Skills (Time and treatment interaction effect): $F(1, 75) = 10.5$, $p < .01$.

Positive Skills (Time and treatment interaction effect): $F(1, 44)= .093$ $p > .05$.
Negative Skills (Time and treatment interaction effect): $F(1, 44) = 3.88$, $p > .05$.

Conclusion

Successful implementation of evidence-based treatments is becoming an increasingly important focus for federally funded system of care programs serving children with serious emotional disturbance and their families. In the current study, PCIT was implemented in two program sites and demonstrated a positive impact in several clinical and functional domains, although this varied by site. In site 1, caregivers who received the PCIT experienced significant reductions in caregiver strain and negative parenting skills and improvements in child competence and on positive parenting skills compared to the control group. While caregivers in Site 2 who received PCIT did not experience these same benefits, their children had significant improvement on strengths compared to the control group.

Results suggest that PCIT is effective at improving caregiver functioning and parenting skills. Embedding PCIT in systems of care can be an effective means of engaging families in services and in achieving positive outcomes for high risk children and their caregivers. These findings are preliminary and future analysis will focus on the relationship between therapist fidelity, observational data, therapist characteristics and outcomes as well as the relationship between cost of providing PCIT and outcomes for children and families.

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Implementation of Evidence-Based Substance Abuse Group Interventions for Youth

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Introduction

Group treatment is one of the most common psychosocial interventions for youth with substance abuse problems and recently, a range of evidence-based group interventions for these youth have become available (Kaminer, 2005). These include both treatment and preventative interventions (e.g., Dennis et al., 2002). Given this context, it is important to consider whether and how these models are being implemented in typical practice settings. Certain factors may determine implementation success, regardless of the evidence-based group treatment approach involved, such as the number of clients assigned to a group (Center for Substance Abuse Treatment, 2005).

In addition to factors specifically related to group intervention, a recent research synthesis has suggested a set of core components that may determine the success of implementation efforts, including staff selection, pre-service training, coaching and consultation, and program evaluation (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005). Research documenting possible peer contagion effects of group interventions suggests that factors such as those described above may be especially important in groups for youth. For example, contagion effects may be more likely in groups for which youth are not screened, sessions are insufficiently monitored, or staff are inadequately trained (Dodge & Sherril, 2006).

The current paper analyzes counselor and administrator survey data from a recent case study of substance abuse group implementation at three agencies. In addition to considering the extent of adoption and types of evidence-based practices (EBPs) adopted, the analyses describe youth groups in terms of their group-related implementation factors and the core implementation components (Fixsen et al., 2005) and compare these data to data from adult groups.

Method

Surveys were distributed and completed prior to in-service events held at each of the three agencies. Agencies were large, publicly-funded programs in the Greater Tampa area that have all received public recognition such as professional association awards for their pioneering work in the area of EBP implementation. Respondents included 68 counselors and 21 administrators representing 45 program units across the three agencies. Of this group, 18 counselors and 3 administrators across 15 program units indicated that their programs provided substance abuse prevention or intervention services exclusively to youth and their families. Most respondents in the sample were female (75.9%), and Caucasian (52.9%), with smaller numbers of African American (28.7%), Latino (12.6%) and other or multi-ethnic (5.7%) staff represented.

Respondents were asked whether they personally facilitated evidence-based groups (in the case of counselors) or whether evidence-based groups were being used in their program unit (in the case of supervisors and administrators). Respondents were also asked to report the specific types of EBPs being used and whether manuals or other published guidelines supported implementation of these EBPs. Several items assessed other group-related implementation features (e.g., the size of the group). Core implementation components were assessed with an original measure containing five subscales measuring components of the Fixsen et al. (2005) model and an additional subscale measuring "manual implementation" (i.e., whether respondents felt manuals assisted their implementation efforts). All implementation items were rated on a four point scale ranging from 0 =*Strongly Disagree*, to 4 = *Strongly Agree*. Internal consistency was acceptable across subscales, with alpha coefficients ranging from .7 to .94.

For all analyses, alpha was set at .05. Analyses were performed on both the entire sample (i.e., counselors plus supervisors and administrators) as well as counselors only; as results were nearly identical,

only findings from the entire sample are reported. A profile analysis approach was used to compare adult and youth staff on core implementation components. The unit of analysis for evidence-based adoption items was the individual respondent. On group-related items and items measuring core implementation components, respondents sometimes rated more than one group; thus, in order to capture variance within as well as between respondents, analyses of these data were conducted with groups rather than respondents serving as the unit of analysis.

Results

In both adult and youth programs, most staff reported using EBPs in at least one group that they personally led or (in the case of administrators) that was led in their unit; however, staff in youth programs were marginally more likely to deny use of EBPs in any groups (in youth programs, 14.3% reported that no evidence based practices were used vs. 3.0% in adult programs, $\chi^2(1) = 3.726$, $p < .10$). Larger proportions of staff in youth and adult programs were more likely to report not using evidence-based practices if the definition was limited to groups using a specific manual, with similar results for this variable obtained for youth and adults (in youth programs, 33.3% vs. 28.0% in adult programs, $\chi^2(1) = 0.158$, *ns*). In the majority of cases (16 of 29 specific groups, or 55.1%), respondents reported using interventions that had been designed for adults. If prevention groups were excluded, the percentage of groups in which EBPs designed for adults were being used was even higher (16 of 19, or 84.2%). Table 1 shows descriptive statistics for group-specific implementation features and chi-square tests comparing these features across youth and adult groups. As the table shows, youth groups were less likely to use a co-facilitator, but also tended to be smaller than adult groups. Use of screening was relatively uncommon for both types of groups.

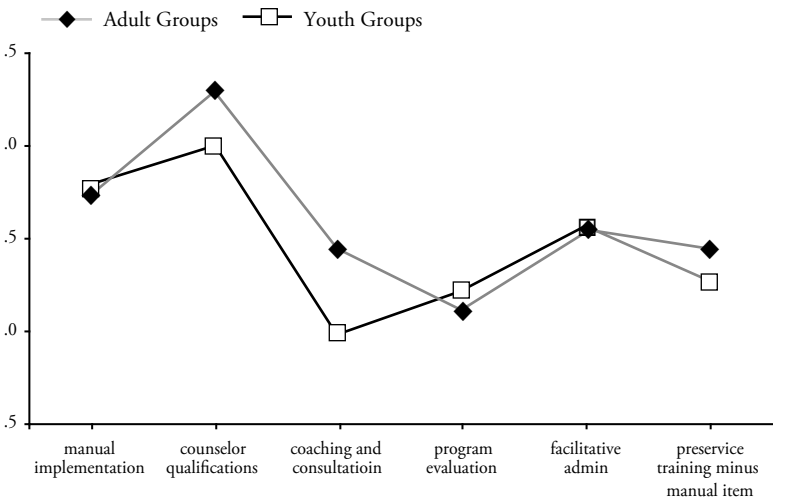
Table 1
Comparison of Youth and Adult Groups on Group-Specific Implementation Feature

	Youth Program (n = 25)		*Adult Program (n = 144)*		
Variable	*n*	*%*	*n*	*%*	χ^2
Co-facilitator present	0	0.0	22	15.3	4.391*
Used screening procedures	10	40.0	48	33.3	0.420
Group size < 10	15	55.6	23	18.1	16.797**

*$p < .05$ **$p < .001$

Figure 1 shows profiles of implementation components subscales for youth vs. adult groups. The test of parallelism showed that implementation profiles of youth and adult groups differed, $F(10) = 3.758$, $p < .01$. A visual inspection of Figure 1 suggests that the profile difference was primarily attributable to coaching and consultation, on which youth groups were rated more poorly ($M = .98$, $SD = .73$) than adult groups ($M = 1.45$, $SD = .91$). Pairwise comparison of youth and adult groups on this component supported this inference, $t = 2.86$, $p < .01$. Across remaining components, a test of parallelism as well as a test of levels (i.e., whether the level of implementation overall differed between groups) were not significant, $F(8) = 1.556$, *ns*, and $F(2) = 1.101$, *ns*, respectively. To assess whether respondents tended to rate certain of the remaining components more highly than others across both youth and adult groups, a test of flatness was performed across these components. Results of this test were significant, $F(4) = 23.45$, $p < .001$. Across all groups, respondents tended to agree that manuals were helpful ($M = 1.73$, $SD = .70$) and that staff were selected to facilitate the groups ($M = 2.26$, $SD = .63$). Respondents tended to disagree that program evaluation was occurring ($M = 1.12$, $SD = .80$). Opinions on remaining components—facilitative administration (e.g., *"clinical directors and supervisors go out of their way to help the group run well"*) and pre-service training (e.g., *"the rationale for the group and the way it works was sufficiently explained"*)—fell between these two extremes ($M = 1.55$, $SD = .61$, and $M = 1.41$, $SD = .78$, respectively).

Figure 1
Profiles of Youth and Adult Groups on Implementation Items



Discussion

Results suggested that the agencies surveyed are using evidence-based groups to serve their youth clients, but raise concerns regarding how these group programs are being implemented. Agencies tended to adopt EBPs for use with youth that were developed for adults. Almost half of youth groups had more than 10 members, the use of a co-facilitator was uncommon, and screening procedures were not used in the majority of cases, raising concerns regarding peer contagion. On core implementation components, responses suggested that agencies are not adequately evaluating their youth programs and are not providing adequate support to staff beyond the pre-service training period. It is important to recognize that conditions at these agencies, which have all been publicly recognized for their implementation efforts, likely represent a "best case scenario" for youth treatment group implementation. Overall, results underscore the urgent need to improve implementation strategies to ensure that evidence-based practices for group treatment of youth work as intended in community settings.

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